

Literacy for the New Millennium

*I dedicate this series of books to all those who center their professional lives on
fostering the development and practice of literacy.*

LITERACY FOR THE NEW MILLENNIUM

Volume 1

Early Literacy

Edited by Barbara J. Guzzetti

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SET PREFACE

This set of four volumes—*Literacy for the New Millennium: Early Literacy*; *Literacy for the New Millennium: Childhood Literacy*; *Literacy for the New Millennium: Adolescent Literacy*; and *Literacy for the New Millennium: Adult Literacy*—presents a current and comprehensive overview of literacy assessment, instruction, practice, and issues across the life span. Each volume presents contemporary issues and trends, as well as classic topics associated with the ages and stages of literacy development and practice represented in that text. The chapters in each volume provide the reader with insights into policies and issues that influence literacy development and practice. Together, these volumes represent an informative and timely discussion of the broad field of literacy.

The definition of literacy on which each of these volumes is grounded is a current and expanded one. Literacy is defined in this set in a broad way by encompassing both traditional notions of literacy, such as reading, writing, listening, and speaking, and the consumption and production of nonprint texts, such as media and computer texts. Chapters on technology and popular culture in particular reflect this expanded definition of literacy to literacies that represents current trends in the field. This emphasis sets this set apart from other more traditional texts on literacy.

The authors who contributed to this set represent a combination of well-known researchers and educators in literacy, as well as those relatively new to the profession of literacy education and scholarship. Contributors to the set represent university professors, senior scientists at research institutions,

practitioners or consultants in the field, teacher educators, and researchers in literacy. Although the authors are experts in the field of literacy, they have written their chapters to be reader friendly by defining and explaining any professional jargon and by writing in an unpretentious and comprehensible style.

Each of the four volumes shaped by these authors has common features. Each of the texts is divided into three parts, with the first part devoted to recent trends and issues affecting the field of literacy for that age range. The second part addresses issues in assessment and instruction. The final part presents issues beyond the classroom that affect literacy development and practice at that level. Each of the texts concludes with a chapter on literacy resources appropriate for the age group that the volume addresses. These include resources and materials from professional organizations, and a brief bibliography for further reading.

Each of the volumes has common topics, as well as a common structure. All the volumes address issues of federal legislation, funding, and policies that affect literacy assessment instruction and practice. Each volume addresses assessment issues in literacy for each age range represented in that text. As a result of the growing importance of technology for instruction, recreation, information acquisition, communication, and participation in a global economy, each book addresses some aspect of literacy in the digital age. Because of the importance of motivating students in literacy and bridging the gap between students' in-school literacy instruction and their out-of-school literacy practices, each text that addresses literacy for school-age children discusses the influence and incorporation of youth and popular culture in literacy instruction.

In short, these volumes are crafted to address the salient issues, policies, practices, and procedures in literacy that affect literacy development and practice. These texts provide a succinct yet inclusive overview of the field of literacy in a way that is easily accessible to readers with little or no prior knowledge of the field. Preservice teachers, educators, teacher trainers, librarians, policy makers, researchers, and the public will find a useful resource and reference guide in this set.

In conclusion, I would like to acknowledge the many people who have contributed to the creation of this set. First, I recognize the outstanding contributions of the authors. Their writings not only reflect the most informative current trends and classic topics in the field but also present their subjects in ways that take bold stances. In doing so, they provide exciting future directions for the field.

Second, I acknowledge the contributions to the production of this set by staff at Arizona State University in the College of Education. My appreciation

goes to Don Hutchins, director of computer support, for his organizational skills and assistance in the electronic production of this set. In addition, I extend my appreciation to my research assistant, Thomas Leyba, for his help in organizing the clerical aspects of the project.

Finally, I would like to thank the staff and editors at Praeger Publishers, who have provided guidance and support throughout the process of producing this set. In particular, I would like to thank Marie Ellen Larcada, who has since left the project but shared the conception of the set with me and supported me through the initial stages of production. My appreciation also goes to Elizabeth Potenza, who has guided this set into its final production, and without whose support this set would not have been possible. My kudos extend to you all.

Barbara J. Guzzetti

PREFACE

LITERACY FOR THE NEW MILLENNIUM: EARLY LITERACY

This book, the first in the set of four, is crafted around the recent reconceptualization of early literacy as including the ages from birth to age three, as well as children in preschool or kindergarten and the primary grades (grades K–3). The term “early literacy” recently replaced the term emergent literacy. It is now recognized that just as there is no ending point of literacy, there is also no turning point or single boundary that signifies literacy.

This book reflects this shift in terminology. The text is based on the premise that even very young children, in their awareness of environmental print, exhibit literacy. Experts in the field recommend that even infants can benefit from being read to and young children are stimulated by their environment as they learn to speak and read language. Early literacy development is crucial to students’ success in school and life.

To provide insight into the problems, issues, and topics associated with early literacy, this text is organized into three main parts. These parts range from three to eight chapters per part and provide an overview of topics related to the field of early literacy. These topics were chosen to reflect and address the concerns of a variety of readers, including undergraduates considering a career in education, teachers, researchers, librarians, policy makers, parents, and interested members of the public.

The first part of *Literacy for the New Millennium: Early Literacy* addresses current problems, policies, and legislation in the field of early literacy. This part, “Recent Issues in the Field of Early Literacy,” begins with a chapter by

Susan Neuman, who describes federal funding and legislation for early literacy instruction. She discusses redistribution of federal funds so that more funding is targeted at the younger ages to prevent reading difficulties in later school years, and the need to fund approaches and programs that work. The next chapter, by S. Jay Samuels, Terri Fautsch Partridge, and Caroline Hilk, provides an overview of the impetus for and the findings of the National Reading Panel, a committee of literacy educators and scholars that was charged with synthesizing instructional studies from the extant research to identify the most effective approaches to reading instruction. This chapter is an overview of the work and findings of the panel. The third and final chapter in this part, by Mario Castro, discusses the political, social, economic, cultural, and environmental issues that impact early literacy, and in doing so, summarizes some popular methods to manage that impact. To illustrate his points, Castro presents a case study that provides an example of how political and economic issues affect literacy learning among young children of Mexican origin in the state of Arizona.

The second part, “Best Practices in Early Literacy Instruction and Assessment,” presents both classic and new topics in early literacy. Traditional topics include methods of assessing early literacy, oral language development, phonics and phonemic awareness, and fostering early literacy. Relatively new topics are reflected in chapters that discuss using informational books with young readers, computer technologies in young children’s literacy development, and the role of media and popular culture in fostering and practicing early literacy.

This part begins with a chapter by Terry Salinger on early reading assessment. Salinger provides a summary of the major approaches available to assess students’ progress as they learn to read. The author also discusses the decisions that teachers make as they develop their own tools for screening students at entry into their classes and develop measures for monitoring students’ progress in reading throughout the school year.

The next chapter in this part focuses on oral language by comparing oral and written language with regard to modalities that rely on the same base of linguistic knowledge. Lynn Hebert Remson discusses five components of language—morphology, phonology, syntax, semantics, and pragmatics. She traces oral language development from the infant’s random sound through intentional, nonverbal communication, and then through various stages of oral language in each of the five areas.

In the following chapter, Benita Blachman reviews the importance of phonological awareness and decoding for early literacy instruction. She provides suggestions for simple activities that foster phonological awareness and describes the core features of effective phonics instruction. She describes an instructional model that demonstrates how instruction in phonemic awareness, decoding,

fluency, text-based reading, and spelling can be incorporated into a systematic lesson.

Next, Diane Tracey and Leslie Mandel Morrow summarize key information regarding early literacy development and the ways that literacy can be fostered in schools. The authors highlight the importance of oral language, vocabulary, phonemic awareness, word identification skills, comprehension, fluency, texts, motivation, writing, technology, and home-school connections. The authors conclude with a case study that illustrates the application of these elements in instruction.

The chapter by Lee Galda and Lauren Aimonette Liang presents recommended literature and read alouds for young children by detailing some of the ways that reading aloud to young children influences their knowledge of and attitudes toward reading. The authors emphasize the importance of the discourse surrounding the read alouds before, during, and after reading. They conclude their chapter by providing guidelines for evaluating and selecting quality children's literature appropriate for reading aloud to young children.

The next chapter, by Barbara Marinak and Linda Gambrell, defines informational books and makes a case for the inclusion of informational books along with narrative story structures for early readers. In doing so, the authors offer several reasons for including more informational texts for primary children. The authors conclude the chapter with a description of the predictable elements of informational text and examples of how those elements can be incorporated into read alouds, discussion, and writing.

The next two chapters in this part address children with special needs. The chapter by Carmen Martinez-Roldán and Jeanne Fain provides an overview of literacy and culture in various American communities. The authors move on to consider how a curriculum that enables literacy/biliteracy development might look. Martinez-Roldán and Fain highlight the role of inquiry in children's learning and discuss such instructional practices as literature discussions, drama, poetry, writing workshops, and writers' notebooks with English language learners. The chapter concludes with some considerations regarding assessment of literacy learning for English Language Learners.

The final chapter in this part discusses the needs of and appropriate instruction for students with learning disabilities. Kathleen McCoy explains that most often children with neurological or perceptual disabilities perform like early readers. Frequently, there is a poor fit between the students' information-processing skills and the approach to reading instruction. The author makes a case for differentiated instruction that accounts for the impact of a child's disability across cognitive, affective, and sensory abilities.

The third and final part of the book, "Foundations for Early Literacy Development," includes other topics that are just now gaining attention but have not typically been explored in other texts on early literacy. These topics are

represented in chapters on the role of popular culture, technology, and media in early literacy development, practice, and instruction. These chapters are balanced by classic topics, including the role of play in literacy development and how parents and family literacy practices support early literacy.

The first chapter in this part, by Christine Walsh, is written from the perspective of a woman who is both a professor of English/Language Arts and a mother of an early literacy learner. In challenging readiness theories about early stages of literacy development, Walsh relates interesting and sometimes humorous stories about her own son's journey as a language learner. The author argues that reading, writing, speaking, and listening are language processes that develop recursively rather than in a linear fashion and that parents and teachers can learn about their children's literacy development mainly by watching them, listening to them, and supporting them.

The next chapter in this part, "Play and Early Literacy in These Times," describes the role of children's play in early childhood education. The authors look back and look ahead both by revisiting studies reported in earlier reviews and by introducing new inquiries into the role of play in early literacy development and learning, especially studies that shed light on school readiness. Kathleen Roskos and James Christie relate the role of play in developing the child's mind, describe how play contributes to the literacy learning environment, and explain the role of play as social activity that scaffolds literacy performances and mediates literacy practices.

In the following chapter, Donna Grace argues for the inclusion of media and popular culture in the school lives of children. She demonstrates how the results of a study that integrated video production into the literacy curriculum contribute to the growing body of research that validates the importance of students' interests in television, movies, video games, and comics. Grace contends that connecting children's out-of-school and in-school literacies holds potential to provide pathways into classroom literacy practices for reluctant readers and writers; offers opportunities for transfer of children's knowledge of the media and popular culture to school literacies; provides spaces for children to rework some of the messages of the media; and provides sites for the exploration of identities and contexts for developing the critical literacy skills necessary for analyzing and evaluating media texts.

The next chapter in this part, by Linda Labbo, explores the role of computer technologies in facilitating young children's early literacy development. Labbo provides a brief historical perspective to frame the current definition of digital literacy. She offers guidelines for computer technology use, including selecting developmentally appropriate software and Internet sites. The chapter offers examples of effective computer technology and integration into the curriculum, including the use of digital cameras and guided Internet explorations.

This part and this volume conclude with a final chapter that offers resources for early literacy development. Ruth Jurey presents resources for parents and teachers to enhance the critical aspects of children's language on which literacy is built—communication processes, auditory skills, and comprehension. This chapter includes a range of authoritative resources on learning to read, from an introductory overview to detailed suggestions.

Part One

RECENT ISSUES IN EARLY LITERACY

Chapter One

POLICY AND LEGISLATION IN EARLY LITERACY

Susan B. Neuman

For most of our nation's history, education has been a local issue. Funds for education have traditionally relied on local property taxes. Early attempts to get the federal government involved largely fell on deaf ears in Congress, foundering according to historian Diane Ravitch on the three deadly, controversial sins of race, religion, and fear of federal control (Cross, 2004). Whether or not to provide federal funds to racially segregated schools in the South and to private schools were sticking points that could not be easily resolved.

This logjam was permanently broken by Lyndon Johnson's Great Society programs and his War on Poverty. During his administration, federal spending immediately shot up by 1,400 percent in the 1960s and 1970s, followed by increases in state and local government spending as well. Much of the new money came in categorical programs targeted to disadvantaged children, most notably by the Elementary and Secondary Education Act of 1965, and for children with disabilities. Since then, federal spending has risen rapidly, going from 4.4 percent of total education spending in 1960 to about 8 to 9 percent in 2005 (McCluskey, 2004). Today, the federal government spends about \$53 billion; states and local taxes provide the rest, bringing the total up to about \$500 billion a year on education.

When you ask the average citizen, however, 76 percent of Americans, according to a recent poll by the Educational Testing Service (Barton, 2003), believe that at least a fair to a great deal of this money on education is wasted. It turns out that the public has a remarkable lack of confidence in educational reform.

It is time to step back and take a fresh look at how to make the most of both time and resources. Policy makers must decide what programs to fund among the bewildering array of choices and the multitude of pet projects. These decisions can no longer rely on good intentions, however. Rather, a results-based approach is needed that essentially clears the decks and employs a simple set of questions to determine if programs are worthy of funding. They are as follows:

- Does it work?
- Is it cost-effective?
- Does it target children's needs?
- Is it equitable?

This chapter describes how policy makers might adopt a results-based accountability approach to grant-making for highly disadvantaged children. I will start by addressing these questions. Then I will provide three examples of how these principles might be implemented. Finally, I will suggest the ways in which these principles might lead to the achievement of better results for our at-risk children.

ESTABLISHING A RESULTS-BASED APPROACH FOR POLICY IN EARLY LITERACY

Policy makers must address the following issues:

Question 1: Does It Work?

Evidence is needed to determine whether programs are improving children's outcomes: Which children are faring well and not so well? Are gaps are increasing or shrinking? Are there data that contain valuable clues for reaching families and children? Without measurement, it is impossible to determine what programs are most plausibly helping to shrink the gap. Further, how can educators legitimately know how to improve the quality of programs?

To do this well, policy makers can provide a rich set of clues and indicators from programs on both processes and outcomes. This information helps to identify the attributes that are essential to a program's success and the infrastructure required to support and sustain them.

Consider the example of a massive effort to bring books to over eighteen thousand children in child care centers in Philadelphia, known as the Books Aloud project (Neuman, 1999). The project called for child care workers to attend regular workshops at regional libraries on learning the techniques of storybook reading. It also involved setting up libraries in centers to help support

good reading habits. Evaluators following the program efforts, however, soon discovered that child care workers rarely attended the workshops, largely due to concerns about safety late in the evening in the neighborhoods. Based on the evidence, program leaders brought the workshops to the centers, resulting in major improvements for children in literacy outcomes.

Progress-monitoring strategies provided formative information that was crucial to improving the project. It saved a \$2 million program. It solved a problem by looking at the evidence of attendance and retention.

Good evaluations of literacy programs look at a rich array of indicators. They make a case for multiple methods to examine outcomes. They draw on a large body of evidence, including evidence from practice, systematically analyzed, and sensitive to the multiple components of programs in the context in which they occur. Achievement scores, for example, may be important indicators of program effectiveness, but so are increased motivation to learn, better school attendance, and greater parent involvement. In judging what works, then, policy makers need to take a careful look at what constitutes credible evidence, remembering that social and behavioral skills, although often hard to measure, also play an important role in equipping children for a productive life.

Question 2: Is There a Return on Investment?

Programs should represent quality investments, and the best programs should provide the largest social returns. For example, a program might be considered a smart investment if its benefits to children exceed its costs. Economists use the term “economically efficient,” meaning that at a minimum, a good investment should have greater payoffs than its costs (Barnett, 1995). Basically, this requires policy makers to develop a list of all the ingredients and the amounts of each that are needed by the program, determine the cost of each ingredient, and look at the benefits in terms of long-range costs to society, including such negative markers as remediation and incarceration costs, as well as positive markers of increased employment and productivity.

Perhaps the most widely known and researched investment is the Perry Preschool Project in Ypsilanti, Michigan (Weikart, Bond, & McNeil, 1978). Following their preschool experience, children were followed over their life cycle. The evidence (Schweinhart, 2004), which is now about 40 years old, indicates that those enrolled in the program had higher earnings and lower levels of criminal behavior in their late twenties than did comparable children randomized out of the program. Reported benefit-cost ratios for the program suggested a rate of return about \$5.70 for every dollar spent. When returns are projected for the remainder of the children’s lives, the returns rise to \$8.70, with a substantial fraction (65 percent) of the return attributed to reductions in crime.

Surely some literacy programs will have better returns than others. At the very least, however, it is hoped that savings generated by programs (in terms of fewer children retained in grade, special education, remediation) would be greater than the program costs.

Question 3: Is the Program Targeted to Those Who Need It the Most?

Programs designed for poor children should serve the poor and help bring them up to par. Too often, programs have become diluted by increasing eligibility way beyond the target audience. As a result, poor children lose out.

Looking at the demographic makeup of the United States, we can see that over 6.7 percent of the population live in the poorest and most vulnerable census tracts, with a disproportionately high number of these tracts in the nation's largest cities (Wertheimer & Croan, 2003). Compared to the nation as a whole, these census tracts will have the largest proportion of triple-at-risk children: They will have much higher proportions of very young children between the ages of zero and five, higher rates of single parenting, and a less-educated adult population, with fewer working adults to support the children. These children are likely to have the most problems as they climb the education ladder.

Yet, in a startling recent analysis by Education Trust (2004), an advocacy group that supports high academic achievement for all, many of our states provide the lowest level of financial support to those in the highest-poverty school tracts—children who depend on public support for their academic development are getting the absolute least. In fact, the top 25 percent of school districts in terms of child poverty were receiving less funding than the bottom 25 percent! Coming from families with limited social capital, poor children get less of everything.

Programs aimed at improving economically disadvantaged children's odds should be targeted to their needs and challenges and help them achieve the gains that only the highest quality intervention can provide.

Question 4: Is It Equitable?

Programs should support the same high expectations for all children, recognizing that what poor children lack is the opportunity to learn, not the ability to learn. We know, for example, that obstacles caused by poverty are not insurmountable, yet it is striking how many believe that all poor children need is the "basics," depriving them of the very quality of help and instruction that would enable them to thrive.

People might be literally stunned by how little is expected in some programs specially designed for poor children. Visiting a school in the heart of a high-

poverty neighborhood in Philadelphia, for example, my colleagues found children watching a two-hour movie, *Space Monkeys*, while teachers were taking a long coffee break, a treat according to these teachers for all the “work” they had accomplished in the morning. Others have written about other time wasters. After touring about 300 high-poverty schools in several states during children’s reading period, one freelance writer found what was actually going on: in these classrooms, children weren’t reading, they weren’t writing, they weren’t learning the alphabet or its corresponding sounds or how to read short texts. They were coloring—coloring on a scale unimaginable to most of us. Dubbing it a “crayola” curriculum, Schmoker (2001) was stunned that children were given more coloring assignments than mathematics and writing.

The logic is pretty plain: children, especially those from high-poverty settings, don’t have a chance unless teachers teach. Poverty is no excuse for dumbing down requirements, curriculum, and standards. Instead, what these children need are intellectually rich programs of learning that engage their minds and spark their interests and imaginations. This is the truest and fairest definition of equity.

The bottom line is that funding decisions must move to a more evidence-based strategy to serve more poor children more effectively. In light of these criteria, I will now look at the evidence, using three well-known programs specifically targeted to educating poor children: Head Start; Title I, and Even Start. I’ll focus just a bit on services, and more particularly on outcomes.

APPLYING A RESULTS-BASED APPROACH: THREE EXAMPLES

Head Start

My first example is the easiest. Head Start is probably the best-known preschool program for economically disadvantaged children. Created during the heady, idealistic days of the mid-1960s, the program was designed to counteract the corrosive influences of turbulent neighborhoods, shoddy healthy care, and undereducated parents. Serving about 900,000 children, with a budget now in the \$6.8 billion range, the federally funded grant program was designed to improve preschoolers’ skills so that they can begin schooling on a more equal footing with their more advantaged peers. Despite some modest efforts to serve a larger age range, Head Start is still basically a half-day, five-day-a-week, nine-month program for poor four-year-olds.

Studies (Currie & Duncan, 1995) agree that Head Start produces an initial boost in children’s achievement. Most studies, however, also show that these effects begin to fade within a year or two after children enter school (Currie & Neidell, 2003). This is not to say that programs are not effective. For its size, the program has plainly exceeded all expectations. It’s a bargain. Head Start’s children, according to many studies, begin school healthier and better

prepared for school. The program helps children transition to school, reduces their placement in special education, and limits retention in grade, essentially providing a huge savings compared to its costs. The strongest evidence comes from studies published in 1995 and 2000 by economist Janet Currie and her colleagues at UCLA (Currie & Neidell, 2003). Using data from surveys of representative samples of families that included information on whether children had or had not participated in Head Start, Currie found that children who attended Head Start were less often held back in school than siblings who did not participate, had higher tests scores, which persisted into adolescence, and higher high school graduation rates.

Despite all these successes, however, the achievement gap persists. Data on school readiness for children entering Head Start 1997 and 2001, for example, show that children start the program with test scores far below average. While their performance improves, it's not nearly enough to make a real difference in the achievement gap. These sobering facts have led to a number of efforts by the Bush administration to try and retool the program toward a greater academic focus through training and accountability.

In contrast to its small size, however, Head Start has been a giant in the field, basically putting preschool on the educational map, creating rigorous standards, reviewing programs for quality performance, using research to inform practice, and taking an enormous step toward helping poor children and their parents to progress. It has been less successful in providing the intensity of help that may address children's already cumulative deficits in background knowledge and vocabulary (U.S. Department of Health and Human Services, 2005). For children to catch up, programs will have to up the ante, starting earlier, with better-trained professionals, and more intensive learning experiences.

Nevertheless, as the centerpiece of federal early childhood programs, Head Start provides a tremendous return for investment. It targets poor children's school readiness, and builds social capital through family and community involvement. It is by far the most highly rated program for economically disadvantaged children.

Title I

Title I is a more complicated story. Established as the Elementary and Secondary Education Act (ESEA) in 1965, during the euphoric days of the War on Poverty and at about the same time as the beginning of Head Start, Title I was designed to help schools meet the needs of economically disadvantaged students. Unlike Head Start, however, the Title I program has never really been a "program" per se. Rather, it's a funding stream, distributing financial resources from the federal coffers to the state, which in turn, distribute resources to high-poverty school districts. The actual amounts school districts

receive are based on complex formulas, fiddled with over the course of seven reauthorizations of the law, to incorporate, among other items, average per-pupil expenditure in the state, number of children in poverty, and previous allocations to the state and the district.

Whereas Head Start bases its compensatory efforts on highly detailed comprehensive services, Title I is more about equating resources. Comparability is a key concept in Title I: school districts must demonstrate that they are spending as much per pupil in Title I schools as in schools not receiving Title I funds. From its outset, this approach showed deference both to local control (an answer to critics who feared federal control of the curriculum) and to the prevailing belief that the main shortcoming of high-poverty school districts is a lack of funding, not a lack of knowledge about better ways to educate the economically disadvantaged.

Dashing cold water on this very supposition, ironically, the government's monumental study, *Equality of Educational Opportunity*, commonly known as the Coleman report, arrived about a year after Title I was first enacted (Coleman et al., 1966). This report was the U.S. Office of Education's response to a requirement of the Civil Rights Act of 1964 to investigate the extent of inequality in the nation's schools. Surveying and testing six hundred thousand students in some three thousand schools across the country, James Coleman, a sociologist from the University of Chicago measured on a grand scale for the very first time the inputs—differences in resources—against the outputs—student performances in schools.

The report captured people's attention not only because it provided an unparalleled description of schools and students, but because its conclusions seemed so totally counterintuitive to what we might expect. School resources, it turned out, did not seem to have very much to do with student achievement. Instead it was families and their widely different social and economic conditions that seemed to account for more of the differences.

Since then, a cottage industry has emerged attempting to refute Coleman's methods, statistical analyses, and conclusions (Fischer et al., 1996). More articles have been written about this controversial finding probably than about any other single issue in education aside from the *Brown v. Board of Education* decision, which essentially denied the argument that separate schools for children of different races were constitutional if regarded as "equal." Nevertheless, after detailed research on the impact of resources on achievement spanning more than four decades, observing performance in many different educational settings, studies have confirmed Coleman's initial findings that expenditures are not systematically related to students' achievement. No wonder, then, that an evaluation using a nationally representative sample known as the Sustaining Effects Study, found Title I to have modest to little effect on achievement or on closing the gap for poor children (Cross, 2004).

Rather than question the assumptions underlying the premise of Title I, policy makers tried to adjust some of the anomalies of the allocation system that led some low-poverty schools to receive more Title I funds than high-poverty schools. By the 1990s, Title I contained four different allocation formulas designed to help channel more funding to high-poverty districts.

Yet, at the same time, believing that the needs of poor children would best be served through a school-wide reform policy, it retreated from singling out Title I students for instructional intervention. Instead, by 1994, rather than targeting, it expanded its focus by increasing the number of schools eligible to use their Title I funds to improve the school as a whole by raising standards and assessments. Unfortunately, it introduced new problems and exacerbated old ones. Funds that had been directed specifically to the early grades now were to be expanded to 4th through 12th grades. What was once an almost exclusive focus on poor children now included every student enrolled in more than sixteen thousand schools with school-wide Title I programs. Diluting what was already a weak intervention for low-performing low-income children, Title I now reached more than 90 percent of all school districts in the country. Not surprisingly, a second evaluation, known as the Prospects Study confirmed the results of the first: on average, Title I assistance failed to improve students' achievement. This congressionally authorized, three-year longitudinal study involving a sample of 40,000 found that students receiving Title I services performed no better than those not receiving Title I services. Harkening back to Coleman's report, findings indicated that the characteristics of the individual student and his or her family accounted for a large share of variation in student achievement (Cohen & Hill, 2001).

That Title I had been far from a homogenous treatment from school to school, however, did not figure prominently in the national evaluation. Or the fact that most school districts did not seem to know how to use program monies strategically, centering their efforts on broad coverage and local control. Or that school-wide programs had little experience with school improvement, often flailing in one direction or another, demonstrating that improving instruction was far more complicated than simple fiscal transfers. Rather, these studies seemed to close the book on the belief that resources alone could improve educational outcomes. Money for poor children was not likely to raise educational proficiencies.

Despite these dismal evaluations, the No Child Left Behind Act of 2001, the latest reauthorization of the Elementary and Secondary Education Act, represented the most significant expansion of Title I, now at \$12.7 billion. Along with its sizable increase in funding came new mandates: a deadline for *all* public schools to bring *all* children up to proficiency, a minimum set of qualifications for teachers in *all* the nation's public schools whether or not they receive federal funding, and a voucher-like program of extra tutoring for

children in the most troubled Title I schools. What was once a compensatory education program for poor children now became a national reform effort to improve educational excellence for all children.

The law also required states and local school districts for the first time to use “scientifically based research” techniques—curriculum-based materials that had been proven to work effectively for achievement. Nevertheless, schools had tremendous latitude in how they used resources. Instruction being a difficult lever to control, traditionally Title I had not devoted much attention to it, using its money on salaries for instructional personnel and aides with little attention to the results produced. Even today with more sophisticated accounting practices, it is still surprisingly hard to get a clear picture of how schools spend money on instructional programs and services for poor children.

To its credit, the No Child Left Behind Act has redirected the national conversation from focusing strictly on inputs to looking at outputs and outcomes. Districts and schools today are being held specifically accountable for helping at-risk students learn. Further, despite rumblings from more affluent districts, the law concentrates more funding on fewer school districts, helping to serve the neediest students. Still, given the federal government’s expanded role, and states’ and school districts’ penchant for spreading dollars rather than solving problems, it is highly questionable whether funds will be adequately targeted to address poor children’s instructional needs. More likely than not, it will depend on the vagaries of school leadership, budgeting, and knowledge about school improvement. Raising a skeptical voice, some suggest that too often, additional resources allotted for helping poor children are used to maximize the status and employment of educational personnel while being packaged in the rhetoric of helping children.

In short, the failure of additional funding to improve educational outcomes is not a failure of the theory of action as much as it is a technical by-product of the failure ever to reach its intended audience. Providing compensatory education through additional funding to poor children has not failed; it has never been tried. Despite the enormous amount of resources provided over the years, there is strikingly little to no evidence that Title I works, that it is cost-effective, that it is targeted to poor children, or that it ensures an equitable education. Title I has rarely delivered on any of its promises. As a result, even today, children who depend the most on public education services for their academic achievement are getting the very least.

Even Start

Even Start may be the nation’s largest family literacy program at \$250 million a year, but it is small in comparison to Head Start or Title I. Recognizing poverty’s multigenerational, multidimensional aspects, it attacks these problems by providing early childhood education and parenting programs for

parents and children up to age eight. Even Start typically works with the most multirisk families, even those harder to reach than Head Start—parents who have dropped out of high school, immigrant families who have not yet learned English, and teenage parents living at or significantly below the federal poverty line.

Originally championed by Pennsylvania Congressman Bill Goodling in 1990, Even Start began as a small family literacy demonstration program modeled after a highly successful program run in Kentucky, called Parent and Child Education, or PACE/Kenan, later the National Center for Family Literacy (Darling, 1989). It has grown throughout the past 15 years, now serving approximately thirty-two thousand families in 50 states. Federal funds are given to the states to award to local projects, the average amount being about \$100,000 to \$200,000. Even though state agencies are given considerable discretion with regard to where to house the program, how to run it, how to use resources, and the approach to instruction, the legislation still requires programs to follow the largely untested PACE/Kenan model. Eligible families receive each of four core instructional components: early childhood education, parenting education, adult literacy education, and parent-child joint literacy activities, creating what is described as a unified literacy program for children and their parents.

It may sound ideal, but in reality, it is hard to accomplish. Mandated by law to collaborate with local service agencies and build on existing services to avoid duplication, Even Start programs often cobble together services from other agencies. Some early childhood centers, for example, may offer a sound preschool program, but not infant or toddler services; others may have parenting education facilities, but no provision for adult literacy classes. Projects borrow from or adapt existing materials, or subcontract for these services from other programs, resulting in collaborations that are nightmarish for quality control. Add in the difficulties of trying to run literacy-based programs for infants through primary grades, programs for adults including high school completion courses (GED), and English as a second language programs, and one can see that instructional intensity inevitably shortchanges some groups of children and adults.

Some Even Start programs are remarkably effective, demonstrating what good leadership, a good curriculum, and sound adult literacy programs can do to bring literacy to life for families. I visited such a program in Brooklyn, targeted to immigrant families, where three-year-olds were engaged in a Japanese tea ceremony while the parents looked on with an adult instructor who was teaching them the importance of play in early literacy development. The program had all the attributes of an effective intervention, involving highly trained professionals engaging respectfully with the community. Other programs lack stable leadership, and end up serving neither parents nor children

well. In some cases, states have provided too much autonomy to programs and too little accountability, with poor quality services and poorly trained staff.

Unfortunately, it shows. Three large-scale national evaluations (St. Pierre, Ricciuti, Tao, & Creps, 2001) report only minimal to no effects on gains for children's school readiness skills. By the end of the program, these studies reported that children scored on vocabulary no better than at the sixth percentile, at the bottom of the testing distribution. There were no substantive improvements in the quality of the home environment, or parent-child interactions during book reading, or parental expectations for their children. There were no effects of program participation on employment, or income, or adult literacy improvements. Even more revealing, 46 percent of Even Start mothers, classified as having high levels of depressive symptoms at the outset, were no better off by the end of the program. Concluding from one of the evaluations, St. Pierre and his colleagues from Abt Associates found that "the gains were not greater than those that similarly motivated families obtained for themselves using locally available services" (2001, p. 18).

Looking at the details of the evaluation, it is noticeable that participation rates in all the parts of the program were strikingly low. In 2000–2001, for example, parents and children participated in only a small fraction of the hours offered: 30 percent of adult education, 24 percent of parenting education, and 25 percent of parent-child activities. The average number of hours in adult literacy courses hovered around 95 hours a year, with hours ranging from 68 to 107 hours, not nearly enough to significantly improve literacy skills for adults. The average estimate is that it takes about 100 hours to move up one grade level alone. Parents participated in programs about 35 hours a year, less than an hour per week. Further, surprisingly few hours of early childhood education were received by children. Although offered an average of 591 hours, they attended an average of 220 hours, which is small compared to the amount of time that children would spend in an excellent early childhood program. Even programs using the soundest research-based practices to teach instructional content could not be expected to impact lives if parents and children did not attend sufficiently long or intensively.

According to the evaluators, at least 14 percent of the families leave Even Start because of a "general lack of interest." To retain families, programs have had to resort to rewards for participating in programs, rewards such as books, toys, fans, T-shirts, and food. Asked the reasons for the low participation, one leader suggested that parent education sessions were hardly "a drawing card" for parents who might be depressed, living in poverty, with no job prospects and a fairly bleak future.

Despite 15 years of trying and billions of federal dollars, the Even Start program has not delivered on its promises to boost children's achievement and adult literacy. Services do not come close to the intensity of the child-focused

services delivered by programs such as Head Start or to the services of adult literacy programs, with the consequences that most programs have yielded only very small effects.

HOLDING PROGRAMS ACCOUNTABLE FOR RESULTS

Demanding results through evidence provides a tool to make big changes at a time when they are absolutely necessary. It roots decisions in results, helping policy makers deliver the outcomes that citizens value, even when there may be no increases in budgets.

How might this work in the case of our three examples? It works very directly: if a program achieves outcomes, or shows promising evidence of effects, it receives funding. If a program performs poorly, it can find its funds rerouted to its competitors.

Given that many programs are still underresearched, this process should not be automatic, however. If the program is not achieving all of its goals, it might need to rethink its theory of action, it might need to adopt more successful practices, or it might need more money. Each program should be analyzed to examine why it may be underperforming and what the most effective remedies might be.

Take, for example, Head Start. Clearly, the program delivers, giving poor children and their families access to an array of nutritional, health, and school benefits. Yet the achievement gap persists, despite the program's commitment to school readiness and high standards. Now compare per-pupil spending in Head Start, averaging about \$7,170 in 2002, to studies of other programs that have shown remarkable long-term improvements in academic achievement, like Abecedarian, at about \$15,000 per child (in 1968), and one can note that Head Start is seriously underfunded for what its intended to accomplish.

If programs are going to deliver the highest quality of education that appears to reduce placement in special education and remediation, they will need to demand more funding.

The case of Title I is a bit more complicated. It is clear that the program has not demonstrated results. Rather than relentlessly focus on educational outcomes for poor children, Title I works rather like the old parlor game, telephone. The federal government sends funds to the states, the states send funds to the school districts, and the school districts send funds to the schools. As the game progresses, the funds get smaller and smaller due to the percentage cuts for "administration." The program ends up delivering relatively modest sums to schools, which they can use with wide discretion. Children in high-poverty schools often end up with top-heavy administration, and personnel rather than instructional programs. It has become a jobs program, employing thousands of unskilled workers and administrative staff. This program is

in need of draconian structural reform to reduce inefficiencies and wasteful spending.

Even Start has not delivered. Compare, for example, the long waiting lines for entry into Head Start to the no-show participation rates of Even Start. People are telling us that the program does not meet their needs. Policy makers should listen and reroute funds to programs that do meet needs. Several efforts by policy makers have been made to cut Even Start over the last four years. One wonders why it has taken so long. Funds should be redistributed to programs that work.

In short, when policy makers examine programs by outcomes, they may review programs against targets using data on results to make improvements, changes in strategies, outcomes, and work processes. This allows public leaders to do some big-picture, creative thinking that essentially entails the following:

- Reduction of inefficiencies and wasteful spending on ineffective programs
- Redistribution of funds from other, less effective, interventions
- Addition of new dollars when needed

GETTING BETTER RESULTS

Seeking more resources, particularly higher expenditures, has been the single most common educational policy for improving poor children's achievement. How these funds might be used to pursue programs and activities that achieve better outcomes has often been an afterthought. This equation needs to be turned around.

A results-based approach demands that, for every dollar spent, there should be a decent return. Good returns mean putting funds into programs where they are likely to matter the most. To get results, priorities must be reexamined, efforts must be concentrated, funding approaches must be adjusted and, finally, funds must be rerouted from failing programs to programs that work. This means taking no existing program or organization as a given.

The paradigm of a results-based approach shifts the equation toward prevention of problems rather than remediation of learning difficulties. To achieve this, however, the funding equation must begin to change. Instead of spending nearly seven times more during the school-age years, policy makers should redistribute funds toward the early years to achieve the greatest impact. Estimates of cost-savings for quality, well-implemented programs (Bruner, 2002) have been reported to exceed 10 percent and go as high as 17–20 percent in mean rate of return.

Even after redistributing funds, however, there is still a missing critical ingredient, which could be the hardest to achieve. Traditionally, policy makers have used discrete and isolated strategies for solving problems. In the long run,

this approach has inherent dangers. Program leaders have had to promise to ameliorate all sorts of problems to gain attention and financial commitment. Unrealistic expectations have often undermined good services. All this has resulted in a growing pessimism about the ability to solve problems.

Rather than succumb to a single strategy for helping poor children, policy makers must adopt a 360-degree surround that embraces every aspect of children's development.

A 360-degree surround recognizes that no single isolated strategy, no matter how good it is, will solve the problems associated with growing up poor. Quality child care is vital for stimulating children's cognitive and social development right from the start. It is not sufficient, however. Neither is home-based intervention to promote healthy development. Nor is good school teachers who demand high standards and get high-quality performance, or charismatic mentors in after-school enrichment programs. Each of these interventions, by themselves, is critically important. Yet each alone will be insufficiently powerful to address the deeply rooted problems that result from persistent poverty and the social exclusion and inequality that accompanies it.

What this realistically means is that the more children can be surrounded with quality home-based programs, child care, community enrichment, good schools, and after-school and summer programs, the greater will be the effect. Each program will make an independent contribution, but it is the synergy among quality programs that will produce the most powerful long-term and life-changing effects. This means that agencies traditionally associated with health and early child care must begin to communicate with agencies that address education, to support children's comprehensive needs related to early learning and school readiness. These agencies deal with the same children and families, yet historically they have had a rocky relationship. This needs to change. States like Massachusetts and Georgia, recognizing the comprehensive needs of children, have come to establish important connections between offices that other states may wish to emulate.

It also means that in contrast to spreading the funds, spreading programs to different groups of children who are at less risk of failure, services should be concentrated on the most vulnerable children. Too often, these children have lurked in the shadows of classrooms, overwhelmed by those with greater social capital who demand that funds be diverted toward their own interests. Federal programs funded for poor children must serve poor children, putting resources in their hands. There also needs to be greater transparency in tracking funds to stop the abuses.

These funding reforms can be initiated right now, putting millions perhaps billions of dollars to better taxpayer use, preventing problems before they overwhelm the school systems in costly remedial interventions that have shown only marginal results. Nevertheless, funding, while important, is only the first step in reforming policies that benefit children from low-income, multirisk

families. Simply placing more resources in funding streams has not been a reliable measure of the improvement of children's outcomes. It just gets to the starting gate. Programs will need to be well implemented to achieve significant cost benefits and improve the lives of at-risk children.

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Chapter Two

THE NATIONAL READING PANEL

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FORMATION OF THE NATIONAL READING PANEL

Imagine the following: as a member of a United States congressional committee with millions of dollars that your committee wishes to award to school districts for reading improvement, you, together with other members of your committee, are concerned that the money may not be used in the most judicious and efficient manner possible. Members of your committee are aware that there are as many different opinions about the best way to teach beginning reading to children as there are colors, and shades of colors, in the rainbow. This dilemma is not new, and attempts to find solutions to this problem go back long before Jean Chall wrote her pivotal book, *Learning to Read: The Great Debate*, in 1967.

To provide a solution to this problem, Congress, in 1997, in collaboration with the secretary of education, asked the director of the National Institute of Child Health and Human Development (NICHD) to convene a national panel that would have the responsibility of examining the research-based knowledge of what works in reading instruction. The panel would be required to accomplish three goals. First, the panel would be asked to synthesize from the research base what they considered to be the most effective approaches to reading instruction. Second, the panel would be asked to indicate the applicability of the different effective approaches. Third, the panel would provide, if appropriate, a strategy for disseminating these findings to the schools.

The panel of 14 people who were selected included some of the leading scientists in reading research, reading teachers, school administrators,

and parents. The panel was named the National Reading Panel (NRP). Although the original plan was to have a final report by November 1998, it quickly became obvious that this deadline was unrealistic and could not be met because of the large number of studies that had to be reviewed. Consequently, the panel was granted permission to delay its final report, and Congress received the *National Reading Panel Interim Report* in February of 1999.

HOW THE PANEL DID ITS WORK

The NRP search of the public databases found that there were approximately 100,000 studies on reading that had been published between 1966 and 1999 and about 15,000 studies that had been published before 1966. It was obvious that the sheer volume of studies was more than the NRP could examine critically in the time that had been allocated. Consequently, the panel decided to form topic subgroups based upon the National Research Council Committee on Preventing Reading Difficulties in Young Children (NRC) designation of topics considered to be central to learning to read—alphabets, fluency, and comprehension (Snow, Burns & Griffin, 1998).

Because of the sheer volume of research in reading instruction that the panel had to review in the relatively short time period before the report was due, the panel had to make decisions about how the literature search could be reduced in scope. The panel decided that in the time available they would review only experimental or quasi-experimental studies. An experimental study is one in which one can logically determine cause and effect because there is a control group and an experimental group. In a quasi-experimental study, one is forced to use intact groups rather than randomly assigned groups. Correlational studies would not be included in the literature search because correlation does not imply causation. The studies that were selected for critical analysis were to address the age range of students from preschool to grade 12. Furthermore, the studies had to be published in a peer-reviewed journal and had to be in English. Each of the panel subgroups focused on those studies that were relevant exclusively to their domains.

Another important decision was made by the panel. All of the literature reviews would follow a common structure, including questions related to 61 variables such as the use of control and experimental groups, the random assignment of participants to groups, or the use of preexisting intact groups. To maintain fidelity of coding, 10 percent of the studies were randomly chosen for reexamination to test for interrater reliability or consistency among coders. If coding agreement fell below 90 percent in any category, the subgroup took action to improve agreement.

DATA ANALYSIS

A meta-analysis is a statistical technique whereby the results of many studies on a topic are combined to allow a general conclusion about the efficacy of a treatment. Many of the studies under review reported only probability values. All that probability values do is simply state the likelihood that differences between the means of the experimental and control groups could only occur by chance, for example, five times out of a hundred (e.g., $p < .05$) or one time in a hundred (e.g., $p < .01$). The problem with probability values is that by themselves they do not inform the scholar as to how much of a difference there was between the mean of the experimental condition and the mean of the control condition. Consequently, when possible, the NRP computed effect sizes for the studies. An effect size shows in standard deviation units how much larger the experimental treatment effect is than the control condition effect, or vice versa. Effect sizes were weighted by the number of subjects in the study under review to prevent small studies from overwhelming the effects of the much larger studies.

ALPHABETICS: PHONOLOGICAL AND PHONEMIC AWARENESS

Phonemes may be thought of as the separate sound components of words; they are sounds in the speech stream that serve to distinguish meaning; changing a single phoneme in a word can change its meaning. A single letter can represent a phoneme; for example, the three letters in the word “tip” represent three phonemes (i.e., /t/ /i/ /p/). The four letters in the word “ship,” on the other hand, represent three phonemes, because “sh” is considered one phoneme. The ability to perceive and manipulate the 42 phonemes of the English language, or “phonemic awareness,” is generally achieved by most children by age eight; however, it is thought that a significant number of children fail to develop this ability; this failure is highly correlated with reading difficulties (Snow, Burns & Griffin, 1998).

It is this correlation with reading disabilities that interested the NRP in phonemic awareness. The NRP sought to determine whether research demonstrated that phoneme awareness could be successfully taught, and further, whether the interventions, if successful, would also affect reading and spelling ability. This was a particular concern for the NRP, because the teaching of phonemic awareness was fast becoming a best practice in beginning reading instruction and a required component in the curricula of states such as California and Texas.

PHONEME AWARENESS INSTRUCTION IN THE STUDIES REVIEWED

Phonemic awareness is often addressed as the final segment of instructional programs that begin with larger units of language. While the NRP reviewed

studies addressing these larger units of language, a study was included in the review only if it also specifically addressed phonemic awareness. The phonemic awareness skills taught in the 58 studies the NRP reviewed involved a variety of skills, including having students identify phonemes (e.g., “What sound is the same in these three words: sub, sad, sit?”), categorizing phonemes (e.g., for initial phoneme: “Which word doesn’t belong: dog, dip, sun?”), blending phonemes (e.g., the teacher may elongate each phoneme and asks the child what is the word: “/mmmm/ /aaaa/ /pppp/”) The child responds, “map”), segmenting phonemes (e.g., “Tell me the sounds you hear in “bus”), and deleting phonemes (“Say ‘cat’ without the /c/”). The NRP also included studies that taught students to manipulate onset/rhyme units (e.g., changing the initial onset, keeping the rhyme /b/-at, /c/-at, /r/-at, /s/-at) and to phonetically spell words. Some of these interventions included the physical manipulation of magnetic letters, or the manipulation of letters on a computer, the use of pictures, and the use of mirrors to allow children to attend to their mouths when articulating phonemes; others were confined solely to an auditory mode. Some studies also included a metacognitive component that called attention to the purpose of the phonemic awareness skills, as well as requiring the student to practice the skill in the context of reading.

The 58 studies included interventions that addressed one, two, or a multitude of phonemic awareness skills, lasted from as little as an hour to as many as 75 hours, were conducted via computer, researchers, or teachers who taught students individually, in small groups, or as a whole class. Studies involved students as young as preschoolers and as old as 6th graders, included normal, at risk children, and/or children with documented reading disabilities.

FINDINGS ON ALPHABETICS AND IMPLICATIONS FOR INSTRUCTION

The NRP concluded that phonemic awareness could very successfully be taught, that becoming aware of phonemes resulted in increased reading and spelling skills for most students, and that the effects were maintained over time. Because a variety of approaches proved to be effective, prescriptions for teaching a specific set of phonemic awareness skills were not advocated by the NRP. The NRP concluded, however, that teaching one or two skills did result in more powerful effects than focusing on a multitude of skills, and receiving instruction on these skills while simultaneously manipulating letters was also more effective than the auditory mode alone.

It is not surprising that results showed that teaching students about sounds would be more successful in small groups than in large groups. That small-group instruction was better than individualized instruction, however, is not so intuitive. This result may have been due to the fact that students receiv-

ing individualized instruction were likely to have more significant deficits. Because of the inclusion of students with a range of deficits, and a range of ages, the NRP did not come to any conclusions about the most successful instructional length of phonemic awareness (PA) sessions. Clearly, the length of successful instructional sessions is likely associated with the ability level of the students.

PHONICS

While instruction in phonemic awareness is concerned with the child's ability to hear and manipulate the sounds in spoken language, instruction in phonics is concerned with the child's ability to recognize and use the sounds of letters in written language. Once children learn letter-sound correspondences, they are taught to blend the sounds represented by the letters into words (synthetic phonics) or use larger units, such as rimes or phonograms (e.g., ack, ain, eat) contained in unknown words to compare to words they can read (phonics by analogy), thus allowing them to decode words they cannot recognize. There are many variations of phonics, including techniques that combine synthetic and phonics by analogy.

One purpose of the NRP review was to address this controversy from the perspective of purely scientific evidence. The NRP conducted a comprehensive review of all studies published since 1970 in peer-reviewed professional journals that compared the use of systematic phonics, unsystematic phonics, and no phonics. Studies had to meet specific criteria including the use of control groups and the use of interventions consisting of phonics techniques typically used in schools. Using these criteria, the panel examined 38 published studies that contained 66 comparisons. The NRP's meta-analysis revealed that the effect size for systematic phonics instruction demonstrated important differences, proving to be more successful than either incidental phonics or no phonics treatments. This finding was in keeping with prior work (e.g., Adams, 1990; Bond & Dykstra, 1967; Chall, 1967) that had found systematic phonics was better than no phonics. These findings were based on outcome measures such as the ability to read words, to read pseudo words, and to read and comprehend text. Generally, findings across studies indicated growth in all these outcome measures, but growth in reading comprehension as a result of systematic phonics instruction is less definitive.

Beyond the central question of whether systematic phonics instruction was effective, the NRP sought to determine whether there were some phonics programs that proved more effective than others. The results indicated that synthetic phonics programs, in which students were taught all letter-sound correspondences and then taught to blend them, were not significantly better than analytic or analogy phonics programs that taught

children to use larger units such as rhymes. The kind of phonics program was not critical, but the use of a systematic approach for phonics instruction was critical.

Further questions on how phonics programs were implemented included whether phonics was best taught in small or large groups, or whether a one-on-one approach would be most beneficial. One might assume that small groups or tutoring situations would naturally be better than whole-class instruction because of the ability of the teacher to attend to individual students. Surprisingly, the NRP found that all three strategies were effective, and the effect sizes for each type of instructional strategy did not differ significantly from one another.

In addition to questions concerning how phonics was implemented, questions regarding when phonics could best be used were also considered. For example, the NRP asked whether phonics is best introduced before students begin to read, or whether introduction in higher grades could also be beneficial. The NRP concluded that phonics was best introduced in early grades (kindergarten and 1st grade) before children had learned to read independently. In a related question, they asked whether phonics could be used as an effective preventative measure for students identified as being at risk for reading problems based on their family's socioeconomic status. The panel concluded that intervention in early grades, before students learned to read, produced significant growth in these students.

The review also included studies providing phonics treatment to students who showed problems in learning to read. Moderate effect sizes were achieved in studies with younger students (kindergarten and 1st grade) identified as low achievers who had average IQs. Older low-achieving students (2nd through 6th grade) did not show significant benefits from phonics instruction. The panel cautioned, however, that the eight studies reviewed may have been too small a number from which to draw firm conclusions about this group of students.

IMPLICATIONS FOR PHONICS INSTRUCTION

There is a long history of support for the use of phonics in teaching young children to read. The NRP findings added yet another source of support for the inclusion of phonics as one component in a balanced program of reading instruction. One important caution noted by the panel, however, was that phonics will not be an effective strategy unless children have developed phonemic awareness. Without phonemic awareness, children are unable to perceive the sounds in spoken words, and so will be unable to apply letter-sound correspondences learned in a rote manner to decode the printed word into a spoken word and create representation of the print. The NRP cautions that

it is this application of phonics to daily reading and writing activities that is most important if children are to effectively use phonics instruction.

In addressing the application of the findings on phonics, the NRP also noted the importance of the teacher's expertise in the application of systematic phonics instruction. Teachers must understand the individual needs of students in their classroom regarding phonics skills, and provide not only systematic instruction but instruction that matches each student's needs. Most importantly, however, teachers must not make phonics the dominant component of their reading program, but rather integrate it as part of a complete, balanced reading program.

FLUENCY

In many ways, phonics and fluency have shared similar fates over the years, at least as measured by interest in these topics is concerned. Both topics have experienced fluctuating periods of high and low status, but not necessarily at the same time. Presently, reading fluency is a very hot topic within the educational community. We believe that the *NRP Interim Report* is partly responsible for the high popularity and status that fluency currently enjoys, because the report gave fluency the same position of importance as comprehension and alphabets. While most teachers agree that fluency is an important milestone in reading, it seems to be an elusive goal for many students. The National Assessment of Educational Progress did a large-scale study of the status of fluency achievement in American schools and found, for example, that 44 percent of the fourth graders were disfluent with grade level materials that they had read under supportive testing conditions (Donahue, 2001).

CHANGING CONCEPTS OF FLUENCY

The *NRP Interim Report* acknowledges that as the social sciences, such as psychology, make advances, these increases in knowledge may transfer to improved instructional methods, as well as refined definitions of fluency that can be used to discuss the research. Changes in definitions that are based on improved theory are not trivial, since they can lead to important advances in the development and assessment of fluency. Presently, there is far greater agreement about how to develop fluency than there is about how to measure and assess it. Fluency assessment has become a contentious issue. How one defines a construct such as fluency can help in deciding if a measurement tool is an appropriate and valid tool. Specifically, the *NRP Interim Report* states, "The purpose of this report is to review the changing concepts of fluency as an essential aspect of reading, and to consider the effectiveness of two major instructional approaches to fluency development and the readiness of these

approaches for wide use by the schools” (pp. 3–5). LaBerge and Samuels’ (1974) theoretical article on automatic information processing in reading generated considerable interest in reading fluency. At the time the article was written, the authors’ attention was focused primarily on the automatic decoding of text. Although they clearly recognized that when decoding was performed automatically (i.e., with little attention or effort) it enabled comprehension to take place at the same time, they made no attempt to define fluency. The fact that fluent readers could perform two tasks at the same time, such as decode and comprehend a text, was implicit in their work, however. The emphasis on the automatic aspects of decoding is reflected in *The Literacy Dictionary* (Harris & Hodges, 1995). The authors’ definition of fluency states that fluency is “freedom from word identification problems” (p. 85). While the early emphasis by LaBerge and Samuels focused on how the automatic decoding of words facilitated comprehension, Schreiber (1980, 1987) took a linguistic approach. He reasoned that the route to fluency was brought about as the student learned how to automatically parse a text into its linguistic units, such as a noun phrase and a verb phrase. According to Schreiber, fluent readers were able to use punctuation and were able to rapidly determine where to place emphasis and how to separate the text into grammatical units. When this activity of breaking a text into linguistic units took place almost effortlessly, it freed up the cognitive resources for comprehension.

Others have extended the idea that as reading skill increases, more and more of the subskills become automatic, and recent conceptualizations of what can become automatic in reading have extended well beyond word identification. Thurlow and van den Broek (1997), for example, have stated that several components of comprehension can become automatic. Thus, the concept of automatic information processing, which started with the automatic decoding of words in texts, has been extended to include certain components of the comprehension process as well. One of the reasons there is so much interest in fluency is the finding that the development of efficient word recognition skills is usually associated with improved comprehension (Calfee and Piontkowski, 1981). Despite the finding that good word recognition skills are positively correlated with good comprehension, it is still possible, however, to find many instances where a student’s word recognition skills outstrip his or her comprehension skills because of poor vocabulary knowledge, as is the case with some English language learners.

Another avenue that has led to changes in how fluency is described has been the work of cognitive psychologists, such as Posner and Snyder (1975), Schneider and Shiffrin (1977), Ackerman (1987), and Logan (1997). They have described the characteristics of highly skilled and complex activity. What most of them seem to agree on is that the seemingly effortless automatic text-processing skills are acquired gradually over an extended period of time as the

result of extended practice. Ackerman (1987), for example, has stated: “Automatic processes are characterized as fast, effortless (from a standpoint of allocation of cognitive resources), and unitized (or proceduralized) such that they may not be easily altered by a subject’s conscious control, *and they may allow for parallel operation with other information processing within and between tasks. These processes may be developed only through extensive practice under consistent conditions, which are typical of many skill acquisition situations*” (p. 4, emphasis added). The underscored portions of Ackerman’s text emphasize two important characteristics of automaticity and fluency. First, when a person is automatic at decoding, it allows for parallel processing. Parallel processing means that a person is able to perform several tasks at the same time, such as decoding the words in a text, breaking sentences in the text into proper grammatical units, and understanding the text. This concept of the ability to perform several tasks at the same time is extremely important to our definition of fluency and to the valid measurement of fluency. The second concept that is underscored in the selection by Ackerman emphasizes the importance of practice that is consistent in developing automaticity.

DEFINITION OF FLUENCY

The theoretical work that has been done on the characteristics of readers’ highly skilled and automatic behaviors shows that these behaviors share several characteristics:

- They are fast.
- They are accurate.
- They are performed with little attention and effort.
- Two complex tasks can be done at the same time. Before the automatic level of performance was reached on the primary task (in the case of reading it would be decoding), a secondary task (such as comprehension) could not be performed at the same time. The critical characteristic of a skill that is at the automatic level is that two complex tasks can be performed simultaneously.

The *NRP Interim Report* defines fluency as follows: “The fluent reader is one who can perform multiple tasks—such as word recognition and comprehension—at the same time. The non-fluent reader, on the other hand, can perform only one task at a time. The multitask functioning of the fluent reader is made possible by the reduced cognitive demands needed for word recognition and other reading processes, thus freeing cognitive resources for other functions, such as drawing inferences” (pp. 3–8). For the nonfluent reader, the word recognition task might require all of his or her cognitive resources. Consequently, comprehension cannot get done at that moment. Having completed the word recognition–decoding task, the beginning reader switches attention to com-

prehension and all the cognitive resources are used for that task. By switching attention back and forth from decoding to comprehension, the nonfluent reader can work through a text, but it is slow and hard work, and it places a heavy load on short-term memory. If the beginning reader cannot work his or her way through a sentence in 18 seconds or less, what has been put into short-term memory is lost, and the student must start the sentence over again. After a long period of practice, the student becomes automatic at the decoding tasks, and the bulk of the available attention can be directed at the task of understanding the sentence. When the lower-level decoding tasks can be done automatically, the student can be considered to be fluent, and is characterized by the ability to get decoding and comprehension tasks done at the same time.

The ability to decode text and comprehend a text at the same time is the essential characteristic of the fluent reader. There are other characteristics of the fluent reader, such as the ability to read a text orally with expression, with accuracy, and with speed. These characteristics of fluency—oral reading speed, word recognition accuracy, and expression—are secondary to the critical characteristic of fluency that is the ability to simultaneously decode and understand the text. For example, there are some students who can read orally with sufficient speed and accuracy but their comprehension may be poor, due to vocabulary or other language-related deficits. Thus, attempts to assess fluency using one of its secondary indicators, such as reading speed, can lead to incorrect judgments.

DEVELOPING READING FLUENCY

How does a reader become so fluent that when asked to read orally, he or she can read the words in the text with accuracy, speed, expression, and comprehension? Analysis of studies that used repeated reading (Samuels, 1979) showed that repeated reading had a consistent and positive impact on word recognition, fluency, and comprehension. Conventional wisdom dictates that it is only through extended practice spent in reading that one develops high levels of skill. Allington (1977), for example, in his article titled “If They Don’t Read Much, How Are They Ever Going to Get Good?” found that the students who needed the most practice in reading spent the least amount of time in actual reading. The *NRP Interim Report* states, “What is surprising is that most of the evidence linking input variables, such as amount read and output variables such as reading ability is correlational” (pp. 3–10).

There are a host of correlational studies linking independent reading and reading outcomes, and these all have found positive correlations, indicating that those who read more have higher achievement in reading. Stanovich (1986), in his classic article, “Matthew Effects in Reading,” has taken a phrase

from the Bible, “The rich get richer and the poor get poorer,” and has shown how it applies to reading outcomes. In essence, Stanovich claims that reading more is associated with higher levels of reading achievement, while reading less is associated with lower levels. Stanovich speculated that the gap in reading achievement between the good and the poor readers would increase over time because of differences in the amount of practice each group would get.

The reading research literature contained abundant information from correlational studies showing the positive linkage between time spent reading and reading achievement. It has long been accepted as a given that practice at any skill leads to improvement. The fact that there was a lack of experimental studies showing a cause and effect relationship between amount of time spent reading and reading achievement was not surprising, because researchers usually avoid doing studies where the outcome seems obvious. The lack of evidence from an experimental study published in a peer-reviewed journal posed a problem for the NRP, however. Since the rules the panel adopted for evidence-based conclusions restricted the members from looking at correlational data showing that students who read more had higher reading achievement, the panel, after much heated discussion, decided to make a cautionary statement about independent reading and achievement. In the “Executive Summary” of the *NRP Interim Report* one finds the caveat: “With regard to the efficacy of having students engage in independent silent reading with minimal guidance or feedback, the Panel was unable to find a positive relationship between programs and instruction that encourage large amounts of independent reading and improvements in reading achievements, including fluency. In other words, even though encouraging students to read more is intuitively appealing, there is still not sufficient research evidence obtained from studies of high methodological quality to support the idea that such efforts reliably . . . result in improved reading skills” (p. 13). This statement has led to considerable criticism, because it violates conventional wisdom and the experience of teachers everywhere.

THE RED FLAG OF CAUTION: DOES INDEPENDENT READING LEAD TO FLUENCY?

The NRP statement indicating that the panel could not support the practice of encouraging students to read independently, because of the lack of experimental evidence showing that this practice led to improved reading achievement, led to considerable criticism by all segments of the educational community. As stated above, while experimental researchers have valid reasons for not doing studies where the outcome seems obvious, given the importance of the NRP statement, the need to do an experimental study showing how the amount of time spent in independent reading affects reading achievement

seemed warranted. Consequently, Samuels and Wu (2006) did an experimental study in which 3rd graders and 5th graders in an inner-city St. Paul school were randomly assigned to either a 15-minute independent reading group or to a 40-minute independent reading group. Data analysis showed that while more time spent reading led to significant positive achievement outcomes on a variety of measures, such as word recognition and comprehension, there was an interesting additional finding that made sense. The study indicated that the higher-achieving readers seemed to gain more with longer time spent in independent reading, while less able readers seemed to gain more with the shorter periods. In conclusion, the results of this experiment strongly support the importance of encouraging students to read independently. The only factor that should be kept in mind in deciding how much time to allocate to independent reading is that students who are skilled in reading have longer attention spans than less-skilled readers, who may not be automatic at decoding.

A FINAL CAVEAT—POST *NRP INTERIM REPORT*

With the growing importance of the No Child Left Behind legislation, how schools test students has become as important as the methods used to teach them. School staff may be providing effective instruction, but if the evaluation instruments are less than adequate, the tests may give faulty results and lead to incorrect decisions regarding curriculum or instruction. As might be expected, the growing emphasis on fluency has led to widespread use of testing and evaluation instruments that have the term “fluency” in their titles. It is time for the federal government to support studies that reevaluate the adequacy of the validity claims for these testing instruments, using validation procedures that are in harmony with the latest theoretical constructs supporting definitions of fluency.

COMPREHENSION

When the NRP reviewed the literature on comprehension, they addressed three major themes: vocabulary, reading comprehension strategies employed as the reader is actively engaged in reading, and how teachers are prepared to teach these comprehension strategies.

Vocabulary

The NRP focused its review of vocabulary research on those studies that attempted to teach the meanings of words to improve reading comprehension. The importance of vocabulary to reading comprehension is widely documented and is crucial from beginning reading instruction to advanced levels. In beginning reading, as students decode letters into sounds, they come to

understand that these sounds can be blended into words that match their oral vocabulary. In this way, they are able to make sense of what they are reading. Clearly, words that are not in the student's listening and/or speaking vocabulary cannot contribute to the meaningful representation or comprehension of what was read. Just as with speaking vocabulary, in which the meanings of new words are learned as a natural consequence of engaging in conversation, the meanings of words are learned incidentally while reading. This indirect learning of vocabulary can come from students engaging in reading or listening to stories being read to them. Often, this indirect method is engineered by the teacher or by the nature of the material (e.g., new vocabulary words are repeated often in the text). In direct vocabulary strategies, students are explicitly introduced to new vocabulary words via their definitions, via other attributes (e.g., calling attention to root words or affixes), or via given algorithms for discovering meanings. The NRP concluded from its review of the literature that many of these studies revealed gains as a result of vocabulary interventions.

Comprehension Instruction

A review of the research on text comprehension instruction resulted in identifying 16 distinct categories of instruction, of which 7 appeared to have sufficient evidence to conclude that they improved comprehension in nonimpaired readers. These strategies with proven effectiveness included comprehension monitoring, cooperative learning, use of graphic and semantic organizers, including story structure, question answering, question generation, and summarization. All of these comprehension strategies were found useful to varying degrees when taught alone, but they have also been found to be beneficial when used as part of a multiple-strategy approach.

Comprehension Monitoring instruction encourages readers to be aware of how well they understand the material as they read. Although the research does not provide strong evidence for using this strategy in isolation, it has been shown to be an effective component of multiple-strategy instruction.

Cooperative Learning allows readers to work together in pairs or small groups to discuss text and instruct one another. This type of engaged interaction has been demonstrated to increase learning of other strategies, and to encourage intellectual discussion and improved comprehension of reading material.

Graphic Organizers are visual diagrams that represent relationships among concepts from the text. These pictorial graphs allow readers to construct a text structure, summarize main ideas, and remember what has been read. Although graphic organizers are most often used in expository texts, they are also applied to narratives as story maps. Teaching students to organize content graphically may lead to improved comprehension and general achievement.

Question Answering is a cognitive strategy often taught to students to facilitate reasoning during the reading of a text. Instruction in this approach is intended to teach students procedures for finding answers within the text and to focus on specific content during reading to learn more from the text.

Question Generation is encouraged during reading to make readers more active and engaged with a text. The goal is to encourage readers to self-question their understanding of the material and construct integrative memory representations. Research indicates that question generation benefits reading comprehension in terms of summarizing main points and answering questions about the text (Rosenshine, Meister, & Chapman, 1996). Teachers often use this approach along with other methods such as reciprocal teaching as part of a multistrategy instructional approach.

Story Structure allows readers to organize episodes presented in the plot structure of a story. Students are instructed to identify the who, what, where, when, and why of a narrative to better understand the sequence of events and construct a coherent memory representation of the story.

Summarization requires a reader to identify the main ideas presented in the text and succinctly communicate this recall in spoken or written form. Research has concluded that summarization is an important component of comprehension instruction, as it helps students improve their memory of the material and generalize ideas from the reading content (Bean & Steenwyk, 1984; Rinehart, Stahl, & Erickson, 1986).

Multiple Strategy Instruction has been shown to be more effective than any one strategy alone. Empirical evidence supports the use of a flexible combination of reading strategies that can be used according to the situation. Teachers often model strategies such as questioning, monitoring, and summarizing, followed by an opportunity for students to engage in reciprocal teaching or collaborative learning to scaffold independent reading. Mental imagery and mnemonic (keyword) strategies are often used with students to help them visualize and comprehend what they are reading; these strategies also aid memory and can be effectively used as an alternative means of representing text.

Implementation of Instruction in Reading Comprehension

Various conditions in the classroom may interfere with effective comprehension instruction. Factors such as classroom management, monitoring behavior, instructional techniques, and degree of student involvement vary from teacher to teacher. Teachers are often more effective when they remain flexible and adjust instruction to students' needs. Research suggests that an emphasis on developing metacognitive awareness and the use of modeling during instruction can have positive results for readers of varying abilities, even when instructional strategies are only partially implemented (Duffy, 1993).

The panel called for future research in the area of reading comprehension that could transfer to the classroom. To accomplish this goal, researchers should attempt the following: use of experimental methods when possible, use of consistent training materials, analysis of intervening factors such as teacher characteristics, and assessment of the long-term impact of the intervention. The NRP suggests several directions for future research, including an examination of whether specific strategies are more effective in certain content areas, or are more useful with different ages, reading abilities, and text genres. Further evidence is needed to determine effective approaches for preparing teachers in comprehension strategies instruction.

Teacher Preparation and Comprehension Strategies Instruction

The NRP identified two primary approaches to comprehension strategies instruction: direct explanation (DE) and transactional strategy instruction (TSI). Both of these approaches are a shift away from the early direct instruction approach, which did not place emphasis on students' understanding of the reasons for using a particular reading strategy.

The direct explanation (DE) approach advocates a problem-solving framework in which students learn to think strategically about reading comprehension. Research on the DE approach conducted by Duffy et al. (1986, 1987) suggests that students who received reading instruction from teachers trained in the DE method were significantly more aware of the specific comprehension strategies they had learned and score higher on word skills posttests than students taught by an untrained teacher, but mixed results on standardized measures of comprehension do not indicate significant differences in reading comprehension ability between the two groups.

Transactional strategy instruction (TSI) and the direct explanation approach share similar components, such as scaffolding and systematic practice, but view the role of the teacher quite differently. Whereas the DE approach emphasizes the teacher's ability to articulate explanations, TSI advocates an interactive exchange among students and instructor. Teacher preparation in TSI emphasizes facilitating discussion and collaboration among students. The studies published on TSI seem to indicate that instructional methods allowing for high levels of student participation and active involvement can have significant positive effects on reading comprehension.

Although research does not provide evidence in favor of one specific set of instructional procedures, previous studies have shown that instruction of teachers in teaching reading comprehension strategically can lead to increased student awareness and engagement. The general guidelines provided by the panel's investigation of comprehension instruction suggest that teachers should explain

fully what they are teaching, model proper use of strategies, and encourage student participation through discussion and question-asking.

Teacher Education and Reading Instruction

Because there were too few studies on preservice teachers, and because there were no student measures taken in these studies, the NRP made no conclusions about the effectiveness of preservice teacher training in reading. The evidence for inservice teachers, however, was quite encouraging. The NRP concluded that teachers could be taught to improve their teaching of reading, and, most importantly, this improvement leads to corresponding improvement of their students' reading achievement.

Computer Technology and Reading Instruction

The NRP found little systematic research on the use of computers for reading instruction. The panel concluded that computers are useful tools for motivating children to read, and tools that can provide hypertext and hypermedia. As teachers know, reading and writing are closely linked in a symbiotic relationship, and the computer has proven its usefulness as a reading tool and as a writing tool. The general conclusion of the NRP is that computer technology can be used to deliver a variety of different kinds of reading instruction, and with the ongoing development of computerized speech recognition, the future of computers in reading instruction seems secure.

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Chapter Three

POLITICAL, SOCIAL, ECONOMIC, CULTURAL, AND ENVIRONMENTAL ISSUES IMPACTING EARLY LITERACY

Mario Castro

Early childhood literacy is a function of much more than individual ability. Broader issues, such as political, social, economic, cultural, and environmental issues, deeply impact early childhood literacy. These broader factors intersect with educational policy and practice to impact early childhood literacy. Moreover, because children in the United States are especially reliant on other persons for care and well-being from birth to grade 3, how these broader factors impact their caretakers is vital to children's literate futures.

In this chapter, I examine the impact of the broader context on early childhood literacy. Because discrete populations are affected distinctly and react in their own way to any given policy or practice, the chapter avoids blanket declarations about how broader issues impact early childhood literacy among all populations. Instead, I analyze the Mexican-origin population in one state to illustrate how unique factors affect this population's early childhood literacy. I present a case study of language attributes focused on early childhood literacy among Arizona's Mexican-origin population and find that economic and political issues are more salient than social or cultural issues at this point in time for this specific population. I note that Arizona education policy, aimed at improving the educational success of students who come to school speaking little or no English, is currently misdirected toward only increasing English proficiency. I further contend that students who are classified as English language learners are not the only ones who are harmed by the state's highly politicized early language and literacy policies. As detailed below, a high portion of other persons in the state is also negatively impacted by these policies. I

conclude that Arizona's policy should be redirected toward eliminating obstacles to schooling—more than toward the promotion of English—because educational attainment far exceeds English ability as a predictor of economic opportunity for the Mexican-origin population in the state.

Before presenting the case study, I briefly consider what recent early childhood literacy research says about how broader issues impact early childhood literacy. I include methods to manage the ever-increasing diversity encountered in classrooms in many parts of the United States. I include two popular methods that early childhood literacy researchers recommend to early literacy educators to manage the impact of broader issues on early childhood literacy.

EARLY LITERACY EFFORTS: THE BROADER CONTEXT

According to Jones Diaz and Makin, “In recent years, there has been increasing dissatisfaction with developmental theories. The main criticism is that there has been too much focus on the individual and not enough on the [broader] context, with a corresponding undervaluing of the importance of interaction with other people” (2002, p. 4). The importance of the social context in determining literacy is recognized by these early childhood literacy authors. They recognize that school literacy often clashes with literacy in regular life activities. In the classroom, literacy is framed at the individual level; in social situations, however, literacy is community wide, as when a person requests feedback from neighbors on a document (Heath, 1998). When considering the broader context of early literacy promotion, other factors affecting literacy and schooling, such as economic, political, cultural, and environmental factors, also come more into focus depending on the population under examination.

A review of early childhood literacy research reflects a reluctance to address this larger “big picture” of sociocultural and sociopolitical influences on literacy and schooling. Without addressing underlying factors that can affect literacy and education, educators and the public may come to believe that young children's social problems will be solved through literacy, early intervention, or proper schooling, and thus disregard lived experience. In this regard, Collins contends that “the idea of mobility through literacy and education remains persuasive, despite . . . the historical experience of most people” (1991, p. 235). In a similar way, Wiley (2005) argues that the connection between literacy and socioeconomic needs to be reversed. Collins and Wiley are among a large number of scholars who conclude that rather than literacy levels *causing* socioeconomic conditions, literacy levels *result* from socioeconomic conditions. Socioeconomic forces affecting literacy should be contended with when focusing on the broader context of literacy, as should, for example, applicable political, cultural, and environmental forces.

In recent years, early childhood literacy researchers focusing on how socio-cultural and political issues impact early childhood literacy commonly recommended to early literacy educators that they should either (1) accept diverse literacies or (2) bring critical literacy into the classroom. These recommendations are presented as methods for managing the impact of broader issues, such as political, social, economic, cultural, and environmental issues, on early childhood literacy. A brief description of each method follows.

Accepting Diverse Literacies

Researchers calling for an acceptance of diverse literacies recommend that early childhood educators recognize and value the diverse literacies young children bring from home, community, and culture. “An awareness of the many dimensions of literacy learning and of the diversity in children’s literacy experiences will equip early childhood educators to adopt inclusive literacy practices that strengthen the pathways into literacy for all children” (Martello, 2002, p. 48). This research calls for accepting all students regardless of their situation and appreciating and working with their varied literacy experiences. For example, a language minority child’s literacy skills are appreciated and built upon as are a poor child’s literacy skills, and both sets of literacy skills are valued as much as any other child’s literacy skills.

The early childhood years not only encompass the key years of brain development but also encompass the age of transition from home to school and school to home. Accepting diverse literacies implies recognizing the impact of forces on early childhood literacy, such as sociocultural, political, and economic forces, by offering a way to avoid the stratification of children at the start of their formal schooling based on their situation, whatever it may be. “Achieving continuity between home and early childhood literacy practices is a prime responsibility of early childhood educators” (Martello, 2002, p. 48).

Critical Literacy in the Classroom

A second method that researchers subscribe to for managing broader issue influences on early childhood literacy is bringing critical literacy into the classroom. Although less common as an approach to handle the broader context of literacy, this method has seen an increase in popularity. This increase mirrors the increased popularity of critical thinking and critical applied linguistics, which view knowledge, including knowledge related to schooling, literacy, and language learning, as political. Pennycook argues that

Everything in the classroom, from how we teach, what we teach, how we respond to students, to the materials we use and the way we assess the student, needs to be seen as social and cultural practices that have broader implications than just pieces

of classroom interaction. . . . In any educational domain, therefore, we need to focus on the cultural politics of what we do and understand the implications of our own and our students' pedagogical choices as both particular to the context and related to broader domains. (2001, p. 139)

Critical literacy likewise aims to understand literacy as a social practice linked to broader political, social, cultural, and economic interests. In early childhood literacy, critical literacy involves challenging "power structures and social practices that privilege some groups over others" and encourages young children to dive "beneath the surface of the text to critique ways in which dominant world views, discourses and ideologies are valued, and minority views suppressed" (Jones Diaz, Beecher, & Arthur, 2002, pp. 308–309).

In *Negotiating Critical Literacies with Young Children*, Vasquez (2004) describes how she implemented critical literacy in an early childhood education setting. Vasquez objects to teachers' attempts to engage in critical literacy by treating social issues as variables to be added to an existing curriculum rather than by using the issues to build a curriculum. In Vasquez's critical literacy classroom, social issues or topics are looked at in different ways, analyzed, and possible changes or improvements are suggested. For example, Vasquez's class considered the topic of vegetarianism following the school barbecue, when it became known that one of the students in the class was a vegetarian and was not able to suitably eat at the barbecue. In considering vegetarianism, the class was "learning a different way of being and acting in the world" (p. 110). Looking at this topic led the class to question who else may be marginalized in some way at their school. Following social action in the form of a letter-writing campaign, the status of vegetarians in their school improved with the offering of a vegetarian option at subsequent events. Vasquez writes that the class members enjoyed their studies because the topics they dealt with were socially significant to them. This implies that, if she implemented a critical literacy curriculum with a different set of students, the issues that the class would look at and analyze might well be very different.

Summary

Bringing critical literacy to schoolrooms of children in their early childhood years and urging an acceptance of diverse literacies respond to Jones Diaz and Makin's criticism of developmental theory, that there has been too much attention paid to the individual and not enough focus on the broader context. Accepting diverse literacies implies dealing with sociocultural and economic differences, such as differences in students' culture and families' financial situations, and not ignoring differences in the experiences and situations of young children. Rather, educators acknowledge that differences exist and capitalize

on them rather than allowing them to create obstacles to literacy. With critical literacy, teachers work on increasing students' literacy skills by becoming aware of how the children's situations position them.

Since both methods rely on recognizing the effects of the broader context on early childhood literacy, the effectiveness of the methods improve with a deeper understanding of how factors such as environmental, sociocultural, political, and economic factors impact literacy. In looking at early literacy for persons classified as English language learners, Xu advises teachers to examine their own beliefs about the culture of their students:

Just as English language learners bring to the classrooms their unique cultures, teachers' own cultures color the way they teach. It is important to discover how learner's cultures differ from those of their teachers, to constantly examine the way in which teachers react to such differences, and to pay special attention to the differences. (2003, p. 67)

Besides recognizing differences in young children's literacy experiences in order to build diverse literacies, early childhood literacy educators must recognize their own differences from their students. While teachers are part of the school domain, they are also influenced by the broader context; that is, teachers are not exempt from misconceptions about such contextual conditions as race, languages, income levels, and gender. A deeper understanding of how they too are influenced by these conditions improves teachers' effectiveness as early childhood literacy educators.

Educators occasionally are not aware of their own role in sustaining existing power structures. Sometimes even a critical literacy educator fails to see his or her own role in marginalizing others. For example, when taking on environmental issues, Vasquez (2004) led her early childhood class into an inquiry about rain forests. The class's efforts to learn and inform others about the need to preserve rain forests and to send a message regarding what happens when rain forests are harvested for profit included sending a poster and a letter to all places selling wood, asking them not to sell wood that has been harvested from rain forests and also mailing the letter to different lumberyards in the city. Vasquez reported that the creation of the poster and the letter resulted from conversations in the classroom about the economics involved in producing goods made from using *wood from rain forests*—that is, conversations about buyers, sellers, and producers.

The class members' concern for rain forest animals and the rain forest environment did not transfer to concern for animals or the environment endangered by their own community's actions, however. The hidden political, social, and economic lesson being taught was that it is not acceptable for faraway persons to take down trees for profit, while it is perfectly acceptable for the

local community to do so, because the local community is not situated in a rain forest, because local trees do not sustain animals or provide oxygen, because local people know how to manage the environment, and because local people are not greedy.

Another example of how even critical literacy educators are themselves victims of existing power structures surfaces with the class's analysis of McDonald's Happy Meal toys. Rather than criticizing consumerism, the angle taken by Vasquez was that the Happy Meal toys increased her students' cultural capital. In other words, students who had whole collections of Happy Meal toys, or at least were knowledgeable about a popular collection, were esteemed by their peers and increased their cultural value in their peers' eyes. One of the criticisms that the class came up with is that this collection of McDonald's toys is not accessible to poor children. This example shows that recognizing broader contextual influences on literacy and education (in this case, capitalism and consumerism) is often not an easy task.

There are studies available that provide a deeper understanding of the impact of broader issues, such as political, social, economic, cultural, and environmental issues, on early childhood literacy and education. Because different populations are affected uniquely, early literacy educators and interested others are advised to seek out works covering specific population types that address the broader context, such as *Contemporary Perspectives on Language Policy and Literacy Instruction in Early Childhood*, a volume edited by Saracho and Spodek (2004), which focuses on the early childhood literacy of persons classified as English language learners.

In the next section, I present a case study showing how the broader context impacts the literacy levels of an important segment of early childhood children in the state of Arizona.

MEXICAN-ORIGIN STUDENTS' EARLY LITERACY: A CASE STUDY

To assist in demonstrating how political, social, economic, and cultural issues impact literacy learning among young children of Mexican origin in the state of Arizona, I first present some key demographics, including statistics about language speakers. I follow the demographic figures with a description of the political climate in the state and describe the effects of this on the early childhood population of students of Mexican origin. I interject literacy and schooling data specifically related to persons in their early childhood years, and I demonstrate how social and economic policies affect their literacy and schooling.

The Mexican-ancestry population is Arizona's largest ancestry group. Most people of Mexican origin in the state are citizens of the United States (Hunnicuttt & Castro, 2005). The 2000 Census (U.S. Census Bureau, 2000) data

for Arizona indicate that the size and rate of U.S. citizenship are even greater for the early childhood population of Mexican origin. Using the Arizona 5 percent Public Use Microdata Sample, or PUMS (U.S. Census Bureau, 2003) from the 2000 Census, I estimate that people whose first ancestry was Mexican made up 25 percent of those nine years old and under. (The Arizona 5 percent PUMS file contains individual records of responses to census questionnaires representing a 5 percent sample of the occupied and vacant housing units and the persons in the occupied units.) PUMS data show people whose first ancestry was Mexican comprised 17 percent of the total population in the year 2000. The important point here is that, while the Mexican-ancestry population was 1.5 times larger than the second most frequently cited ancestry choice for people responding to the census survey, the Mexican-ancestry population was than 3.5 times larger than the second most frequently cited ancestry group in the early childhood years (German is the second most frequently cited choice in Arizona). In addition, I estimate from PUMS data that, while 70 percent of persons from the overall Mexican-origin population in Arizona were U.S. citizens in 2000, 89 percent of Mexican-origin persons nine years old and under were U.S. citizens.

Moreover, PUMS data show that Arizona's Mexican-origin population overwhelmingly speaks Spanish, but the rates are lower for school-aged children in their early childhood years. Whereas 76 percent of the Mexican-origin population five years and older speak Spanish at home and 24 percent speak only English, 67 percent of those between the ages of five years and nine years speak Spanish at home and fully one-third speak only English (see Table 3.1).

Table 3.1
Arizona Mexican-Origin Population by Proportional Share of Language Spoken at Home and Ability to Speak English

Language spoken at home		How well English is spoken by those who speak Spanish at home			
		Very well	Well	Not well	Not at all
Population 5 years of age and over	Share				
Spanish	76%	38%	15%	14%	10%
English-only	24%	–	–	–	–
Total	100%				
Population between 5 and 9 years of age					
Spanish	67%	32%	19%	12%	4%
English-only	33%	–	–	–	–
Total	100%				

Note. The percentage of Spanish speakers falls below the percentage speaking very well, well, not well, and not at all due to rounding.

Because statistics about language are collected by the census only for persons five years old and over, children less than five years old are not included in the analyses presented in Table 3.1. PUMS data show, however, that 84 percent of Mexican-origin children less than five years old reside in Arizona households where the household language is Spanish. This figure of 84 percent is also the same for the five- to nine-year-old Mexican-origin population, as well as for the Mexican-origin population as a whole.

Although Arizona's Mexican-origin population overwhelmingly speaks Spanish, although Mexican ancestry represents the modal (most frequent) category in the state, and although persons of Mexican origin are overwhelmingly U.S. citizens, especially those in their early childhood years, there are statewide political efforts to depress the use of Spanish through language planning policy, masked as education policy. Wiley (1992) stated that "Schools have been the principal instruments in promoting a consensus regarding the alleged superiority of standardized languages" (p. 113). Wiley's quote holds for the alleged superiority of any specific standard language; in Arizona, it is the version of English spoken by the state's English monolingual speakers.

Arizona education policy as mandated by Proposition 203 severely restricts Spanish language use and requires the teaching of students English only through so-called structured English immersion. The Arizona State Constitution dictates that all public school instruction should be conducted in English: "Provisions shall be made by law for the establishment and maintenance of a system of public schools which shall be open to all the children of the State and be free from sectarian control, and said schools shall always be conducted in English" (Art. 20, § 8, 2004). Following Arizona voters' approval of Proposition 203, the Arizona legislature enacted a measure requiring students classified as English language learners to "be taught English by being taught in English and all children shall be placed in English-language classrooms" (English Language Education for Children in Public Schools, A.R.S. § 15-751-§ 15-756, 2004).

Arizona education policy is framed as if it is tailored to assist those whose native or familial language is not English. Wright and Choi (2005) dispute the idea that using only English in the classroom benefits persons labeled English language learners. What policy makers and voters ignore is that Arizona's English monolingual students are the beneficiaries of the advantages, privileges, and prestige bestowed by a politically instigated education policy that suppresses Spanish, advocates the falsity that Spanish is foreign to the United States, and promotes English monolingualism. Also ignored is the point that language standards are very important in creating distance in literacy levels and schooling success between Spanish speakers and English monolinguals.

In *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*, Valenzuela (1999) shows how the abilities, skills, and culture that students bring

to school are given value, and that the Spanish language is typically seen as inferior. Perceived inferiorities are communicated by ridicule, by ignoring the additive properties of traits, and by other many other means. Those with undesirable traits, like a speaking ability in Spanish, are encouraged and expected to drop out or become poor performers. School is shown to *subtract* from students, who attempt to shed the undesirable traits and become resistant to schooling. Valenzuela writes that “Unassessed in current scholarship are the academic consequences to many Mexican youth who ‘learn’ perhaps no stronger lesson in school than to devalue the Spanish language, Mexico, Mexican culture, and things Mexican” (p. 19).

A popular, but erroneous, belief assumes that the lack of native English skills among Mexican-origin persons is to blame for their lower literacy levels, social status, and schooling and economic success compared to non-Mexican-origin persons. So, inevitably, English proficiency often becomes the misdirected goal of sociopolitical and economic policies and practices. Examples of Arizona sociopolitical policies and practices with the goal of English proficiency include “Official English” (which voters once again approved in 2006, although the 1988 measure was stuck down *a decade later* by the Arizona Supreme Court in *Ruiz v. Hull*) and “English-Only in the Schools,” the practice of providing Mexican-origin persons with English instruction instead of subject instruction, and the practice of Spanish-speaking households withholding bilingualism from school-aged children because of the false belief that speaking only English will result in greater school success. Examples of Arizona economic policies and practices with the goal of English proficiency include college admission policies, hiring practices, and other policies and practices requiring a strong command of the English language prior to delivery of educational services and jobs. While policies such as these may not be conclusive about their effects on language use (that is, the policies are not conclusive on whether or not they increase or decrease use of a language), the effects on access to educational services and workforce training are noticeable. Thus, it is not the lack of English skills that has a reducing effect on Spanish speakers’ literacy levels, social status, and schooling and economic success; it is the lack of access to quality education and workforce training services that has a reducing effect.

As mentioned earlier, the great majority of Mexican-origin people in Arizona are U.S. citizens. The increasing number of Mexican-origin people has been met with a voter backlash through additional propositions that burden and are hostile to the state’s large Mexican-origin population. In the mid-term elections in November 2006, four propositions were passed, each with more than a 70 percent voter approval rate, and these propositions further highlight the current political climate in the state. Proposition 100 adds to the list of nonbailable felony offenses that of being in the U.S. illegally. Proposition 102

denies punitive damages in any civil action to persons who are in the U.S. illegally. Proposition 103 makes English the official language of the state of Arizona, although the legality of this proposition will be tested in the courts. Finally, Proposition 300 provides that only citizens or legal residents are entitled to in-state classification for education purposes, tuition and fee waivers, financial assistance, and child care assistance. In addition, only citizens or legal residents may participate in family literacy programs and immigrant and adult education classes.

Current Arizona education policy rejects what education policy analysts and education academics have known for over 40 years. In early 1967, at the hearings for the Bilingual American Education Act, the precursor to the Bilingual Education Act that provided federal assistance to local education agencies for the development of bilingual education programs, testimony by several witnesses revealed that it was already well acknowledged that the best way to teach children is through their mother tongue. Literacy in one language facilitates literacy in another, and the debasing or rejecting of a student's native tongue, not the language itself, works negatively on a student's self-esteem and promotes dropping out and low educational attainment (see U.S. Congress, Senate, Committee on Labor and Public Welfare, Hearings before the Special Subcommittee on Bilingual Education, 1967).

Unfortunately, because of the persistent belief that a lack of native English skills is to blame, the solution to lower levels of literacy and education is habitually to increase English oral proficiency. Castro and Wiley (in press) state that overemphasizing oral English-language skills at the expense of literacy and job skills that can be mediated in non-English languages overtly delimits the workplace and educational policy options that would better accommodate our linguistically diverse society. English proficiency is the misdirected goal of Arizona education policy for the improvement of the educational success of students who come to school speaking little or no English, and this goal is actually a large part of the problem. Current Arizona education policy implies a preference for changing the Spanish-speaking Mexican-origin student into an English language speaker rather than providing the non-English-speaking student the greatest possible number of years of schooling and the best possible education and literacy services. Speakers of non-English languages are damaged by ill-informed education policies focusing on the acquisition of English rather than on, for example, subject matter.

The following statistics from the National Assessment of Educational Progress, or NAEP (U.S. Department of Education, 2006), further highlight the reasons why English proficiency is a misguided goal. In testing reading and writing achievement levels for students in grade 4, or just beyond our early childhood focus from birth to grade 3, the latest NAEP data show Mexican-origin students who only speak English at home in Arizona are (at

a statistically significant level) just as likely to be below basic reading and writing levels as Mexican-origin students who speak a non-English language at home once in a while, half of the time, or all of the time (see Table 3.2) (U.S. Department of Education, 2002; U.S. Department of Education, 2005). In other words, speaking only English does nothing to support Mexican-origin students' literacy success.

PUMS data might provide plausible insight into why Arizona's school-aged Mexican-origin children in their early childhood years who speak only English at home are just as likely to be below basic reading and writing levels. Table 3.1 shows that 33 percent of Mexican-origin children between five and nine years of age speak only English in the home. Of these children, less than half (46 percent) reside in households where the household language is English, creating a possible literacy disconnection between child and home. This implies that some Mexican-origin Spanish-speaking households are drawn to the social practice of withholding bilingualism from young children because of the false belief that speaking only English will result in greater school success. These households may actually be conspirators with governments and schools in hurting their children's literate future. This also highlights the reason why, as Jones Diaz and Makin (2002) noted, there is growing dissatisfaction with developmental theories focusing on the individual learner. The importance of interaction with other people in early childhood literacy development must not be undervalued. Ill-informed social practices and policies, like Arizona's English Language Education for Children in Public Schools, that spur beliefs such as speaking only English will translate to educational success, need to be stamped out. Data may help inform, but only early childhood educators and families can put suggestions into practice.

Concluding Suggestions Based on the Case Study

In summary, the data do not support current Arizona education policies and practices that focus on English oral proficiency in an attempt to improve

Table 3.2
Percentages of Mexican-Origin Students Who Are below Basic Reading and Writing 4th-Grade Levels by Frequency of Language Other Than English Spoken at Home

Speak a language other than English at home	Below basic reading level, 2005 (standard error)	Below basic writing level, 2002 (standard error)
Never	62% (4.5)	35% (5.8)
Once in a while	54% (3.5)	28% (3.5)
Half of the time	59% (5.6)	32% (6.5)
All of the time	64% (2.6)	32% (3.4)

the literacy outcomes of Spanish speakers in the state, of whom a great many are Americans of Mexican ancestry. In their attempt to pose some important questions in the hope that those questions may lead to policy improvement in the state, Hunnicutt and Castro (2005) ask,

Since Spanish is so prevalent among Mexican-origin persons, with the vast majority not enrolled in school, are efforts to stamp Spanish out of schools masked efforts to deny education services to Mexican-origin persons and garner [educational] resources for English monolinguals? (p. 123)

To improve the literacy and the educational outcomes of Spanish speakers, the state of Arizona should instead concentrate on removing barriers to literacy and education, including removing policies and practices requiring a strong command of the English language prior to delivery of educational services, jobs, or workforce and job-skills training. Eradicating poverty (not turning everyone into English monolinguals) should be the goal. Castro and Wiley (in press) demonstrate that U.S.-born persons who have had the opportunity for schooling are likely to acquire English-speaking skills. Rather than educational attainment being seen as a function of English ability, English ability is a function of educational attainment obtained under English or bilingual instruction.

The data related to early childhood literacy support the path of redirecting efforts from English acquisition to the provision of quality literacy experiences. For example, Mexican-origin students who speak only English but who are National School Lunch program eligible are more likely to be below basic 4th-grade reading levels than Mexican-origin students who speak a non-English language once in a while and who are not National School Lunch program eligible (see Table 3.3) (U.S. Department of Education, 2005). Perhaps even more surprising, Mexican-origin students *who speak only English but who are National School Lunch program eligible* are more likely to be below basic 4th-grade reading levels (at a statistically significant level) than Mexican-origin students *who are not eligible for the National School Lunch program and who speak a non-English language all or most of time!* Observably, English proficiency is not the solution for the improvement of Spanish speakers' literacy outcomes.

Comparing students who have similar language use patterns, Mexican-origin students who speak a non-English language once in a while are more likely to be below basic 4th-grade reading and writing levels (at statistically significant levels) if they are eligible for the National School Lunch program than if they are not eligible for the National School Lunch program (U.S. Department of Education, 2002; U.S. Department of Education, 2005). These figures offer testament to Wiley's (1995) contention that rather than literacy

Table 3.3

Percentages of Mexican-Origin Students Who Are below Basic Reading and Writing 4th-Grade Levels by Frequency of Language Other Than English Spoken at Home and National School Lunch Program Eligibility

Speak a language other than English at home	Eligible for National School Lunch program	Below basic reading level, 2005 (standard error)	Below basic writing level, 2002 (standard error)
Never	Yes	73 (6.4)	48 (9.0)
	No	*	*
Once in a while	Yes	61 (3.6)	35 (4.2)
	No	40 (7.1)	18 (4.9)
Half of the time	Yes	69 (8.0)	33 (7.5)
	No	*	*
All of the time	Yes	66 (2.8)	35 (3.4)
	No	48 (7.1)	*

* Reporting standards not met.

levels causing socioeconomic conditions, literacy levels result from socioeconomic conditions.

Early childhood educators should note that it is not a lack of English proficiency but primarily political and economic interests that impact the literacy of young Mexican-origin students in their early childhood years. This chapter has aimed to assist in recognizing and valuing the diverse literacies that young children bring from home and community to school, to strengthen the pathways into literacy for all children. Likewise, this chapter has aimed to provide ammunition to early childhood educators who practice the art of critical literacy in their quest to challenge the power structures and social practices that privilege some groups over others. While I have mainly addressed language standards, I encourage a look at other areas, such as discriminatory practices in housing and lending, that are supported by industry, government, and individuals, resulting in much of the discrepancy in wealth between groups in the United States (Lipsitz, 1998).

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Part Two

BEST PRACTICES IN EARLY LITERACY INSTRUCTION AND ASSESSMENT

Chapter Four

ASSESSMENT OF EARLY READING DEVELOPMENT

Terry Salingor

For years, early childhood reading assessment has drawn intense criticism and generated many cautious words. Criticisms have frequently concerned the overuse of tests in the early childhood years, and the cautions have alerted educators, policy makers, and parents about the relative lack of measurement precision, validity, and reliability of instruments designed for use with young learners. For example, the National Association for the Education of Young Children (NAEYC) published an edited volume in 1990 with the provocative title of *Achievement Testing in the Early Grades: The Games Grown-ups Play* (Kamii, 1990). The author contended that the rush to test is motivated by various political and social purposes that can be categorized as “the vote-getting game, the looking good game, the keep-my-job game, or the buck-passing game” (p. 3). The insight provided by the book is certainly relevant today.

More recent critics question the supposed link between increased testing, teacher and school accountability, and improved student achievement (Nichols, Glass, & Berliner, 2005). The crux of the questioning is whether the imposition of more testing will bring about the kinds of instructional changes needed to improve the chances for all students, especially those at risk for failure, to become strong readers and writers. Time spent on testing, critics claim, is time taken from instruction; and many of the tests currently in use do not provide teachers with the kinds of information that can improve their instruction (Manning, Chumly, & Underbakke, 2006).

Critics' concerns have only intensified because of the No Child Left Behind (NCLB) legislation and Reading First. Reading First is a massive, federally

funded program that focuses on improving reading instruction and student achievement in kindergarten to 3rd-grade classes. Reading First schools must use core reading programs that contain periodic theme tests. They must also screen students upon entry into each grade, provide diagnostic testing and intervention for students found to be at risk for reading difficulties, and document students' development with frequent progress monitoring assessments. The Dynamic Indicators of Basic Early Literacy Skills or DIBELS (<http://reading@uoregon.edu>; www.dibels@uoregon.edu) has become the most widely used instrument to measure early reading, and in many ways, DIBELS has narrowed the definition of what early reading development is all about (Tierney & Thome, 2006).

This chapter discusses some of the methods used in early childhood classes to assess young learners' development of reading, including DIBELS. It takes the stance that gathering assessment data about early reading is important; in fact, teachers should gather multiple forms of evidence about their young students' reading acquisition. It is important, however, that the assessment data are valid and reliable, that collection procedures are not intrusive and make sense to children, and that the data are useful for instructional decision making. Therefore, this chapter begins with a summary of some of the negative aspects of early reading testing, continues with a more positive picture of how several forms of assessment can help teachers improve their early literacy instruction, and ends with a discussion of DIBELS.

THE CURRENT MODEL FOR EARLY LITERACY ASSESSMENT

A three-part model of assessment is currently advocated and is required in Reading First schools. The model consists of three specific levels of testing: initial screening of all students; diagnostic assessment for students whom the screening test identifies as potentially at risk; and ongoing progress monitoring for all children. Children found to be at risk are supposed to be given extra help, at first by their teachers and then if needed by specialists. In 3rd grade, students take a standardized, paper-and-pencil reading test requiring them to bubble in their answers to multiple-choice questions. The 3rd-grade data contribute to schools' annual yearly progress (AYP) rating.

On the surface, this is an excellent model because it provides children with ample opportunities to show what they know and can do and to demonstrate those areas where they need some level of intervention before being confronted with a high-stakes test at grade 3. The plan, in and of itself, is a strong one, at least so long as what is being advocated makes sense conceptually and practically and will not result in unintended negative consequences.

WHY EARLY TESTING OF READING MAY BE INAPPROPRIATE

No matter whether reading will be tested by a standardized reading test or by a more informal method, many variables can influence how children perform on any given day. These include children's health or mental state on the testing day; capacity to attend to the test or assessment tasks; ability to sit still and hold a pencil; familiarity with testing routines, including bubbling in responses if necessary; or even the teacher's demonstrated attitudes toward the test. Bad vibes from teachers who are stressed about giving students a test or about how the test results may be used can easily be communicated as frustration to students. Standardized tests, unlike many classroom-based assessments, capture performance at one moment in time. Learning to read is a dynamic process; and as children learn, they progress along a developmental continuum that includes both the acquisition of knowledge about literacy and also numerous skills and strategies. The most valuable information for teachers is where children are on that continuum and how they are orchestrating what they are learning, not how they are able to read at one particular point.

Many classroom-based assessment approaches fall victim to some of the same difficulties as standardized tests. If the tasks that students are asked to perform seem as unfamiliar as filling in bubbles for answer choices on a reading test, then the measurement of reading may be seriously flawed. An example of such a situation would be asking students to read as many nonsense words as possible in one minute. There is nothing inherently wrong with the use of nonsense words; in fact, students' ability to read nonsense words is a good measure of their decoding. If students' reading instruction has centered primarily on making meaning from text, however, the nonsense-word activity may be so confusing that its measurement value is lost.

The example of the nonsense-word assessment activity illustrates another reason why early reading assessment may be inappropriate. Some informal classroom-based assessments and most standardized measures conceptualize reading acquisition as an accumulation of discrete skills and strategies (Pearson, 2006) that can be measured discretely. The current attention to the five essential components of reading discussed in the *Report of the National Reading Panel* (National Institute of Child Health and Human Development, 2000) perpetrates this view of early reading, and misinterpretation of the recommendations of the report often inappropriately merges discussion of instructional emphases with students' own orchestration of the different cognitive activities involved in learning to read. Assessment reports that offer only information on discrete skills or clusters of skills are often used primarily to identify what students have not learned, that is, to highlight the aspects of reading that are not developed up to a particular criterion for mastery at dif-

ferent grade levels. Teachers may then focus instruction on these deficit areas in which students need to improve. If Stanovich's (1984) contention that it is impossible to find single elements or subsets of elements that are the definitive cause of children's potential reading difficulties is to be trusted, viewing reading achievement as the accumulation of a set of scores on an assessment makes even less sense.

A final reason for concern about much early reading assessment is that teachers often feel pressure to teach to the test, whether it is a standardized measure or an assessment such as DIBELS that is administered individually. Teaching to the test occurs when teachers know the content that will be covered on a test and make that the core of their curriculum. For example, if kindergarten students will be tested on their understanding of phonemic awareness and beginning consonant sounds, teachers may provide a steady diet of drill on these two components of early reading, often skipping other instructional foci such as knowledge of text structure or beginning comprehension strategies. Sometimes, the nature of the tasks included on an assessment drive the instruction. Teachers might, for example, make sure that students know how to select from a series of pictures "the picture whose name begins with the letter I will say," or they may provide extensive practice reading lists of words quickly and accurately. Such practice may increase students' phonics knowledge or oral reading fluency, but again, these are only aspects of the entire range of cognitive behaviors that students need to master as they begin to read. Further, this kind of instruction totally ignores the affective aspects of learning to read—the satisfaction students gain from listening to and then reading stories themselves.

Letting the content of a test or assessment tasks determine what teachers emphasize limits the curriculum and shortchanges students in a very vulnerable phase of early reading development. From the teachers' perspective, this content and these tasks constitute beginning reading instruction; and from the students' perspective, the repetitive drill and practice may simply not be worth the cognitive and affective effort needed to stay engaged and motivated. Pearson (2006) has sagely pointed out that "assessments should reflect, not lead, curriculum and instruction. We need instructionally sensitive assessments, not assessment-sensitive curriculum" (p. xvii).

Teachers may engage in this practice because tests are part of the accountability system in place in their school or district and they want their students to do well. In addition, when students do well, teachers themselves will be viewed as effective. This practice is what Kamii (1990) referred to as the "looking good game" that adults play. From a measurement perspective, teaching to the test ultimately decreases the meaningfulness of the test data, because students' deeper knowledge of the content is not assessed.

WHAT EFFECTIVE ASSESSMENT OF EARLY READING CAN DO

Being trained on and then using an effective classroom-based assessment system can have far-reaching and positive effects on the early childhood instructional program. It matters less whether teachers use a commercial product or a locally developed system than that their approach to gathering, interpreting, and acting on assessment data is systematic. Classroom-based assessments should yield huge quantities of rich, descriptive data about what students do as they learn to read, and the process of collecting these data give teachers tremendous opportunities to get to know their students' strengths and weaknesses and to evaluate the effectiveness of their instruction. As they use the assessment and get to know their students, teachers expand their ability to make sense of what they see and to act on the information they gather through instructional decision making. The process also gives teachers new insight into the complexity of reading development.

SOME BACKGROUND ON CLASSROOM-BASED ASSESSMENTS

Classroom-based assessment of early reading that teachers administer themselves is not a new idea. In fact, there is a long history of reading researchers working to find the best forms of classroom-based assessments to give teachers the information they need to help young students learn to read. The research and theoretical work of Clay (1985), Holdaway (1979), and Teale and Sulzby (1986) has been highly influential in shaping assessment approaches that are very similar to common activities in early childhood classes. This similarity to business as usual gives high levels of face validity to assessment tasks, like running records, story retellings, or invented spelling tests (Clay, 1985). Anecdotal records, oral reading of vocabulary or sight word lists, fluency checks (Rasinski, 2003, 2004; Zutell & Rasinski, 1991), self-assessments (McKenna & Kear, 1999), motivation inventories (Gambrell, Palmer, Codling, & Mazzoni, 1999), use of *Concepts about Print* exercises (see Clay, 2000), and other tasks or inventories (Parker et al., 1999) are also common. In most systems, data are collected throughout the year for teachers to document and chart the range of skills and strategies their students are acquiring.

The common underlying feature of comprehensive approaches to classroom-based assessments is that various facets of reading are measured accurately, efficiently, and without undue stress to teacher or students. Approaches to classroom-based assessment seem to be divided into two distinct categories. In the first, the assessment system consists of distinct tasks that are administered either at scheduled times throughout the year or in an on-demand manner dictated by students' seeming mastery of content. Teachers administer and score tasks and use data to monitor students' progress and to make deci-

sions about instruction. Individual tasks have integrity within an underlying theoretical perspective about how reading develops, but each task exists as a stand-alone instrument that gathers data on specific aspects of reading (e.g., fluency, invented spelling, knowledge of letter-sound correspondences). The scores from the distinct tasks cumulatively yield an accurate picture of how students are developing as readers.

In the second model, tasks are administered and work is collected at specific points throughout the year to document progress along a theoretically grounded developmental trajectory. For example, a teacher may administer the tasks at the beginning, middle, and end of the year. Work is kept together, may be shared at parent conferences, and usually travels as a whole or in summary with children from grade to grade to familiarize receiving teachers with the progress that students have made in the previous year. Often such data allow teachers to place students on a developmental continuum with behavioral anchors at each point to describe how students orchestrate knowledge, skills, and abilities at different stages in literacy learning

WHAT EFFECTIVE EARLY READING ASSESSMENT LOOKS LIKE

Next, let us consider the positive aspects of assessing early reading development, and let us do so from the perspective of a group of teachers in kindergarten to grade 2 and their reading coach, who want to improve their approach to assessing the reading development of the students they teach. Twenty years ago, Johnston (1987) wrote that teachers in early grades need to become “evaluation experts” who can make sense of what they see their students doing and trying to do as they learn to read and write. This is what teachers want to be. They know that collecting classroom-based data will be time-consuming if they are going to do it well, but they are convinced that doing so will improve their teaching and their students’ learning. With full support from their principal, they set out to learn more about assessment in general, to find alternatives to DIBELS that their school might adopt, and to make plans to improve early literacy instruction in their school.

The teachers want especially to improve their ability to screen students’ strengths and weaknesses when they enter their classes and to monitor their progress throughout the year. They recognize that good screening assessments may suggest that some students need further testing to diagnose cognitive or language deficits, so they ask the school guidance counselor to begin to identify individually administered diagnostic tests for use with beginning readers.

The teachers find that there are many models of instructionally sensitive, age appropriate assessment procedures that can make them true evaluation experts. Some are comprehensive systems like the *Work Sampling System* (Meisels, Jablon, *Fox in a Box*, and the *New Standards Portfolio System*, all

of which are available commercially, or the *Texas Primary Reading Inventory*, which was developed by university researchers for use in Texas. Others models have been developed at the district or state level (see Harrison & Salinger, 1998, and Valencia, Hiebert, & Afflerbach, 1994, for summaries of locally developed systems). Although a comprehensive classroom-based assessment system may take many forms, it should demonstrate adherence to three important principles:

1. The system must facilitate the collection and use of multiple forms of evidence of reading development;
2. It must have a high degree of face validity, in that it includes assessment tasks that make sense to teachers and students; and
3. It must include procedures to help teachers become knowledgeable about gathering and using data.

The concept of multiple forms of evidence means that data should be collected in different reading situations with different kinds of text and should tap different aspects of young learners' reading. These data reflect the complex, dynamic nature of learning to read. A comprehensive system may even factor in results from a standardized, paper-and-pencil assessment of reading or from the administration of tests like DIBELS.

At the same time, the tasks should make sense to teachers and students and be as similar as possible to normal classroom activities. When teachers use routine activities for assessment purposes—for example, analyzing errors that students make when they read orally—the assessment event is less stressful than administration of a formal test. Even when assessment tasks are administered according to a set schedule, tasks that are similar to what students normally do are more likely to yield accurate information about developing reading skills.

To be true evaluation experts, teachers need to learn to collect, understand, use, and respect data. The skills needed to do this successfully are not usually taught in teacher preparation programs, and they need to be part of the professional development opportunities that teachers receive. Comprehensive assessment systems often include training programs, but as discussed below, teachers can—and should—learn to incorporate assessment methods into their everyday teaching routines. One of the most important roles that reading coaches can play is to help teachers feel more comfortable as data users.

After several months of reading articles and books about early reading assessment and reviews of commercial packages, the members of the assessment development committee report to their principal that they want an assessment system that will allow them to gather data on children's development by taking advantage of the activities that engage students as part of high-quality literacy instruction. They have decided against recommending a commercial product,

because they want to work together to create and try out an assessment system that aligns to their understanding of reading development, will be appropriate for their diverse student population, and will not impose extra burdens on their already busy instructional day. They have learned that the most common data sources are students' oral reading, students' written products, and teachers' observations and interactions with students. Further, they have read about and seen examples of assessment tasks for kindergarten to grade 2 that work together to provide teachers with rich data to guide instruction and to use to keep parents informed about students' progress.

THE DATA SOURCES

Their plan is to concentrate first on their data sources: oral reading, written products, and teacher observations, and then to find, adapt, or design assessment tools to capture the data they need.

Oral reading is a dependable source of data on children's developing reading skills because it provides evidence of how they are making sense of the written word. In keeping with the goal of collecting multiple forms of evidence, teachers ask students to read different kinds of materials: lists of words, continuous text in familiar books, and informational and narrative texts developed for assessment purposes. Some of the texts used for assessment may have illustrations to help students make sense of what they are reading, but it is always wise to get a sense of how well students can read unillustrated text as well.

Finding out what students know about books, book handling, and language is an important screening procedure that has particular value in kindergarten and grade 1. The *Concepts about Print* test (see Clay, 2000) is a formalized approach to this assessment with its own printed materials. For example, some of the print in one of the little test booklets is written upside down to measure children's sensitivity to print orientation. Teachers can simulate the test on their own by handing student a small book with minimal print per page and ample illustrations. Even noticing whether the child immediately turns the book to the front and orients it so that the text is upright is an important piece of screening information. Teachers can then ask students to perform simple tasks, such as identifying the title, pointing out where the text begins and ends on a page, where the words are (as distinct from the pictures), and what the punctuation is for. Teachers may even point to specific simple words and ask if children can read them. Another important piece of information comes from students' attempts to tell the story based on the title and the illustrations. This can show their sense of what stories are all about.

Students reveal many of their cognitive processes when they read to the teacher. Oral reading shows fluency, that is, how quickly and accurately stu-

dents can decode print. A short fluency test is a good way to screen students to see what they know at the beginning of the year and also serves as an efficient progress-monitoring tool as the year progresses. Most commercial classroom-based assessment systems include a fluency measure, and teachers can easily locate such measures if they are developing their own approach. Rubrics for scoring oral reading are readily available (e.g., Rasinski, 2003, 2004; Zutell & Rasinski, 1991).

When children can read fluently, they demonstrate that they understand letter-sound correspondences and can apply their understanding with relative ease. This is certainly true when students read word lists, but fluency becomes an even more nuanced concept when considering how students read continuous text. Fluent reading of text that is at the appropriate reading level is marked by overall smoothness, attention to punctuation and other markers of thought units, appropriate phrasing, variations in expression aligned to the reader's interpretation of text, and minimal disruption to an ordinarily conversational style. Readers may make errors, but generally, they self correct and move on.

For young readers, fluent reading, even of short texts, is strongly correlated with comprehension, because when children read fluently, they are monitoring what the text says and how it says it (Pinnell et al., 1995). When reading orally, even fluent readers often make miscues, that is, they deviate from the actual written text. When teachers are listening to students read orally as part of an assessment system, they can use a procedure called a running record to track the miscues students make (Clay, 1993). Miscues take many forms and all reveal something about students' cognitive activity as they try to read. Some miscues are phonetically similar to the word in the text but don't make sense within the context of the story; these show that students know letter-sound correspondences but are not monitoring comprehension. Other miscues may bear little resemblance to the original word phonetically but make perfect sense within the text. Reading "house" for "horse" is an example of a meaning-changing miscue, but reading "pony" for "horse" would not change the meaning.

Oral reading fluency and analysis of miscues should not be the only indicator teachers use to measure students' comprehension, however. Asking students to retell what they have read and asking questions to prompt them to think about the reading are two important ways to determine how well students have comprehended. When students retell a story they have understood, they should be able to provide a beginning, middle, and end, the main character, and usually the main plot events. Learning to retell stories begins even before students can actually read, with teachers prompting students to talk about stories that have been read to them. As students engage in retellings, teachers may have to prompt and probe a bit to gather the documentation they need

so that students can structure their responses to show how much they have actually comprehended.

Teachers can also ask students questions about what they read, but the questions need to be carefully developed. Questions that tap the literal level of comprehension (“What color was the dog?”) can tell whether students comprehended and can remember details, but it is important to use questions that are more engaging and thoughtful. Questions can ask students to engage in many levels of thinking about what they read, including making simple inferences or evaluating the text. Asking students to make personal connections to the text is also important, because this process engages students in reflection and emphasizes the importance of students’ knowledge and experiences in making sense of text. For example, asking a student to tell how an event in a story reminds them of something that has happened to them requires the student to delve into background knowledge—an essential comprehension skill that is easier to model than to explain to young readers. Questions of this sort can work, even with very young learners, because they invite them to think deeply about the text. Kindergarten teachers can start to accustom students to think about text in these kinds of ways by asking similar questions about stories they have read aloud.

Students’ written products are also an important data source that teachers can use to gain insight into what goes on inside students’ minds as they try to externalize their knowledge about various aspects of reading and about their reactions to what they read. There are two commonly used formats for the written products: spelling tests and students’ attempts to write continuous text. The tests consist of a series of words that demonstrate different regular and irregular spelling patterns, and students are encouraged to spell the words as well as they can. The written product shows their stage of invented spelling, that is, the way they are at that particular time applying—or misapplying—their knowledge of letter-sound correspondences. Researchers (Clay, 1985, 1993; Richgels, 1995) have shown that students pass through distinct stages in their ability to spell in traditional ways, and that knowing how they are orchestrating their phonics knowledge helps teachers tailor instruction to students’ needs. If students are in the process of learning English, their spelling may show the influence of the phonic knowledge in their home and school language. Teachers need to be sensitive to this so that they can help children overcome their confusion.

If the classroom climate is literacy rich and teachers are supportive, even beginning kindergarteners will “write” when asked to do so, and pre-readers will often “read” a story they have written or dictate what the story says so that teachers can transcribe their words into traditional orthography. As students move along the developmental continuum extending from kindergarten to grade 2, they should be encouraged to continue to write both on their own and in response to teacher requests (Dyson, 1993). Teachers can collect representative samples and compare them against the many rubrics that are available to explain what the writing

shows about phonics, letter formation, left-to-right orientation of print, purposes for writing, and even story structure. Analyzing writing samples at a given point in time help teachers monitor progress and plan ongoing instruction.

Teachers' observations and anecdotal records can also be an invaluable part of the assessment data that teachers keep about their students' growth. One current textbook (Fields, Groth, & Spangler, 2004, p. 312) for training teachers suggests that "Most teachers talk way too much in school. Instead of trying to keep kids quiet so they can hear you, try keeping yourself quiet so you can hear children. You will be amazed at how much you will learn." Teachers can find or develop checklists that will help them document students' oral language or their demonstrations of specific reading or writing behaviors that are benchmarks along the developmental continuum of literacy growth.

Teachers' anecdotal notes about students' learning are also very important, whether they are taken during instructional interactions or when they periodically step back from involvement with the students to conduct an environmental scan. Teachers might note students who seem reluctant to try to read new words, who like to go off by themselves in the library corner, or who seem to prefer writing to reading. Notes on these and countless other behaviors can help teachers figure out what's going on with students as they try to master literacy and figure out how to help them move forward.

After all their reading and discussion, the teachers and the reading coach devise a plan for an efficient but effective classroom-based assessment system that can be used in kindergarten to grade 2. Table 4.1 summarizes their ideas for screening and progress-monitoring tools. They have integrated the use of the theme tests in their core reading program into their scheme strategies but are convinced that the additional procedures they are proposing will strengthen their ability to monitor progress. They propose setting aside a range of books from each classroom's set of leveled books that can be kept secure for conducting running records, and they have identified words for the spelling test that will give them information on their English-dominant students and those for whom English is a second language.

Their principal likes the proposal and gives approval for the teachers to move forward to the next step of development. This step will be lengthy because it involves finalizing instruments, creating actual recording sheets, developing scoring procedures, trying out the assessment tasks with students, developing training and resource materials, and in all likelihood, refining everything after the pilot year. The development committee has learned firsthand why many schools and districts simply purchase assessment packages or rely primarily on materials accompanying a core reading program. Commercial materials make assessment easy and efficient. Still, for these educators, the work has been worthwhile in terms of what they have learned and what they hope to learn about their students by using this locally grown assessment system.

Table 4.1
Proposed Contents of an Early Reading Assessment System, Kindergarten to Grade 2

Activity/task	Target of assessment	Grades	Data source	Comments
Screening: Given near the beginning of year or as children enter class during the year				
Oral language interview	Vocabulary: extent and specificity; facility with English (for ELLs)	All	Teacher observation	Teacher engages students in conversation about books and reading done at home and listens as students interact with others to get an initial sense of language facility. Used at beginning of school year or when new student enters class
Alphabet, environmental print, and sight word check	Students' familiarity with alphabet and common words observed in environment	K-1	Student response	Teacher asks students to view and read from a list of upper and lower case letters; list also contains common examples of environmental print, such as STOP, and common sight words. Used at beginning of school year or when new student enters class
Concepts of print	Knowledge of book parts and book handling skills	K-1	Student response, teacher observation	Teacher engages students in discussion of a book with pictures and one line of print per page; teacher observes students' familiarity with book handling and book parts. Used at beginning of school year or when new student enters class
Fluency check	Decoding speed and accuracy	1-2	Student response	Teacher asks students to read a list of words and checks accuracy, mistakes made in decoding, and self-corrections. Used at beginning of school year or when new student enters class

Progress Monitoring: Used at least three times per year

Running record	Reading rate and fluency; pacing in oral reading; accuracy of decoding and apparent decoding strategies; comprehension as indicated by retelling and answers to questions	1–2	Student response, teacher observation	Running records provide information about decoding, pacing, and rate, all of which correlate with comprehension. Students read orally in an unfamiliar book; teacher notes deviations from text to analyze later for information about decoding strategies; teacher also notes omissions, insertions, and requests for help.
Reading comprehension	Comprehension; ability to orchestrate emergent and developing reading skills	Upper 1–2	Student response Student writing	After reading, students retell what they read, and teacher notes thoroughness of retelling. If necessary, teacher probes to gain the maximum amount of information. Simple comprehension questions may also be asked. Used quarterly
Spelling assessment	Ability to apply letter-sound knowledge in encoding	Upper K–2	Student writing	Students read orally or silently depending on ability, retell the story, and answer questions. They should find the task challenging enough to require them to use multiple reading strategies. Advanced students may be asked to answer questions in writing. Used quarterly
Writing assessments	Orchestration of prerequisite skills; familiarity with story structure and conventions of writing; syntax; vocabulary		Measures of reading, spelling reflected in writing	Teacher dictates grade-appropriate list of words and encourages students to spell the words as well as they can. Each word is read separately, in a sentence, and then separately again. Teacher analyzes spellings to gain insight into ability to apply letter-sound knowledge. Used quarterly
				A minimum of four samples are collected quarterly and analyzed at that time; entire set is analyzed at end of year to determine growth.

Satisfied with their work so far, the development committee turns to the guidance counselor for information on the third tier of the assessment model—diagnostic tests. There actually are many from which to select. Some are very focused, such as the *Reading Fluency Indicator* (Williams, 2004) or the *Test of Word Reading Efficiency (TOWRE)* (Torgesen, Wagner, & Rashotte, 1999); others are far more comprehensive (see Rathvon, 2004). The guidance counselor appreciates the assessment development committee members' interest in diagnostic testing and says she will work with the early-grades teachers if their screening identifies students who need additional testing. She cautions them that diagnostic testing is only the start of the process of securing intervention for students, however, quoting cautionary words from the *TOWRE* administrator's manual (Torgesen et al., 1999, p. 47: "Too often examiners forget the dictum that 'tests don't diagnose, people do' and base their diagnoses exclusively on test results, a hazardous enterprise at best. . . . The questions concerning the why of the test performance are the very essence of diagnosis, and they can be answered only by an insightful, competent examiner.")

Appropriately, Torgesen's comment reminds the committee members that developing tools and procedures is a necessary first step in improving their assessment and teaching, but it is only a beginning. Their next steps include trying out their instruments with their students to answer questions about their sensitivity to student differences, the comprehensiveness of the data they gather, and of course their ease of use. They also know that they will need to develop training and resource materials for their colleagues if the assessment system is going to be used in all the early grades in their school.

The principal is happy with the work that the teachers, reading coach, and school counselor have done and especially applauds the collegial way in which they have worked to create a useful assessment system. She recognizes the professional development value of the work for committee members and looks forward to the learning that will take place when other early-grades teachers are trained to use the system. The principal is aware of the pressure within the district to adopt the test that is issued to the district's Reading First schools, however (see Salinger, 2004). This test is DIBELS. Because of the pressure, the principal asks the development committee to investigate DIBELS further, and to let the reading coach, who has been trained, administer the test to children whom the screening measure identifies as potentially at risk for difficulties. This seems reasonable, because many teachers in district Reading First schools praise the test and see it as valuable.

THE DYNAMIC INDICATORS OF BASIC EARLY LITERACY SKILLS OR DIBELS

DIBELS was developed as an early reading extension of the curriculum-based measurement tools created at the federally funded Institute for the

Development of Educational Achievement (IDEA) at the University of Oregon (see <http://reading@uoregon.edu>; www.dibels@uoregon.edu; Rathvon, 2004). Now in its sixth edition, it is a set of short, individually administered tests that measure six aspects of fluency: initial sound, letter naming, phoneme segmentation, nonsense word, and oral reading. There are also measures of retelling and word use, both of which also depend on students' fluency. Each measure takes about three to four minutes to administer. The two primary purposes for using DIBELS are to determine whether students have achieved specific benchmarks in skills acquisition and to monitor progress. Teachers use the tests frequently, as often as every two weeks. DIBELS is also widely used as an outcome measure.

DIBELS is a comprehensive system in that it provides a vast array of materials, including reusable test booklets for all measures, consumables for student use, videos, and so forth. The materials can be downloaded from the DIBELS website or purchased commercially (see www.dibels@uoregon.edu or www.sopriswest.com). Teacher training is also available. A software company has also made a handheld computer available for teachers to keep track of their DIBELS data as they administer the tests (see www.wirelessgeneration.com). The University of Oregon DIBELS website also provides data management services so that schools can track their students' scores easily and perform various analytic procedures. The cost is relatively minor, and this service, for an assessment system that may be used every two weeks, is often perceived as good value. Scott Foreman has published an intervention program, *Early Reading Intervention*, tied directly to DIBELS (<http://scottforesman.com>).

Websites for DIBELS and the Florida Center for Reading Research (see www.dibels@uoregon.edu; www.assessments@fcr.org) contain links to reports on the psychometric properties of the test and attest to the care that the developers have taken to investigate the test's validity and reliability. Other researchers have also conducted studies. For example, Hintze, Ryan, and Stoner (n.d.) use a validated, commercial test of phonological processing to investigate DIBELS' concurrent validity and diagnostic accuracy. One of their results was that DIBELS designated far more students as at risk for reading failure than the validated, comprehensive diagnostic instrument against which it was compared. Early identification of students who need intervention is positive and a definite goal of the three-tier model of assessment, but clearly schools need to be cautious about dependence on a test that can potentially overidentify potentially struggling readers.

Many reading researchers have also thought deeply about the test, analyzed its use and its properties, and reached decisions that are not always positive about the consequences of depending on DIBELS as the primary measure of young students' reading development (see Lewis & Fabos, 2005; Manning, Kamii, & Kato, 2005). Tierney and Thome (2006) maintain that because it

uses only quick fluency tests, DIBELS “does not enhance teachers’ knowledge of student literacies in a manner that supports the full range of their literacy development” (p. 52). Goodman (2006) suggests that the short tests used in DIBELS may produce inaccurate measurement of what young readers actually know. He suggests that learners who “are coming to understand that reading is supposed to make sense are likely to be underscored. . . . [T]he more thoughtful and concerned with the meaning a young reader is the more likely they are to perform more slowly or to lose time as they are distracted by the search for meaning” (p. 15). This view is supported by Lewis and Fabos (2005), who point out that testing students primarily on fluency narrows the definition of early reading and may consequently narrow students’ view of “the needs they will have for their literate and social futures at home, at work, and in their communities” (p. 498).

DIBELS has had powerful and positive effects on many teachers, in that they have become more accustomed to thinking about data and using data to monitor their students and to plan instruction. The criticisms of the test, however, point out three possible negative consequences. The first is its potential to narrow teachers’ definitions of early reading development. DIBELS tests students’ fluency—speed and accuracy—and teachers who teach to this particular test will undoubtedly stress fluency in their instruction. Doing so may produce students who know how to decode quickly and accurately, but who do not necessarily comprehend well, enjoy reading, or see reading as a valuable part of their lives. Teaching to DIBELS will undoubtedly also produce an early literacy curriculum that avoids the use of children’s literature, writing, and discussion about what is read. This is the second negative consequence: DIBELS has the potential to narrow the curriculum. These two negative consequences are the same as those that have long been feared because of overuse of standardized, group-administered, paper-and-pencil tests.

The third potential negative consequence is overidentification of struggling readers based on a test with a narrow conceptualization of reading. Learning to read involves the acquisition of knowledge about print, books, and language and the development of many complex cognitive skills. Decoding words quickly and accurately is one part of this developmental process, admittedly a very important part, but only one. The various tests in DIBELS sample this aspect of reading in different ways (letter-sound correspondence, words, nonsense words, etc.), but they do not assess the sense that students are making of what they are reading by asking them to read and discuss continuous text.

REACHING SOME COMPROMISES

At the end of the trial year for the proposed assessment system, the development committee members conclude that even though they have to fine

tune some of their measures, their proposed system of screening and progress-monitoring assessments, as summarized in Table 4.1, is aligned with their approach to instruction. It allows them to collect multiple forms of evidence and has encouraged them to look closely at distinct times in students' learning and also at evidence collected over time. They like having the different pieces of evidence to supplement theme tests in their core reading program, especially the samples of students' writing.

The teachers, reading coach, and guidance counselor also report to the principal that DIBELS has provided useful information about the students who might be struggling with beginning reading. The data were detailed, specific, and helpful in determining how to help students *before* they encountered severe difficulties. Thus, they see that DIBELS has potential as one form of evidence. They reject the idea that its small tests of different forms of fluency can replace a more comprehensive approach to collecting data on young learners, but they see its potential value in gaining insight into one aspect of the complex process of learning to read.

WHAT'S AHEAD FOR THE TEACHERS AND THEIR STUDENTS

Refining a teacher-developed, classroom-based assessment system to the point where it will consistently yield reliable and valid information about students' reading development takes considerable dedication and many years of work. Whether the members of the committee discussed in this chapter persevere in their efforts remains to be seen, but their story speaks to the importance of teachers working together to understand their students' reading development and their own instruction. Assessment opportunities built into the fabric of classroom life are an essential part of this understanding and enrich the information that can be obtained from core reading programs or narrowly focused measures like DIBELS. Such assessment usually reflects the instruction that teachers provide, so the question of teaching to the test is moot.

At grade 3, students' reading is assessed, often for the first time, with a standardized, paper-and-pencil test. These tests usually contain multiple-choice items and ask about a full range of reading behaviors, including phonics knowledge and simple reading comprehension (see Rathvon, 2004). The tests may have been commercially developed or created in students' own states to align to the state reading and English language arts standards.

Students whose development up to 3rd grade has been monitored carefully and whose teachers have acted upon multiple forms of evidence from that monitoring should be prepared for the test: learning to read well in a broad sense is better preparation than learning the content of discrete sections of the test through teaching to the text. It is also important, however, that students be prepared for the format and requirements of a standardized testing situation.

Teachers can provide a proactive form of test preparation by helping students understand what Calkins, Montgomery, and Santman (1998) refer to as the specific genre of reading tests. Sitting still, working silently, not asking questions, and bubbling in answers ought not to be natural parts of young learner's school day, but they have become a category of basic skills that students need to master. As Calkins has stated: "if our children's achievement on standardized tests matters to us or to them, then our children deserve to be acclimated to the genre of standardized tests. They deserve some wise instruction in its particular demands" (Calkins, Montgomery, & Santman, 1998, p. 68).

CONCLUSION

Students and teachers both benefit when teachers use ongoing assessment to keep track of students' early reading development, and doing so in thoughtful, instructionally sensitive ways that are embedded within that very development process makes sense. Nevertheless, teachers also owe it to their students to prepare them for the kinds of external measures of reading that they encounter at grade 3, if not earlier. Thoughtful teachers can accomplish both goals when they take on the responsibility of becoming evaluation experts.

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Chapter Five

ORAL LANGUAGE

Lynne Hebert Remson

Research and clinical professionals in disciplines as diverse as linguistics, psychology, anthropology, communication disorders, education, and neurology all claim expertise in the knowledge of oral language. Although it is often referred to as a skill, oral language is actually a complex network of coordinated knowledge and movement that allows individuals to communicate with each other by talking and listening. It is the complexity of this process that generates an appeal across so many disciplines.

For the purposes of this discussion, oral language is treated as the modality for symbolic communication that relies on speech production and reception. Communication is defined as the ability to construct meaning between at least two individuals. Symbolic communication refers to the use of language, or a system of shared symbols to represent meanings. Speech is one physical form for producing such symbols. Other forms are written and gestural. These three forms constitute the oral, written, and gestural modalities, reflecting shared linguistic knowledge. Each modality also requires other, more specialized knowledge about that particular form. Oral language, then, is the use of speech to share meanings through an agreed-upon set of symbols—spoken words.

Competence as a communicator depends on the individual's linguistic system (the combined knowledge about a language). It includes word meanings, speech sounds (or another output modality such as writing or gesturing), morphology, syntax, and pragmatics. Phonology refers to the implicit rules for using the speech sounds of a language to construct words. Semantics refers to word meanings. Morphology is the set of rules for modifying root words to alter

meanings. Syntax is the grammar of a language, or the rules for ordering words in phrases and sentences. Pragmatics concerns the rules for how language is used socially within a community. These five components comprise the form, content, and use of language (Bloom & Lahey, 1978). By the time children are six years old, their linguistic system is very similar to an adult's, although they continue adding complexity to the system throughout the school years.

Researchers tend to agree that interaction among biology, learning, and culture contributes to the acquisition of a first language (Berko Gleason, 1993; Haynes, Moran, & Pindzola, 1990; Norris, 1998). Debate continues, however, concerning the relative contributions of each process. Similarly, there are different ways of examining the components of language. Some linguists, known as structuralists, prefer to study each of the five components as separate systems that interact. In contrast, functionalists are more interested in how people actually use language, or the functions of language and how they are expressed. Functionalists consider pragmatics to be the overarching component upon which the other four depend. Thus, social interactionists believe that children begin to acquire oral language because they enjoy social interaction with others. Infants exhibit a very early preference for the human voice as against other sounds. This helps babies attend to and learn speech. Parents also use certain techniques, collectively known as *motherese*, that facilitate language learning by infants. As they gain motor control and cognitive awareness, infants use vocalizations and other behaviors to influence the actions of others. This presymbolic, or prelinguistic, communication develops from random, reflexive behaviors that attentive caregivers interpret as meaningful. With repeated interactions, infants learn to pair looking, vocalizing, reaching, or other gestures to make requests, call attention, and express rejection.

As the infant refines these gestures and vocalizations to intentionally elicit specific responses from others, phonetically consistent forms (PCFs) begin to emerge. These are sounds that the infant uses consistently to represent such things as favorite objects, sounds recognizable only to familiar caregivers and close family members. Through these, the child hopes to achieve a particular result with particular people. Thus, social interaction is crucial for shaping early utterances and refining them into true words. As children mature, they gain the understanding and use of a large number of phoneme sequences (words), which they organize to express more complex meanings. The choice of sounds, words, morphology, and syntax is dependent upon the level of linguistic development of the child and also upon the pragmatic demands of the situation. For example, children must learn that ways of talking with their parents differ from ways of talking with strangers or with friends. Later, choice of words, morphology, and syntax is heavily influenced by the degree of formality of the social situation. Casual conversation with family requires different language choices from those required for presenting a formal speech in a large conference hall.

RELATIONSHIP BETWEEN ORAL AND WRITTEN LANGUAGE

Earlier models of language acquisition represented oral language and written language as separate, sequential processes. It was thought that children first learned to understand and then speak oral language; later, they learned to read and write. Carol Westby (1991) described a continuum of language use with oral language at one end and written language at the other. Oral language was believed to be more casual and immediate; written language was considered more formal and more displaced in time. Many now view oral and written language as merely two different modalities that represent a shared base of linguistic knowledge (Norris & Hoffman, 1993; Westby, 1991). Both modalities rely on similar knowledge of the components of language that comprise surface structure/form (phonology, morphology, and syntax), meaningful content, and social functions. Both modalities can be casual or formal and both can represent information that is dependent upon the immediate context as well as information that is more displaced in both time and space, that is, more decontextualized. That is, we can both talk and write about persons and events that are in the past or future or are located in different geographical places, including hypothetical places. Development in both modalities can be simultaneous because they reflect shared linguistic knowledge in the component areas.

The primary difference between oral and written language, then, lies in the physical form of the symbol. For oral language, it is the spoken word, conveyed through spoken phonemes (speech sounds). Pragmatic nuances are expressed in the oral modality through prosody, loudness levels, gestures, facial expression, and so forth. The form for written language is the written word, composed of graphemes. The pragmatic functions correlates are expressed through written conventions such as punctuation, underlining, and emoticons.

THE COMPONENTS OF LANGUAGE

The remainder of this discussion is devoted to describing each of the five components of language—phonology, morphology, syntax, semantics, and pragmatics. These are organized as the three aspects of language—form, content, and use—as described by Bloom and Lahey (1978).

Form

Language form includes three areas. In oral language, these are phonology, morphology, and syntax. Phonology is the sound system used to express words in oral language. In English and other alphabetic languages, orthography (the writing system) is the equivalent to phonology for written language. That is, words, phrases, and sentences can be spoken using phonemes or written using

graphemes (letters). In alphabetic languages, the morphology and syntax are shared. Each of these areas will be discussed separately, although in language acquisition and actual use, there is a great deal of interaction among them and the other components of language.

Phonology. Phonology refers to the knowledge that speakers have about the sounds of a language, how they can be combined, and what combinations are allowed and disallowed. The smallest identifiable linguistic unit is the phoneme, or individual speech sound. A phoneme is defined as the smallest unit that can change meaning. For example, the phoneme /k/ distinguishes *cake* from *Kate*. So, /k/ and /t/ are separate phonemes because they cannot be used interchangeably without affecting meaning. The /k/ in the initial position is actually slightly different from the /k/ in the final position, however. The initial consonant is slightly aspirated (produced with a slight /h/ after the /k/). In English, this difference does not affect meaning. Aspirating the final /k/ in the word *cake* by saying /k^hek^h/ instead of /k^hek/ does not change the meaning. In other words, /k^h/ and /k/ are allophones—sounds in the same phoneme family.

INFANTS

Within the first weeks of life, infants learn to recognize sounds that are in their native languages as opposed to those that are nonspeech sounds or sounds that might be in another language. The configuration of the vocal tract, however, is very different from the adult configuration. This influences early vocalizations. Infants have smaller mouths and smaller lips. The larynx and palate are shorter and the tongue is relatively large and forward in the mouth. In addition, infants do not yet have teeth. All of these features influence the character of the sounds produced by an infant. As infants grow physically and the dimensions of the vocal tract change, they are able to produce a greater variety of sounds with better control. The period from birth to 12 months is characterized by prelinguistic development of sounds. This means that the infant is learning how to use the vocal tract to produce sounds and modify pitch and loudness rather than using sounds for symbolic communication.

Prerepresentational phonological development characterizes the period from 12 to 18 months. The infant begins to produce a variety of vowel sounds and combine them with consonant-like sounds that will eventually become consonants. Sounds and syllables produced with high frequency during babbling often emerge in the infant's first words. The first consonants to emerge are typically the ones that are easiest to see—/m/, /b/, and /d/. These are almost always present in the first words of children. The infant produces reduplicated consonant-vowel (CV) strings such as “dadadadada” or “muhmuhmuh.” Attentive caregivers attach meaning to these random sounds and syllables,

rewarding the infant with attention and reciprocal babbling. Very soon, these reduplicated syllables give way to variegated babbling, in which the infant uses different consonants and vowels in the strings. Infants also begin imitating the prosody, or melody, of the speech they hear, playing with pitch and loudness levels.

At 18 months, children have several words that they use consistently to communicate with caregivers based on these early syllables. When children have about 50 such words, they begin to organize speech sounds as single phonemes rather than as syllables. This stage is known as representational phonology. Children are characterized by their ability to perceive nearly all adult phonemes. However, at this stage, they are still unable to produce many of the speech sounds. By the time children are three, they can produce all the vowel sounds and many of the consonants in the language. At first they produce these sounds in single words, and then they learn to smoothly transition between words in increasingly longer utterances. They learn the distinctive features (the place and manner of articulation) that identify each phoneme as a separate sound. This means that changing the sounds in a word changes the meaning: *toy* and *boy* are not the same. Children learn that /k/ and /w/ can go together at the beginning of a word, as in *quit*, but that /z/ and /r/ cannot. They also know that two words can be reduced, for example, *got* and *to* can be reduced to *gotta*, but that the words *got* and *two*, as in *He got two toys from the shelf*, cannot be reduced.

The average person can understand most of what a three-year-old child says. Toddlers and preschool children, however, continue to have difficulty with many consonant clusters such as initial blends (e.g., /sl/ in *sleep*) and final clusters (e.g., /ndz/ in *ends*), and they mispronounce complex words or those with several syllables or those that are motorically complex (e.g., *elephant* or *piano*). The ways of simplifying sounds in words so that young children can say words they would otherwise be unable to pronounce are collectively known as phonological processes (systematic modifications of the distinctive features of sounds in words). Examples include weak syllable deletion (e.g., saying *te'phone* for *telephone*); final consonant deletion (e.g., saying *daw* for *dog*); and cluster reduction (e.g., saying *s'im* for *swim*). Such errors are very common in toddlers, but they begin to disappear by the time the child is around three years old.

Between the ages of four and seven, children complete the phonetic inventory. That is, by the time children are six or seven years old, they have acquired all the consonant and vowel sounds of the language, although they may still have some difficulty with words that are five or six syllables in length. The typical five-year-old is almost completely intelligible to the average listener. As children complete the phonetic inventory and master more advanced phonology, phonological processes gradually fade. Between the ages of 7 and 12,

children acquire more advanced phonology, such as the sounds for *th* and *r*. They also learn how to combine sounds in multisyllable words, such as *outrageous*, *ridiculous*, and *Bohemian*, that require many fine adjustments. By the age of 12, the phonological system is similar to that of an adult.

Some researchers have begun to look at the connection between early phonological development and learning how to spell in English. Jan Norris and Paul Hoffman (1989) found that children undergo a developmental process of learning to spell that is similar to the process of acquiring speech sounds. In fact, spelling errors in young children often resemble their earlier speech errors. For example, children who say the word *tooth* accurately nonetheless may write it initially as *tuf*, substituting *f* for *th* as they once substituted /*f*/ when learning to talk. The progression of early scribbling from random movements to coordinated patterns resembling real words can be likened to the vocal play, babbling, and jargon speech demonstrated by infants as they gain control of the articulators, moving from random and vegetative sounds to speech-like strings of variegated (differentiated) syllables.

Morphology. The second component of form is morphology. A morpheme is the smallest unit of meaning. Some morphemes are single words, such as *hat*, *elephant*, *walk*, and *enormous*. These are known as free morphemes because they are meaningful even when standing alone. Other words have two or more morphemes. Words such as *hotdog* and *sailboat* are compound words because they combine two free morphemes. These words can be modified, however, by bound morphemes. Bound morphemes are meaning units that must be attached to other meaning units. For example, the word *hat* can be modified by adding the bound morpheme *-s* to denote plural. The word that is formed, *hats*, has two morphemes. There are two types of bound morphemes—inflectional (or grammatical) and derivational.

Inflectional morphemes occur only at the ends of words and are used to modulate or change state or make the meaning of the free morpheme more precise. Inflectional morphemes mark verb tense, subject-verb agreement, possession, plural, and so forth. Once an inflectional morpheme has been added to the end of a word, no other morphemes can be attached. Inflectional morphemes are usually acquired by the age of five.

Roger Brown (1973) identified 14 inflectional morphemes that most children acquire in a predictable order and at predictable ages. Known as Brown's grammatical morphemes, these meaning units inflect, or mark, nouns and verbs, thereby changing their meanings. Children first learn to mark progressive verbs with *-ing* to indicate that an action is ongoing. Soon afterward, they mark regular noun plurals by adding *-s*. Also among the earliest of Brown's grammatical morphemes to emerge are the prepositions *in* and *on*, although these are actually free morphemes. These first four markers begin to appear around 18–30 months. Sometime between the ages of two and three years,

the possessive marker *-s* emerges, as in Mommy's book. Children between the ages of approximately three and a half and four and a half begin to mark past tense verbs with *-ed*. Irregular past tense verbs, such as *ate* and *fell*, emerge shortly after, although the child may double mark these verbs at first, producing such words as *ated* and *felled*. During this same time period, children master acquire the definite article, *the*, and the indefinite articles *a* and *an*. The *-s* marker appears at the ends of third person singular verbs in the present tense to mark agreement, as in the sentence *The boy plays in the sandbox*. In addition, utterances now include the contractible copula, as in the sentence *He's big*. As the child nears the age of five, the last inflectional morphemes are mastered. These include the contractible auxiliary (e.g., *He's playing*), the uncontractible copula (e.g., *Is it ready?*), the uncontractible auxiliary (*Is he running?*), and the irregular third person singular verbs (*He has a new toy*).

In contrast, derivational morphemes change whole classes of words to other classes. Development of derivational morphology occurs over a long period of time and is not usually complete until adulthood. In English, derivational morphemes can either be suffixes, found at the ends of words, or prefixes, found at the beginnings of words.

Derivational morphemes are used to change the grammatical categories of words. For example, the derivational morpheme *-er* is used to transform the verb *bake* into the noun *baker*. The morpheme *-ly* changes the adjective *quick* into the adverb *quickly*. We can change adjectives such as *happy* into nouns such as *happiness* by using the derivational morpheme *-ness*. Other common suffixes include *-ism*, *-tion*, *-able*, *-ment*, and *-al*. Derivational morphemes can also be prefixes, such as *un-*, *in-*, *pre-* and *a-*.

Derivational morphemes can be added to free morphemes or to other derivational morphemes. For example, the verb *transform* consists of the root word form and the prefix *trans-*, a derivational morpheme. It can become the noun "transformation" by adding the derivational morpheme *-ation*. By adding *-al* to *-ation*, the adjective "transformational" is created. Inflectional morphemes such as *-s* can be added to derivational morphemes, as in as in the word "developments." The free morpheme, *develop*, is first modified by the derivational morpheme, *-ment*, changing the word from a verb to a noun, and then by the inflectional morpheme *-s*, denoting pluralization. Once an inflectional morpheme has been added to the end of a word, no other morphemes can be attached, however.

Syntax. Morphology is closely related to syntax, the third component of form, because of the relationship to grammatical categories and to verb tense formation. Syntax refers to the order of words in sentences and the relationships among the words and phrases. The order of words in a sentence contributes directly to the meaning of the sentence. Word order expresses certain relationships among and between words that the child must come to understand. An

example of one kind of relationship is animacy. An entity person, character, or object that can act and move freely has animacy. Thus words that entail animacy can be used in certain ways; words that do not entail animacy cannot. The boy kicked the door is a grammatical sentence in English, but The door kicked the boy is not. Doors cannot, by definition, perform an action; therefore, the word door cannot be used as the subject of the verb kicked, because that particular verb requires an animate subject capable of kicking.

Differences in word order signal other types of meaning differences. Interrogatives, or questions, are formed by inverting the order of the subject and the verb. The sentence Catherine Murphy is here is a declarative sentence, making a statement of fact. Changing the order of the words to Is Catherine here? makes the statement become a question rather than an observed fact. Changing the order of words so that the subject receives the force of the action expressed by the verb creates the passive voice. In the previous example, The boy kicked the door, the subject actively exerts a force against the object of the verb door. But if door is in the subject position, the sentence is in the passive voice: The door was kicked by the boy. To accomplish this transformation, we must also change the verb morphology—by adding the auxiliary (helping) verb, was. Question formation often requires auxiliary verbs as well, especially forms of the verb do. For example, to transform the statement, Allyson eats crackers, into question form, we must begin the question with the word do(es), as in the question, Does Allyson eat crackers?

Roger Brown (1973) noted that, in children who are first acquiring English, the development of inflectional morphemes is directly related to the average number of words the child is able to combine in an utterance. He found that this average, or the mean length of utterance (MLU), is related to syntactic complexity. As MLU increases, the child uses more complex syntax. MLU is roughly equivalent to chronological age in years up to the age of five. That is, children who are one year old have an MLU of one word; children who are two years old have an MLU of two words, and so on.

Brown (1973) examined the language development of three children, whom he called Adam, Eve, and Sarah. Based on the ways that these children learned to talk, he identified stages of syntax development from 18 months until about the age of five. These stages, known as Brown's stages of development, describe the sequence of syntax development, from the single-word level, to simple phrases consisting of two or three words, to complete sentences with a subject noun phrase and a verb phrase, through lengthier sentences that have two main clauses (sentences composed of a subject and verb that can stand alone) or a main clause and a dependent clause (a subject-verb combination that cannot stand alone as a complete sentence, such as, who is sitting). Remarkably, subsequent research has supported Brown's general findings despite the extremely limited number of children in the original study.

Brown (1973) described the increases in complex syntax by examining the sequence of development for using grammatical morphemes, expressing negation (using, for example, no, not, and don't), asking yes/no questions, asking wh- questions (questions starting with what, where, when, and why), elaborating noun phrases, elaborating verb phrases, and forming complex sentences. As children acquire inflectional morphemes (such as -ing, plural -s, past tense -ed, etc.), they are able to express more ideas in each utterance. Increases in inflectional morphology and MLU correspond to more complex syntax.

In order to discuss the way children develop complex syntax, it is first necessary to clarify the terms that Brown and other linguists use. A noun phrase consists of a single word that names a person, place, object, event, or concept, or a pronoun standing in place of the noun, such as I, you, it, her, one, and all. The noun phrase also includes all the words that modify the noun or pronoun, such as my book or the big one. Noun phrases can be elaborated by adding modifiers in front of the noun. Such modifiers can be the articles a, an, or the; the demonstratives this, that, these, and those; possessive pronouns such as my or his; possessive nouns such as Mommy's or children's; quantifiers such as all or some; or adjectives such as big, silly, or interesting. In the sentence *The little boy laughed*, the subject noun phrase is *the little boy*. Noun phrases can also occur in the object position as part of the verb phrase, as in the sentence *The little boy threw the ball*. In this sentence, the noun phrase, *the ball*, is the object of the verb, *threw*. Thus, there are subject noun phrases and object noun phrases.

A verb phrase consists of the main verb in a sentence plus any auxiliary (helping) verbs as well as any phrases or clauses that come after the verb and complete it. A phrase is simply a group of words, and a clause is a group of words that has a subject and a verb. Some clauses can stand alone as a grammatical sentence. These are called main clauses or independent clauses. Examples include *I go*, *The book fell off the table*, and *The dog ran all the way home*. Complex sentences have two clauses. Dependent clauses cannot stand alone and must be attached to an independent clause. In the sentence, *I talked to the woman who was sitting on the bench*, the clause "who was sitting on the bench" has a subject and a verb (who; was sitting) but it cannot stand alone as a grammatical sentence. It is, therefore, a dependent clause. "Sitting" is the main verb for that clause and "was" is the auxiliary verb. The complete verb phrase in this dependent clause, however, is "was sitting on the bench." This is because the verb phrase also includes any noun phrases that complete the verb.

Such sentences, called complex sentences, are generally mastered by the time a child is only five years old!

In Brown's stage I, children are learning their first words and the semantic roles expressed by these words, such as agent (performer of an action) and action (movement). These roles will be explained in more detail in the section

devoted to semantics and the meaning of language. Children do not yet use any of the grammatical (inflectional) morphemes, previously discussed, in a consistent way, and they express negation at first with the single word *no*. Later, they learn to use *no* or *not* with a noun or verb, as in *no cookie* (I don't want a cookie) or *not go* (I don't want to go). They ask *yes/no* questions as statements with rising intonation: *drink?* or *Baby go?* Children ask *what this?* or *what that?* often spoken as a single "giant word" as in (*whasat?*) Some children begin to use elaborated noun phrases when there is no verb. For example, they might say *big dog*, but not *big dog bark*.

Occasionally, they might elaborate the verb phrase by using particles, as in *sit down* or *put on*.

Brown's stage II is characterized by mastery of the first grammatical morphemes, particularly the *-ing* verb ending, *-s* for noun plurals, and the preposition *in*. In this stage, children learn modulation of meaning. That is, they learn how to modify words and word order to change meanings. MLU increases to 2.0 with occasional utterances being three or four morphemes in length. Simple *what* and *where* questions emerge. For example, children might say, *What doing?* or *Where Daddy?* They are beginning to elaborate noun phrases when they appear in the object position. At this stage, children can elaborate only noun phrases that follow the verb and, importantly, only if they omit the subject; they cannot elaborate noun phrases when they are the subjects of sentences. Thus, children at this stage might say, *Get big cookie*, but cannot yet say, *I get big cookie* or *Bad dog go home*. Another important characteristic of stage II is the appearance of use of the semiauxiliary (helping) verbs *gonna*, *gotta*, *wanna*, and *hafta*. Sentences such as *I hafta go* and *wanna run* are now possible.

The semiauxiliary verbs *gonna*, *gotta*, *wanna*, and *hafta* function as auxiliary (helping) verbs at this stage rather than as main verbs with infinitival clauses (e.g., *I'm going to eat dinner now*; *I have to sit down*) as they do in the speech of adults. Sentences such as these are now possible: *I wanna go*, *you gotta*, *hafta play*.

Utterances of children in Brown's stage III are beginning to sound more like adult sentences. The MLU is now around three morphemes and children master the preposition *on* and the possessive *-s*. They express negation in sentence form with utterances such as *I not go* or *Baby not sleeping*. Later in this stage, they are able to use auxiliary verbs to form negation, such as *I didn't jump*, and copula verbs as in *I'm not happy*. Early in this stage, they still ask *yes/no* questions by using rising intonation, but as they transition to stage IV they begin to invert the auxiliary verb with the subject to form adult-like questions, such as, *Is he running?* or *Can I go?* They now ask *wh-* questions by combining *who*, *why*, and *how* with a statement, as in *Why baby sick?* or *Who in there?* or *How doggie bark?* Children can now manage to elaborate the subject noun

phrase with demonstratives such as *this* or *that*, and occasional articles (*a* and *the*) or other modifiers, and at the same time also include the verb in the sentence. In fact, they almost always use verbs in nearly all their utterances at this stage, and use such auxiliary verbs as *can*, *will*, *be*, and *do*. The past tense *-ed* may appear, but children also apply it to irregular verbs such as *sleep*, *fall*, *eat*, and *go*. Sentences that are now possible include *That doggie slept* or *Kitty can eat*. Finally, in stage III, children begin to use more complex utterances, with a full sentence taking the place of the object of the verb. For example, they can now say, *I see bunny hopping*. Simple infinitive phrases, such as *I want to play*, emerge as children transition to stage IV. In these sentences, the subject of the main verb is also the subject of the infinitive (verb forms such as *to go*, *to eat*, *to play*, etc.).

During Brown's stage IV, at around ages three and a half to four and a half, children almost always use noun or pronoun subjects as well as verbs in their utterances. Noun phrases now include possessives (e.g., *Mommy's big book*) along with other modifiers, such as articles, demonstratives, and adjectives. Examples include *a little bird* or *that chocolate cookie*. Noun phrases can be joined with a variety of different verb forms that include the occasional use of the past tense *-ed*, the past tense modals (e.g., *could*, *would*, *should*, *must*, and *might*), and forms of the verb *be* plus the present progressive *-ing* (e.g., *is seeing*, *am giving*, *are going*). Possible sentences now include *That little bird fly*, *I didn't taked that one*, *Mommy's big book gone*, *He's running away*, and *She should say sorry*.

The hallmark of stage IV is embedding—sentences that contain certain kinds of phrases or that combine two clauses into one clause. Embedding at this stage usually occurs as prepositional phrases that consist of a preposition, such as *as*, *in*, *on*, *under*, or *to*, and its object noun or pronoun. Examples of prepositional phrases are *in the box*, *to me*, and *under my bed*. Children also use the word “and” to conjoin two simple sentences, as in *I sit here and Daddy sit there*.

In Brown's stage V, children acquire five more grammatical morphemes: regular and irregular past tense verbs; the regular third person singular, present tense agreement marker *-s*; definite and indefinite articles; and the copula, or linking, verb (forms of the verb *be* such as *He's happy* or *I am here*). Yes/no questions now include past tense modals and *be* verbs (e.g., *Could I be a pirate?*). The most important milestone in stage V is the ability to use relative clauses to produce complex sentences with both independent and dependent clauses, as in the sentence *Give me the one that's big*. Infinitives are also more complex now, with subjects that differ from the subject of the main verb. Children can generate sentences with infinitives that have different subjects from the main verb. An example is the sentence *I want Mommy to fix it*. Children also use *if* clauses, as in *If you go, I'll go too*.

Brown (1973) identified two additional stages, known as stage V+ and stage V++. The MLU of children in stage V+ is between 4.5 and 5.0 words. During this stage, children master the final four grammatical morphemes: the contractible auxiliary, the uncontractible copula, the uncontractible auxiliary, and irregular third person singular verbs. These morphemes allow the child to achieve more complex verb phrases, such as, He's eating all the cookies; Is that candy for me? Are we gonna walk to the park? and She has my best favorite doll. Children can also use past tense forms of the verb be (was and were). These increases in verb development overlap those in stage 5++. In this final stage, children are nearly approaching the age of five and the MLU is between five and six words. They now use when and so as conjunctions (words that connect other words, phrases, or clauses). Examples include such sentences as When I start counting, you hide and He took my cookie so I told. Although children continue to make errors with verb tenses and with marking agreement between subjects and verbs, most sentences are well formed and adult-like by this stage.

Thus, by the age of five or six, most children have progressed from random, reflexive, vegetative noises to intentional verbal communication. They produce this through verbal symbols (words) requiring coordination of motor patterns to reflect a complex phonological system. They organize words with highly organized, complex syntax conveyed through the coordination of motor patterns expressing an equally complex phonological system. However, although it is true that most of a child's first language is acquired by the age of five, children continue to develop and refine language form throughout adolescence and beyond, although the rate of development slows considerably.

Sentences in which the order of events is inverted pose problems for preschool children to understand. An example is the sentence Before you get your cup, pick up your toys. Young children must figure out that the first action mentioned is not the first action to be performed. They also continue to refine their understandings of embedded ideas. Embedding gives us ways to include an unlimited number of ideas in one sentence. For example, we can keep adding prepositional phrases to the sentence There's a hole on the bottom of the sea, to create new sentences such as There's a wart on the frog on the bump on the log in the hole on the bottom of the sea.

During the school years, the major focus of language learning shifts from oral to written language. With this shift, children are introduced to even more complex syntax not typically encountered in conversation. In oral conversations, syntax is usually simple and linear. That is, words are ordered in a straightforward manner to enhance listener comprehension in real time. Language is highly contextualized, as children and caregivers talk about persons and objects present at the time of conversation and about immediate events. However, Carol Westby (1991) maintains that, through storybooks and storytelling, children encounter language that is more distant in time and space than the highly contextualized

language of everyday, routine activities at home. Adverbial phrases (words that tell when, where, how, how much, how many, how often, or why, or express affirmation or negation) such as once upon a time, all of a sudden, at last, and after a while are common in storybooks but are less frequent in storybooks than they are in everyday conversations. Adverbial phrases are groups of words that function as adverbs. They modify verbs, adjectives, and other adverbs to tell when, where, how, how much, how many, how often, or why. They also express affirmation and negation (e.g., I will *absolutely* do it; I *never* saw it.) In sentences such as Even though her mother told her not to, Little Red Riding took a shortcut through the woods, adverbial phrases are moved to appear at the beginning of the sentence, a condition known as adverbial fronting. This type of syntax is rarely used in conversational speech, although young children begin to use such constructions in their oral retellings or when “reading” books from memory to family, playmates, or dolls. Much less is known, however, about how children continue to develop and refine complex sentences during the school years.

Cheryl Scott (1995) has studied the ways children continue to develop and refine complex sentences during the school years. She noted that much less is known about how advanced syntax emerges in typically developing school-aged children and adolescents for several reasons. First, language development tends to slow in rate during the school years, with gradual growth measured over periods of years rather than in months as with preschool children. Another problem involves modality and genre. Scott (1995) has demonstrated that older children use more complex syntax when writing than they do while speaking, and that these differences are highly influenced by the nature of the discourse. That is, the social context of the language and the purposes for which it is used as well as the topics being discussed all interact to influence the choice of word and the syntax used by the child. As we have already seen, written language tends to use different conventions that may be harder to apply in conversational language. Conversation is fleeting and spoken words last only a moment before the sound signal fades altogether. In contrast, written language remains on the printed page and can be referred to over and over again, as many times as the child likes. Once spoken, a word cannot be retrieved. However, written words can be examined, erased, reordered, or modified because the conversational partner, the reader, does not have immediate access to them. Thus it is difficult to measure increases in oral language complexity as children enter adolescence.

MEANING

Content

The component of language that deals with meaning is semantics. This component includes the lexicon, or mental dictionary, of the language as well

as other knowledge we have about words, such as what part of speech a word is, how it can be used in a sentence, what other words have similar meanings, and so forth. According to Erika Hoff (2001), the average adult knows the meanings of over 100,000 words.

Children begin to learn word meanings sometime between the age of six months and one year. They understand the meanings of some words long before they begin to produce them. The process of learning word meanings is called reference. Children must associate the verbal symbol (the spoken word) with its real world referent (the object or person it represents). The first few words are spoken between 10 and 15 months of age and are context dependent. That is, first words are tied to a particular object or person in a single context. When the child says *mama*, it means only this person who is the child's own mother.

First words are usually associated with a frequent social routine or word game, such as waving and saying *bye-bye*. In fact, because first words seem to be conditioned responses that the infant has learned in very specific circumstances, some linguists believe that these utterances are not really words at all. This is because the child has not really used the word as a symbol to identify a specific referent. Rather, he is just making sounds the way a parrot can be trained to make sounds similar to words. Gradually, these context-bound words become attached to referents and become true words that are symbolic. It takes many repeated opportunities to hear a word and associate it with the referent before the child learns to use the word. This process is relatively slow at first.

By the time children are about 18 months old, they can use approximately 50 true words. First words usually fall into a limited number of categories such as naming words, action words, modifiers, personal-social words, and function words. Specific nominals are words that name a particular person, animal, or object such as *Mamma* or *Fido*. General nominals refer to general instances of people, animals, or objects, such as *book* or *water*. Action words describe actions and may or may not actually be action verbs. An example is the word "up" when the child uses it to ask to be picked up. Modifiers are often function words, adjectives or adverbs that describe or tell about some quality. These can include words like *more* or *again* (to request recurrence), *big*, and *allgone*. The fifth category contains personal-social words such as *yes*, *no*, and *please*. The final category is function words. These are words needed for grammatical functions and they do not correspond with concrete referents. Examples are words like *is*, *for*, *to*, and *where*. Children have very few of these words in their early vocabularies.

In English, children learn more nominals (nouns) as part of their first 50 spoken words than any other grammatical category (verbs, adjectives, adverbs, prepositions, pronouns, and conjunctions). One reason is that caregivers usually stress nouns in their speech to young children. It is also easier to map words to

concrete referents such as persons and objects than to map words such as verbs or adjectives. Verbs also denote relationships. In other words, although a noun simply names a person or object, verbs and other parts of speech entail relationships among objects or actions that the child must understand. For example, adults know that “Don’t say me that” is ungrammatical because the verb say cannot take the indirect object “me.” This is an example of relationships that are part of understanding the meaning of the verb say versus the verb tell. The verb tell is needed in this example. Evidence that children actually do not fully understand the first words that they use comes from the way that children overuse or underuse first words. For example, the word dog may first mean only the family dog. The child does not apply this word to any other dog. Later, the word dog may be overgeneralized and applied to any animal with four legs, including cats and cows. With experience, the child learns the conventional meaning of dog, a particular kind of four-legged animal, with fur and a tail, that barks and behaves in particular ways and is found in particular places.

After children can produce about 50 words, they experience a rapid growth in new words known as the word spurt. The rate of learning new words now increases dramatically from about 10 per month to about a new word every day or two. Toddlers seem to approach the learning of new words in one of two different ways. Some children seem to learn more names for objects than anything else. This learning style is known as referential. Other children tend to learn more personal-social words, a style known as expressive. Other factors that seem to influence word learning include birth order, gender, temperament, and the amount and type of speech used by the mother.

As children refine their understandings of word meanings, they begin to understand various semantic roles, mentioned previously in the section describing Brown’s stage 1 in syntax development. Nouns, or naming words, can be agents that perform actions or objects that receive actions. They can also possess, as in baby toy to mean the baby’s toy. Words can identify locations, as in cookie table to mean the cookie is on the table. Other words express actions, such as go and eat. Still others express quantities, such as lots, or recurrence, such as more or again.

Between 18 and 24 months, toddlers begin to combine single words into two-word combinations. These combinations are based on semantic, or meaning, relationships rather than syntactic relationships. An utterance such as Daddy up may mean Daddy, pick me up; Daddy is upstairs; Daddy, go upstairs; or Is Daddy upstairs? In this way, the child can use a handful of words, and ways of combining them can give the child a way to express many different meanings. The interpretation, therefore, is dependent upon the adult’s knowledge of the context in which the child is speaking.

Early combinations typically consist of content words known as lexical words. These words are nouns, verbs, adjectives, and adverbs that carry the meanings the child is trying to convey. These words can be contrasted with

functional category words that consist of words needed to express syntactic or grammatical relationships. Functional category words include auxiliary verbs, pronouns, articles, prepositions, and conjunctions. These are often missing in the speech of very young children.

For this reason, early speech has been called telegraphic, with a reliance on lexical words.

Children continue to add new words to their mental lexicon at a very fast pace throughout the preschool years. According to Rhea Paul (2001), the average five-year-old child has over 5,000 words in his or her vocabulary. This is more than doubled by the time the child is 18 years old and includes a greater variety of types of words in all grammatical categories. Some of the growth is accounted for by greater and more varied experiences as the child matures, especially by reading. Knowledge of derivational morphology that allows the child to take a known word and change the grammatical class (e.g., bake/baker) is another important contributor to semantic development.

During the preschool and early school years, children explore meanings through word play and school lessons that involve concepts such as synonyms (words with similar meanings) and antonyms (words with opposite meanings), and rhyming words. During the school years, children organize their knowledge of words in ways that facilitate the ability to remember and use words as needed. For example, they recognize hierarchies of word families. An example is the relationships among the basic category word, cat, and its subordinate categories, such as wild and domestic. They understand that subordinate categories of domestic cats are Siamese, Persian, and tabby, as compared with wild cats such as lions, tigers, and leopards. Children understand superordinate categories, such as feline, mammal, and vertebrate. They also organize words according to semantic fields, or areas of related terms, such as those associated with math, music, banking, or sports.

Children acquire an appreciation of figurative language, especially idioms, slowly throughout childhood and adolescence. Expressions such as hit the roof and raining cats and dogs cannot be interpreted literally. Children also begin to understand and use such language as similes, in which the comparisons are explicit (as white as snow), and metaphors, which only imply comparisons (Her hair is straw). Figurative language is especially important for comprehending the literate language of textbooks and literature.

Use of Language

Language is a social tool, acquired within a community of speakers. Children learn not only the native language of the parents but also the nuances of the parents' particular dialect. Children learn not only what words are in the language and how those words are ordered in sentences, but they also learn

when to talk and when to be quiet, and how tone of voice changes meaning. They learn that there are different ways of talking to different people in different contexts and that some words are taboo. They learn which words to use with which people, which words to avoid using, and what happens when they use these words. This component of language is pragmatics.

As with all other components, pragmatics begins to develop very early in infancy, before verbal communication. Early evidence of pragmatic development is apparent in what is known as the prelinguistic, intentional communication of infants just before and as they transition into the use of verbal speech and language. It occurs when the children intentionally use gestures paired with vocalizing or eye contact to communicate with caregivers. Early intentions that children can express this way include requesting objects, requesting actions, and requesting social attention, and rejecting or refusing. Soon afterward, the children begin to use words along with gestures and eye contact to express these early intentions. The gestures eventually fade as children establish a spoken vocabulary and begin to develop syntax.

John Searle (1969) proposed that using words accomplishes specific functions that he referred to as speech acts. Examples of speech acts are requesting information, naming, acknowledging, commenting, and protesting. John Dore (1974) identified nine "primitive speech acts" accomplished in the single-word utterances of infants and toddlers: labeling, repeating, answering, requesting action, requesting an answer, calling, greeting, protesting, and practicing. With more complex language, greater cognitive ability, and the ability to shift perspectives from one's self to that of another, older children exhibit a wider range of pragmatic intentions, which include, among others, deception and joking.

The study of pragmatics also includes the organization of language into discourse, the use of language beyond the level of a single sentence. Three types of discourse characterize oral language: conversational, narrative, and expository discourse. Conversational discourse is the earliest to develop, with infants and toddlers engaging in rudimentary conversations as they learn to talk. Early conversations occur during familiar interaction routines with the mother or other primary caregiver, who provides support by altering her language to maintain the conversation. By the time children are two years old, they can respond to invitations to conversation, initiate conversations, take turns, shift topics, and respond to invitations to conversation.

As children approach school age, they soon learn that there are polite ways of talking and that people do not always say exactly what they are thinking. They begin to understand and make indirect requests. Preschoolers learn registers, or different ways of talking with different people in different situations. They also learn acceptable ways of maintaining and closing conversations, issuing directives, and making requests, and they learn how to shift perspectives. The ability to appreciate the perspective of another is crucial in discourse,

because it allows the speaker to decide what knowledge is already shared and what information is new and must be explicitly stated. It is also necessary for understanding and correctly using pronouns such as I and you or these and those.

During the preschool years, children learn other important aspects of conversation. Grice (1975) argued that conversation involves a tacit agreement among participants to cooperate with each other to construct meaning. He called this the cooperative principle. Grice proposed that conversational participants expect each other to provide new information without repeating what is already known, to be honest, to speak directly, to use precise vocabulary and syntax, and to avoid being ambiguous. Communication breaks down when participants violate this agreement unless they agree to certain exceptions. Examples of such agreements are using sarcasm, or telling jokes, or creating suspense.

As children enter the school years, they begin to understand and make indirect requests. Prior to this time, they have not understood that, when someone says, *Is your mother home?* this is actually a request to call the mother to the telephone or to the door. Another area of growth for school-aged children is the ability to make conversational repairs. Preschool children simply repeat what they have already said when listeners do not understand them. When the listener lets a preschool child know he has not been understood, the child simply repeats the utterance. Because this strategy does not give the listener any more information, it usually results in frustration for both the child and the listener. By the time a child is six, he can sometimes add a little more information. It is not until children are around nine years old that they can rephrase or elaborate when conversation breaks down, and make effective repairs, partly because they are more adept at taking on the listener's perspective.

Narrative discourse is also important during the school years, with brief personal and fictional narratives emerging during the preschool years. Westby (1991) considers narratives to be the bridge between the highly contextualized language of the preschool years and the more abstract, literate language of the school years. According to Westby (1991), narratives are characterized by a speaker who assumes responsibility for most of the discourse, by fluency and prosody that are not typical of conversation, and by distancing from the present context and often from personal perspectives. These characteristics are similar to those of early books designed to help children learn to read, as well as the more advanced literature encountered in higher grades.

Norris and Hoffman (1993) identified a developmental progression as children learn to construct increasingly more complex narratives. First efforts are characterized by list-like sequences of statements about a topic known as a descriptive list. Next, children begin to order events in a chronology. Such narratives constitute an ordered sequence. Children need more complex syntax to express causal relationships among events when their narratives are organized

at the level of a reactive sequence. By the end of the preschool years, children are often able to attribute intentionality to characters as they engage in events. This level is an abbreviated structure. A complete structure occurs when the narrative expresses an overarching moral or theme. The required components of a story grammar—initiating event or problem, response, consequences, and resolution—are present at this level. Older school-aged children are able to develop complex episodes with multiple plots, with lessons learned from one episode carrying over into other episodes. Finally, in adolescence and adulthood, interactive structures are possible, with independent story episodes that may be related from multiple perspectives.

The third type of discourse is expository, or language that describes or explains. Preschool children engage in expository discourse when they explain how to play a game, make a sandwich, or use a toy. Studies of classroom discourse show that the ability to understand and to produce expository discourse is critical to school success. Teachers use expository discourse to explain mathematics, science, or social studies lessons. And they expect students to be able to define, list, enumerate, and describe, as well as explain, compare and contrast, and argue. These kinds of structures are organized differently from both conversational and narrative discourse. Thus far, most of the research has focused on identifying the nature of the organization of expository discourse, but little is known about the process of how children acquire the ability to use these ways of organizing and communicating information.

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Chapter Six

THE IMPORTANCE OF PHONOLOGICAL AWARENESS AND DECODING FOR EARLY LITERACY INSTRUCTION

Benita A. Blachman

In just 30 years, educators have made enormous strides in understanding how young children learn to read and what teachers and parents should do to promote early literacy acquisition (Dickinson & Newman, 2006). There is a consensus among researchers and practitioners that reading is a language-based skill. As a consequence of the emphasis on language, educators have come to expect that oral language experiences will be valued in classrooms, that reading to children will be commonplace, that basic concepts about print (such as how to hold a book) and the functions of reading and writing will be developed, and that children will have daily opportunities both to talk and to write about their experiences (Anderson, Hiebert, Scott, & Wilkinson, 1985). It is important to remember, however, that children come to school with differing levels of language—especially vocabulary knowledge and world knowledge. Hirsch (2003) emphasizes the strong relationship between vocabulary knowledge and oral and written language, pointing out that a “high-performing first grader knows about twice as many words as a low-performing one and, as these students go through the grades, the differential gets magnified” (p. 16). One way of building both vocabulary and world knowledge is “through the stories that teachers read aloud and through the discussions that follow” (Walsh, 2003, p. 25).

Another area in which children differ when they enter school is in their knowledge about the connections between spoken and written language (Adams, 1990). Although as literate adults, it is obvious that we have an alphabetic writing system in which letters more or less represent speech sounds,

we cannot assume that young children have this important insight into the relationship between print and speech. Understanding how print and speech are connected provides the foundation for learning to read words accurately and fluently—a critically important skill that is strongly related to good reading comprehension (Snow, Burns, & Griffin, 1998). The ability to read words accurately and fluently frees up conscious attention that children would otherwise have to devote to sounding out words—allowing children to focus instead on the meaning of what they are reading.

Recently, two prestigious panels (Snow et al., 1998; and the National Reading Panel [NRP] report, National Institute of Child Health and Human Development, 2000a) have provided research-based guidance regarding early literacy practices that have been proven to reduce the number of children who have trouble learning to read. These practices include a strong focus on learning how print and speech are connected. The NRP report reviews the importance of instruction in phoneme awareness (an awareness that spoken words can be segmented into individual sounds or phonemes—the sounds that are represented by the letters of the alphabet). Other important practices reviewed by the NRP include instruction in phonics (helping children use their knowledge of letter-sound correspondences to read and spell words), as well as the importance of developing fluency, vocabulary, and comprehension. This chapter will focus on phoneme awareness and learning to decode (sound out words) by providing children with systematic phonics instruction. I will provide examples of research-based practices that have been used in the classroom and have been found to facilitate the acquisition of reading and spelling in young children.

WHAT IS PHONOLOGICAL AWARENESS AND WHY IS IT IMPORTANT?

Phonological awareness is the awareness that speech can be segmented into words, syllables, and even smaller units called phonemes. Phonemes are the smallest units of sound in a given language and the segments of speech that are represented by the letters in an alphabetic writing system. It is important for children to understand that spoken language can be segmented—especially into phonemes. If children don't understand that the spoken word *sun*, for example, has three phonemes (or segments of sound), it will be very hard for them to understand why the word must be written with three letters. Awareness that speech can be segmented into the phonemic units represented by the letters of the alphabet does not develop naturally as a consequence of learning to speak. It is only when children start to learn to read and write that this awareness becomes important. Educators now know that failure to develop this awareness can be a major stumbling block for many young children.

Researchers have used many different tasks to assess a child's phoneme awareness. For example, children have been asked to demonstrate their awareness of phonemes by tapping out the sounds in spoken words, categorizing spoken words on the basis of common sounds (for example, knowing that the spoken words *hen* and *hot* go together because they both start with /h/), and deleting sounds (say *sat* without the /s/). Regardless of the task used to measure this crucial skill, the children who perform well are the children who are more likely to be successful readers in the early grades; and the children who perform less well on these tasks are the children who are more likely to have difficulty learning to read. Twenty years ago, Williams (1987) offered an explanation for the connection between phoneme awareness and reading when she wrote that "Sometimes children have trouble learning to decode because they are completely unaware of the fact that spoken language is segmented—into sentences, into syllables, and into phonemes" (pp. 25–26).

Why is it so difficult for children to develop the understanding that *spoken* words can be segmented? When we see the *written* spelling of the word, the segments (represented by letters) are obvious. On the other hand, the segments in the spoken word are not obvious, because when we pronounce a word, the sounds merge or overlap (think about the overlapping shingles on a roof)—the consonants are actually folded into the vowels. This phenomenon is called coarticulation. Liberman and Shankweiler (1991) explained it this way:

Though the word "bag," for example, has three phonological units, and correspondingly, three letters in print, it has only one pulse of sound: The three elements of the underlying phonological structure—the three phonemes—have been thoroughly overlapped and merged into that one sound—"bag." (p. 6)

Given what educators now know about speech production—and coarticulation in particular—it is easy to understand why a young child might have difficulty detecting the separate segments in spoken words (Moats, 2000, p. 230). Large-scale research studies in the United States and elsewhere (see Blachman, 2000, for a review) have shown repeatedly that when teachers include phoneme awareness activities (showing children how to segment spoken words) in early literacy programs, along with activities to illustrate how the phonemes are represented by the letters of the alphabet, many of the reading difficulties experienced by young children can be prevented.

According to research reviewed in the National Reading Panel report (National Institute of Child Health and Human Development, 2000b), effective phoneme awareness instruction has many important characteristics. Two specific phoneme awareness activities, phoneme segmentation (breaking spoken words into their individual sounds or phonemes) and phoneme blending (blending the segmented phonemes and saying the word naturally), have been

shown to have the most direct transfer to reading. Thus, it is important that any phoneme awareness program include these two activities. Research has also shown that phoneme awareness instruction is most effective and has a greater influence on reading and spelling when children are taught explicitly how the segmented phonemes are represented by letters in print. Finally, research has shown that phoneme awareness programs do not require extensive amounts of time in kindergarten classrooms. Programs that took less than 20 hours had the most impact on reading. Although the NRP makes a strong point of saying that this last point should be interpreted with caution (different children might require different amounts of instructional time), the finding is consistent with what I and my colleagues found in our research.

In our work with kindergarten children, our first study (Ball & Blachman, 1991) included 28, 15- to 20-minute lessons spread over 7 weeks for a total of 7 to 9 hours of instruction. Children who participated in the 28 phoneme awareness lessons had higher reading and spelling skills at the end of kindergarten than children who did not participate in these lessons. In our second study (Blachman, Ball, Black, & Tangel, 1994), we expanded the intervention for children who began with fewer early literacy skills (on average they knew only two letter sounds in January of their kindergarten year). The expanded program included 41, 15- to 20-minute lessons spread over 11 weeks and taking 10 to 13 hours. Again, we found that children who participated in our phoneme awareness instruction in kindergarten were better readers and spellers at the end of kindergarten and they maintained this advantage at the end of 1st grade. Others who have followed children for a longer period of time have found that the advantage of this instruction lasts well beyond the time that children participate in the activities (National Institute of Child Health and Human Development, 2000b).

To illustrate activities that include both phoneme segmenting and phoneme blending, and also illustrate how to combine phoneme awareness with letter-sound instruction, I will describe the three-part program that we used in our research. Although no one program has been found to be superior to all other models of phoneme awareness instruction, the research is clear that all children need to learn about the segmental structure of speech and how to connect these segments to printed letters. Children who develop this understanding are more likely to be better readers and spellers than children who lack this important insight about the structure of spoken words.

Research-Based Strategies to Build Phonological Awareness and Letter-Sound Knowledge

In our intervention studies, we used a simple three-step lesson plan. At the beginning of each lesson, children participated in a phoneme segmentation

and blending activity called *say-it-and-move-it*. This activity is followed by a second activity to reinforce phoneme awareness, and finally there is an activity each day to teach letter names and sounds. Although these activities have been designed with small groups in mind (four or five children), they have also been adapted for larger groups and used with individuals.

The children begin each lesson with a *say-it-and-move-it* activity designed to teach children to segment spoken words into phonemes and then to blend the phonemes and say the word naturally. Each child in the group is given an 8 1/2-by-11-inch sheet of laminated paper. On the top half of this sheet is a picture (e.g., boat or clown) or geometric shape that serves as a holding place for the disks (tiles, buttons, or blocks) that will be used to represent the sounds in spoken words. A thick black line divides the paper into two sections. Below the line is a black arrow going from left to right. The children are taught to move the appropriate number of disks down to this arrow to represent the individual sounds pronounced by the teacher. For example, the teacher might say "I'm going to say a sound: /a/. Now I'm going to *say-it-and-move-it*." The teacher models for the children, moving the disk out of the square in the top half of the page to the black arrow in the bottom half of the page as she stretches out the sound, /aaaaaaaaa/. When the disk is on the black line, the teacher says "/a/, one sound" and then sweeps the disk back to the top of the page to get ready for the next sound or word. After modeling for the children, the teacher has the children "*say-it-and-move-it*," using the same sound that she used for demonstration. When the children are successful at moving one disk to represent one sound, the teacher can move on and model how to move two disks for a sound that is repeated twice, such as /a/ /a/. Again, the children repeat the sounds and move one disk to represent each sound. Next, two-phoneme words (such as *at*) are introduced, and finally three-phoneme words (such as *sun*). After modeling by the teacher, the child repeats the word slowly, stretching out the sounds, and moves a disk to represent each sound. Once the children have demonstrated how many sounds they hear in a spoken word (such as *sat*) by moving one disk to represent each sound, the children blend the sounds and say the word naturally.

During the first few weeks of instruction, it is helpful to use continuous sound letters in the initial position. These are sounds that the children can stretch out or hold with a minimum of distortion, such as /s/ in *sun*, /f/ in *fan*, and /l/ in *lip*. After children are comfortable segmenting three-phoneme items beginning with continuous sound letters, stop consonants (a stop consonant, being a "speech sound that is articulated with a stop of the air stream" [Moats, 2000, p. 235], such as /t/ and /b/), can be used in the initial position.

Once children are successful segmenting one-, two-, and three-phoneme items using blank tiles or disks, the teacher can begin to add letters to the disks, being careful to select only those letters whose names and sounds have

been mastered by the children. For example, we often start by adding the letter *a* to one of the tiles, once we know that the child can automatically give the name and sound of that letter. We usually select letters from among the first eight letters that we teach (*a, m, t, i, s, r, f, b*), although children do not need to know all of these letters before one of them can be added to a letter tile. (There is no agreed-upon sequence for teaching letter names and sounds. We start with these letters because they can generate a significant number of simple words with the consonant-vowel-consonant pattern, such as *mat, sat, fit*. Other letters may have been learned first by the children if a teacher has been using a specific sequence in a classroom reading program. The important point is that the first letters that are put on the tiles should be letters that the children know automatically.)

The children who are ready for the letter tiles can use a combination of letter tiles and blank tiles when segmenting a word, while other children in the group can continue to use all blank tiles if that is what they need to be successful. Eventually, children who have mastered more letter names and sounds can be given enough letter tiles to produce a consonant-vowel-consonant real word (e.g., *lip*) during the segmentation activities. The children use the same procedure that was described above, saying the word slowly (stretching out the word and segmenting the sounds, as in *llliiiipp*) and moving one letter tile as each sound is pronounced. When the three letter tiles have been moved to the black arrow on the bottom half of the sheet, the children blend the sounds and read the word *lip*. This is an important stage for the children to reach, because now they have made the connection that spoken words can be segmented and that each segmented sound can be represented by specific written letters (graphemes). This is the point at which phoneme awareness and the alphabetic principle (the knowledge that letters stand for spoken sounds) meet. The insight that written letters stand for spoken language sounds—whether the children develop this insight informally through language play and being read to or through explicit instruction—increases the likelihood that children will become successful readers and spellers.

After the say-it-and-move-it activity, children are given an opportunity each day to practice phoneme awareness with a related activity or game. For example, a teacher might introduce sound categorization, a game adapted from Bradley and Bryant (1983) in England. Using pictures of words that rhyme or that share initial, final, or medial sounds, the teacher displays three pictures with shared sounds, such as *bat, hen, hug*, and one picture that does not belong because it does not start like the others (such as *bus*). The children select the picture that does not belong and explain their choice. In another activity, adapted from what Elkonin (1973), a Russian psychologist, called “sound analysis,” the children get booklets containing one picture on each page of an object representing simple words (*fan, sit, lip*). Underneath each picture is a

series of connected boxes corresponding to the number of phonemes in the word. As in the say-it-and-move-it activity, children using the Elkonin cards are taught to say the word slowly and simultaneously move a disk into a box to represent each phoneme in the word. In yet another phoneme awareness task, children learn to hold up a finger for each sound they hear in a word spoken by the teacher. To reinforce blending words, as opposed to segmenting them, the children also have the opportunity to practice correcting mistakes made by a puppet with a movable mouth who tells the children stories. At several points in the story, the puppet mispronounces a word by segmenting it into its constituent phonemes (saying the word very slowly and stretching out the sounds). The bashful puppet turns away from the children until the children fix the mispronounced word by pronouncing it or blending it correctly.

A final activity in each lesson involves direct, explicit instruction in *letter names and letter sounds*. As noted earlier, the results of previous phoneme awareness intervention studies demonstrate that phoneme awareness instruction has a greater influence on early reading and spelling when connections are made between the sound segments of the word and the letters representing those segments (Bradley & Bryant, 1983). As indicated in the discussion of the say-it-and-move-it activity, teachers in our research projects start teaching children eight letters (*a, m, t, i, s, r, f, b*). Children learn key words and phrases to help them remember the sound of each letter. Illustrated alphabet cards are used to reinforce initial sounds. For example, the *r* card has a picture of a *red rooster* in *red* running shoes and the *f* card is illustrated with *five funny faces*. Children also play games such as “Post Office” to reinforce letter names and sounds. In this game, children select a picture, identify the letter that represents the first sound of the pictured item, and mail the picture card in the appropriate letter pouch. On another day, a bingo game might be selected, with pictures that illustrate a subset of letter names and sounds (for example, one set of cards might reinforce the letters *a, m, b, and t*). Once children have mastered several letter names and their corresponding sounds, these letters can be put on the manipulatives (e.g., disks, buttons, tiles, or blocks) and used in the say-it-and-move-it activity, as described earlier.

Phonological Awareness—Some Final Thoughts

The research on phonological awareness has led to some important conclusions. Teachers need to understand and be able to provide for the differences in phonological awareness that they will encounter in their classrooms. Some kindergarten children will not yet know how to rhyme—an early indicator of phonological awareness—while others will already know how to segment spoken words into their constituent sounds. Some children appear to make discoveries about the connections between speech and print effortlessly by

being read to, by opportunities to write, and by playing oral language games with parents, preschool teachers, or other caregivers. Other children are not as fortunate. Even with exposure to preschool literacy experiences, differences or deficiencies in phonological ability might make it difficult for them to discover the connections between print and speech. Other children lack the necessary preschool literacy experiences that facilitate making these connections. The latter two groups especially need teachers who understand why they may be lagging behind in early reading. Their teachers may need to provide explicit instruction to help them understand that spoken language can be segmented into the sounds that are represented by the letters of the alphabet. Thus, even though not every kindergarten child will need as explicit a program in phoneme awareness as the one just described, every teacher of young beginning readers, especially in kindergarten and 1st grade, needs to know how to provide such a program for those children who need it. Next, it is important to help young children use the insights they have gained from instruction in phoneme awareness and the alphabetic principle (understanding how letters represent the sounds of speech) to learn to decode words and to spell.

WHAT IS DECODING AND WHY IS IT IMPORTANT?

Research has shown that decoding (figuring out the pronunciation of a word by using one's knowledge of the systematic relationships between sounds and letters) (Snow et al., 1998, p. 52) is made much easier when a child has phoneme awareness. In a now classic article, Stanovich (1986) described children who fail to learn to decode words in 1st grade and the downward spiral that can result. These are the children who are more likely to dislike reading, practice less, and fail to develop the fluency that comes with practice. Without fluency, children must use valuable resources to continue to focus attention on decoding words and are left with less attention available to devote to the meaning of what they are reading. In addition, these children gain less from their reading—in terms of new vocabulary and general knowledge—than the children who are initially successful in learning to decode in 1st grade. Juel (1994) confirmed these observations when she followed 54 children from grade 1 to grade 4 and found that the 4th-grade poor readers were the ones who entered 1st grade with the most limited phonological awareness. This contributed to their difficulty in learning the correspondences between spoken sounds and letters and to their slowness in learning to decode. At the end of grade 4, Juel reported that the decoding of the poor readers was not yet equivalent to that of the average readers at the beginning of grade 2. Consistent with Stanovich's hypothesis, the poor readers in the Juel study liked reading less, did less of it, and, consequently, lost the valuable opportunities for vocabulary growth and exposure to new ideas that come from reading widely. Although no one is

suggesting that all is lost if children fail to learn to read in 1st grade, the point is that it gets harder and takes longer to remediate difficulties the older children get (Torgesen, 2005). Thus, our goal should be to get all children off to a good start by teaching children to decode words accurately and fluently.

Research-Based Strategies to Build Accurate and Fluent Decoding—The Foundation for Good Comprehension

As with phoneme awareness, there is no one model that is superior to all others for providing explicit and systematic instruction to insure that all children learn to decode words accurately and fluently. The research is clear, however, that this is an important goal for all children. In the studies I have conducted with my colleagues, we have provided teachers with a framework for organizing beginning reading instruction that has proven successful with children in regular classrooms, as well as children with special needs in programs taught by reading and resource teachers. In one of our classroom studies (Blachman, Tangel, Ball, Black, & McGraw, 1999), classroom teachers and their teaching assistants followed a five-step plan to facilitate accurate and fluent word recognition and to provide opportunities for students to read stories out loud with corrective feedback from teachers. Children who participated in this project were better readers at the end of 1st grade than children who did not participate in this structured program, and they maintained their advantage when assessed one year later. More recently, we (Blachman et al., 2004) reported the results of a remedial study in which 2nd- and 3rd-grade children who had been identified as struggling readers (scoring below the 25th percentile on individually administered reading tests) participated in eight months of one-to-one tutoring that replaced the special remedial program the school was providing. We used an expanded version (50 minutes instead of 30 minutes) of the five-step plan as will be described below. At the end of the intervention and again one year later, the participating children demonstrated superior reading, fluency, and spelling skills when compared to the children who had participated only in the remedial programs available in the school.

Explicit and Systematic Decoding Instruction in the Regular Classroom

The model that we have used in our research is based on five relatively simple steps. Each small-group lesson takes between 30 and 40 minutes, although all times are only suggested guidelines. Each part of the lesson can be adapted easily by the teacher to meet the needs of a particular group (spending less time on one step and more time on another). As noted earlier, in our remediation study, resource and reading teachers expanded the length of the lesson to a 50-minute tutorial.

Step 1. Each lesson begins with a brief and quick-paced (1 to 2 minutes) review of sound-symbol associations in which the child gives the name of the letter, the sound it makes, and a word that starts with that sound (such as *a* says /a/ as in *apple*). A pack of index cards can be used as a sound pack, with each card containing one grapheme (a grapheme is a letter, such as *t* or *a*, or a letter cluster, such as *ai*, representing a single speech sound or phoneme). To keep this activity brief and quick-paced, not all sounds are included each day. In order to highlight the vowels (such as *a*) and later the vowel combinations (such as *ai*), the vowels are written in red and the consonants in black. In the early stages of letter-sound instruction, when the children are just learning vowels, we have found that it is especially important to have a consistent key word for each of the short vowels and make sure that the children can name the letter, give the sound, and identify the key word. These are the key words we have used:

- *a* says /a/ as in *apple*
- *i* says /i/ as in *itch*
- *o* says /o/ as in *octopus*
- *u* says /u/ as in *up*
- *e* says /e/ as in *Ed*

Step 2. After the letter-sound review, teachers instruct the children in phoneme analysis and blending. In this step, children learn new decoding skills. That is, they learn how to build words and sound them out *accurately* using the letter sounds that they already know from Step 1. The primary activity at this step requires the use of a pocket chart that we refer to as a “sound board” (an 8 1/2-by-11-inch piece of card stock with three pockets—the top pocket holds cards with the consonant letters or consonant digraphs, such as *sh*, *ch*, *th*, that the children learned in Step 1, the middle pocket holds the vowels also learned in Step 1, and the third or bottom pocket is used to put these letters together to make new words). When used in a regular classroom, this step might take only six to eight minutes, depending on the ability of the children. The group might build six to ten words—using fewer words when working with the younger children (beginning 1st graders).

To get started on this phoneme analysis and blending technique (adapted from Slingerland, 1971), the teacher pronounces a word, such as *fat*, emphasizing the medial (vowel) sound. The children repeat the word, listen for the vowel sound, and select the appropriate vowel grapheme card (vowels are color-coded red) from the middle pocket and place it in the lower pocket. The teacher then repeats the word and asks the children to select the letter card that represents the first sound in the word and place it in the appropriate position (i.e., in front of the vowel) in the bottom pocket. The teacher might then

say, “Now we have /fa/. Our word is *fat*. What is the last sound we hear in *fat*?” The children then select the *t* and place it at the end of the word. The whole word is then read naturally (as we would say the word in normal speech), either by an individual child or by the group.

Once the children are successful in constructing words, phoneme manipulation is introduced. For this task, the teacher works through a series of preselected words and might ask the children to change *fat* to *fan* and, when new vowels are mastered, change *fan* to *fn*. A later lesson might require changing *fn* to *shin* and, eventually, as new syllable types are introduced on the sound board, changing *shin* to *shine*.

As with all of our activities, teachers have developed a variety of ways to improvise and adapt instruction. For example, the same activity can be conducted with a set of magnetized letters on a cookie sheet or with Scrabble tiles. Scrabble tiles are especially useful with older children, giving the activity a more sophisticated look, and can be used when students are building longer phonetically regular words (words that can be sounded out, such as *backpack* or *pancake*). Blank Scrabble tiles can be purchased and a black marker can be used to create special tiles, for example, for consonants digraphs (e.g., *sh*, *ch*) and vowel teams (e.g., *ai*, *ee*), putting the two letters that make a single sound on one tile, just as we would when we create letter cards for the sound board described above.

Step 3. Whereas the goal of Step 2 is *accuracy*, the goal of Step 3 is *fluency*. Once children can construct and accurately read on the sound board a pool of phonetically regular words, these words (and different words with the same phonetic pattern) are put on flash cards and the children practice reading them quickly. Often the children need to read the words more than once—the first time for accuracy and the second time to build automaticity. Teachers have found that the use of a stopwatch or hourglass encourages children to move quickly. Both the stopwatch and hourglass can be used by pairs of children when the teacher is working with groups. Each child tries to beat his or her own time on his or her own set of words. In that way the children in the pairs are not competing with each other. Children like to graph their progress on this activity.

Step 3 also includes the opportunity to practice high frequency words that have to be memorized, such as *said*. Words can be selected from a variety of sources. Basal reading programs, the core program used in most elementary schools, often have a predetermined list of high-frequency words that the children are required to learn at each grade level, and these can be incorporated into this step. There are also published lists (see, for example, the lists of instant words in *The Reading Teacher's Book of Lists* by Fry & Kress, 2006) that include the most frequently used words in written English. These lists are a valuable resource for classroom teachers, reading teachers, and resource teachers. The

teachers in our research projects write the high-frequency words in a different color font (or print them on a different colored index card) than the phonetically regular words, to remind the children that these are words that need to be memorized. For approximately two to three minutes daily, children can practice reading phonetically regular words and irregular high-frequency words.

Step 4. The fourth step in the lesson includes using a variety of books for oral reading. We encourage teachers, especially during the early stages of instruction, to select books that will give children the opportunity to practice the decodable patters they have learned and to reinforce the importance of accurate and fluent reading as a foundation for comprehension. For this purpose, we include a variety of decodable texts in our early lessons, selecting books from several series, such as Primary Phonics (Educator's Publishing Service, 1995), the Steck-Vaughn Phonics Readers (Steck-Vaughn, 1991), and Dr. Maggie's Phonics Readers (Creative Teaching Press, Inc., 1999).

Teachers are also encouraged to include stories that are not phonetically controlled by whatever basal series (core reading series) is being used in their school district, as well as having children read from trade books, including both narrative (e.g., the Arthur series by Marc Brown; the Amelia Bedelia series by Peggy Parish) and expository texts (e.g., the Curious Creatures series, Curriculum Associates, 1997). In the early stages of instruction, teachers (and/or parents) may need to provide extensive support when books that are not phonetically controlled are being introduced. This might mean that the teacher will be doing most of the reading, alternating reading with the child, or just supplying unknown words. Gradually, as the children become more proficient, they will be reading these books independently. Trade books should be selected based on the appropriateness of the reading level and on the child's interests.

As noted in the *Report of the National Reading Panel* (National Institute of Child Health and Human Development, 2000a, p. 11): "Fluent readers are able to read orally with speed, accuracy, and proper expression. Fluency is one of several critical factors necessary for reading comprehension." The NRP further explains that "If text is read in a laborious and inefficient manner, it will be difficult for the child to remember what has been read and to relate the ideas expressed in the text to his or her background knowledge" (National Institute of Child Health and Human Development, 2000a, p. 11). In order to develop this important component of reading, children should have frequent opportunities to read and reread texts with corrective feedback from an adult. As early as possible, teachers should begin to help children self-monitor by having the children ask themselves, for example, if what they just read makes sense. Focusing children's attention on the meaning of the text should be part of their earliest reading experiences—whether the teacher, parent, or child is doing the reading (Snow et al., 1998).

Step 5. The last step of each lesson includes a short writing to dictation activity. Teachers dictate preselected words used in earlier steps of the lesson (such as words practiced on the sound board or encountered in phonetically controlled text) *or* new words with the same phonetic pattern. The number of words dictated will depend on the age of the children. In our research projects, we have asked teachers to dictate four to six phonetically regular words and one sentence (that may include one or more high-frequency words) when working with small groups of first graders—this usually takes about five to seven minutes. For reading and resource teachers working with somewhat older children (2nd and 3rd graders) who are struggling readers, we have encouraged them to dictate six to eight words and two sentences. Reading and resource teachers often have more than 30 minutes in which to conduct their lesson and, therefore, can spend somewhat more time on each step.

Regardless of the number of words dictated, children are directed to print vowel headings at the top of each dictation page (e.g., *a* and *i*, or, later in the year, *ai*, *oa*, *ea*). These headings represent the particular vowel sounds that the teacher targeted for that day's lesson. The teacher says the word she wants the children to write, such as *lid*, and the children repeat the word slowly, stretching it out and listening for the vowel sound. If the dictation paper has the headings *a* and *i*, for example, the child might stretch out the word *lid* and then write it under the appropriate heading. After the words for the day are dictated, the children are asked to read the words back to the teacher. Only phonetically regular words—words that can be decoded—are dictated in this step of the lesson. The goal is to help children see the connection between reading and writing by learning that they can write the words they can decode. This procedure for learning to spell is quite different from the usual classroom activity of having children memorize lists of unrelated words for the Friday spelling test.

The dictation activity gives teachers an opportunity to evaluate student progress on the target sounds for the day's lesson. The dictation notebooks also become a record of student growth over the year. Students, teachers, and parents can review the progress as students move from writing and reading simple closed-syllable words (*ham*) to more complex syllable types (*lake*, *float*, *perch*) and multisyllable words (such as *reptile*, *bugle*, and *tarnish*) made up of the syllable patters they have learned.

Many of the early activities in the five-step plan focus on developing accurate and fluent word identification. Accurate and fluent word identification can be developed in part by learning the six basic syllable patterns used in the English language. All six of the syllable patterns can be introduced using the five-step plan just described. These patterns include the following:

- closed syllables, such as *fat* and *flat*
- final “e” syllables, such as *cake* and *shine*

- open syllables, such as *me* and *cry*
- vowel team syllables, such as *pain*, *teach*, and *crawl*
- vowel + *r* syllables, such as *burn* and *start*
- consonant + *le* syllables, as in *bottle* and *table*.

The syllable patterns are reinforced when children read decodable books and also when children have the opportunity to read a wide variety of trade books and books representing various genres. The goal in teaching these patterns is for children to begin to read appropriate grade level texts fluently and with good comprehension as early as possible.

Vocabulary development and comprehension, although not the focus of this chapter, should never be neglected. Teachers are encouraged to make sure that children know the meaning of all the words that they are asked to read *or* spell, and a variety of strategies, such as retellings and making predictions, can be used to support comprehension. It is especially important to help children learn to self-monitor their reading and detect from an early age when something does not make sense. As word recognition increases, more time in each lesson can be devoted to reading new stories and rereading old ones. If time becomes a problem, teachers may alternate the use of the sound board and dictation. This allows more time to be spent on oral reading of text with corrective feedback from the teacher.

CONCLUSION

In this chapter, I have focused on the importance of phonological awareness and decoding for early reading instruction. As the NRP (National Institute of Child Health and Human Development, 2000a, 2000b) points out, however, although both are critical for early reading success, neither constitutes a total reading program. There is also no one-size-fits-all reading program and, regardless of the core program that teachers are using to teach reading, teachers need to differentiate instruction for children in their classrooms. Unless all children learn about the systematic relationships between speech sounds and spellings, teachers will be doing a disservice to young readers. Making sure all children have this foundation can help to level the playing field for children who come to school with different levels of early literacy skills and experiences. The ultimate goal is for more young children to learn to read fluently and with good comprehension and, just as important, to learn to enjoy reading.

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Chapter Seven

FOSTERING EARLY LITERACY DEVELOPMENT

Diane H. Tracey and Lesley Mandel Morrow

Our knowledge of how best to facilitate children's literacy development in schools and at home has grown tremendously. The earliest educational recommendations date back to ancient Greece and the period of Plato (ca. 428–347 B.C.) and Aristotle (384–322 B.C.), who suggested that the mind was like a muscle that needed to be exercised through practice for learning to take place. People believed that learning occurred as a result of associations made in the mind, such as the associations made between items that are similar and those that are opposite, and that these associations needed to be practiced to enhance learning. These concepts, known as the theories of mental discipline and associationism, dominated educational thought throughout ancient times, the Middle Ages, and the European Renaissance. For about 2,000 years, educators emphasized practice as the main route to all educational learning (Guttek, 1972).

In the 1700s, however, a new way of thinking about learning emerged that proved to be extremely influential, particularly in the education of young children. Known as unfoldment theory, this idea suggested that learning unfolds naturally in young children's minds as a result of their curiosity. Educators such as Rousseau (1712–1778), Pestalozzi (1746–1827), and Froebel (1782–1852) seized this idea and began to design programs for young children that emphasized the creation of environments that would stimulate children's natural desire to learn. The contributions of popular educators of the early twentieth century, such as Maria Montessori and John Dewey, extended unfoldment theory and applied it to literacy education. Many current early childhood education programs still reflect this important educational belief.

Beginning in the 1950s, educators began to design alternative educational initiatives that would be more proactive than those based on unfoldment theory. The new orientation, called reading readiness, identified subskills thought to be most highly related to early reading achievement, and then directly taught those subskills in a sequential manner. Skills frequently addressed in reading readiness programs included the following: auditory discrimination of familiar sounds, similar sounds, rhyming words, and sounds of letters; visual discrimination, including color recognition, shape, and letter identification; left-to-right eye progression; visual motor skills, such as cutting on a line with scissors and coloring within the lines; and large motor abilities, such as skipping, hopping, and walking a straight line. While the practice of many of these skills can still be seen in today's classrooms, new research has extended our understanding of the ways in which young children's literacy abilities develop, and, subsequently, has impacted our classroom practices.

In the mid-1960s, ideas regarding the best way to facilitate young children's literacy development changed once again. This change was prompted by the research findings of Durkin (1966), who discovered that children's progress in literacy learning was positively correlated with a variety of previously unrecognized conditions. These included the frequency with which parents read aloud to children at home, the frequency with which parents themselves read, the frequency of conversations about books held in children's homes, the number of books in children's homes, and children's at-home access to writing materials. These conditions, when present, were considered indicators of a rich at-home literacy environment.

CURRENT THOUGHTS REGARDING EARLY LITERACY DEVELOPMENT

Marie Clay (1966) extended Durkin's findings and created emergent literacy theory. In addition to recognizing the importance of a rich at-home literacy environment, emergent literacy theory emphasizes that children's literacy development begins at birth and is an ongoing, lifelong pursuit. Emergent literacy theory suggests that the processes of listening, speaking, reading, and writing are all related and develop concurrently. This theory argues that gains in any one of these literacy processes has a positive effect on the other processes and, similarly, that a deficit in any one area will adversely affect the others.

The central concepts from emergent literacy theory have now been applied to early childhood education classrooms. When these concepts are combined with those from unfoldment theory and with direct instruction, originally associated with reading readiness, a "balanced literacy" program is created. A balanced literacy program is a popular approach to literacy programs for young children.

Balanced literacy programs are ideal for fostering early literacy development in schools. The first way in which programs are balanced is that they address the physical, emotional, social, and cognitive dimensions of all children. For example, a balanced literacy program is sensitive to the fact that young children are not able to be physically still for long periods of time and, as a result, a balanced literacy program includes many active learning experiences during the school day. A balanced literacy program also addresses the emotional needs of young learners by prioritizing the importance of a warm, positive, and nurturing affective climate in the classroom. A balanced literacy program recognizes the importance of social interactions in learning, and works hard to create positive learning communities in schools. Finally, a balanced literacy program creates cognitive experiences for children that are developmentally appropriate.

A balanced literacy program also heavily emphasizes the physical environment of the classroom. The classroom should be designed to support whole-group, small-group, and individual learning experiences. Reflecting ideas about a rich literacy environment, the physical environment of an early childhood classroom should include the following: appropriately sized clustered desks or worktables, and a literacy center including: a rug, rocking chair, pillows, bean bag chairs, stuffed animals, storytelling items, manipulatives, a writing table, and books organized by difficulty and genre and stored in baskets on bookshelves. The classroom would also have an abundance of labels in the room (e.g., “desk,” “clock,” and “door”), to help children associate printed words and objects, a dramatic play area enhanced by items for reading and writing (e.g., a menu, pad, and pencil within a play restaurant), and learning centers for other academic subjects, such as a science center, a math center, and a social studies center. In short, the classroom should be filled with print and opportunities for listening, speaking, reading, and writing.

The curriculum of a balanced, early literacy program addresses the following areas: oral language/vocabulary, phonemic awareness, word identification strategies (including phonics instruction), comprehension, and fluency instruction. Other vital areas addressed are children’s texts, motivation, writing, technology, and parent involvement. Each of these areas is further described below.

Oral Language and Vocabulary Development

Oral language is believed by many to be the foundation for children’s reading and writing achievement. Children whose oral language develops easily and at an early age tend to be children who learn to read with ease and success; conversely, when children’s oral language is delayed or follows a deviant pattern, children tend to be at risk for reading and writing difficulty (Snow, Burns, & Griffin, 1998). A child who has had a normal oral language history

but is experiencing excessive difficulty with early reading tasks may have a reading disability.

There are valuable strategies that teachers and parents can use to facilitate children's oral language and vocabulary development. For example, "scaffolding" is used when adults reduce the difficulty of a conversation so that children can better understand what is being said. "Extensions" are adults' restatements of children's words in grammatically correct sentences. "Topic continuations" are seen when adults provide extra verbal information about a topic to children so that their background knowledge is increased as a result of a conversation. "Open-ended questions" are those that have require more than a one word (Yes or No) response to appropriately answer. "High-level questions" are those that require children to use critical thinking skills to answer (e.g., "Why is using bricks to build a house better than using straw?"). Adults can use all of these strategies during daily conversations and storybook reading to help build children's oral language.

Phonemic Awareness

Another important aspect of early literacy development is phonemic awareness. Phonemic awareness refers to the ability to hear sounds within words. A phoneme is the smallest unit of sound in the English language. For example, the word "boat" has three phonemes since the letters "oa" create a single sound. Children's ability to hear sounds within words is closely related to their ability to match sounds and letters, a skill essential for both reading and writing. Proficiency in phonemic awareness is linked to success in early reading and writing while deficits in this area are linked to reading and writing difficulties. Many researchers believe that a deficit in phonemic awareness processing is the most common cause of reading disability (Stanovich, 2000). The possibility of a phonemic awareness deficit should be investigated in all children displaying early reading and writing problems.

It appears that phonemic awareness skill develops naturally and quite easily in most children. Furthermore, weaknesses in this area appear to be responsive to remedial interventions. Some of the best activities to strengthen children's phonemic awareness are the following: sound matching activities, sound isolation activities, blending activities, sound addition or substitution activities, and segmentation activities (Yopp, 1992). In sound matching activities, children identify words that begin with particular sounds. In sound isolation activities, children listen to a word and are asked to decide if a target sound is at the beginning, middle, or end of the word. In blending activities, children put sounds together to make new words. For example, if a child hears three sounds, c/a/p, she or he would have to blend them together to create the word "cap." In sound addition or substitution activities, the child changes one word

to another word by changing single sounds. In segmentation activities, children isolate sounds within a word. Additional ideas for strengthening students' phonemic awareness skills can be found in Yopp and Yopp (2000).

Word Identification Skills

Another essential area for fostering early literacy development is known as word identification skills. Word identification skills are the skills that children use to identify words during the reading process. Word identification skills include the ability to memorize high-frequency sight words, the ability to break words down into their individual sounds (decoding), the ability to break words down according to word families (phonograms), and the ability to break words down using word parts such as prefixes, roots, and suffixes (structural analysis).

High-frequency words are those that occur most often in the English language. Because of their great frequency, there is a high payoff for young children in learning how to read and write these words. For example, according to Fry and Kress (2006), the 25 most common words in the English language make up about one-third of all printed material, and the first 300 words make up about 65 percent of all written material. *The Reading Teacher's Book of Lists* (Fry & Kress, 2006) lists the most common words in the English language in groups of 25. When children master these words, they are able to automatically read them when they come across them in connected text. Reinforcement activities for teaching sight words include making matching pairs of cards for each word and having children play games.

Children also need to decode to be successful with early reading and writing. Decoding instruction teaches children to break down words based on sound-symbol relationships. Decoding instruction begins when children learn the letters of the alphabet and the sounds associated with each letter. It is easy for children to confuse the name of a letter with the sound that a letter makes. Individual letter sounds are often practiced by having children find items in the classroom that begin with a certain sound, cut out pictures from magazines that begin with that sound, and bring in objects from home that begin with that particular sound.

Within classrooms, teachers often create areas, called centers, designed to provide students with opportunities for independent, hands-on learning. One center literacy activity that children often enjoy is sorting objects according to their sounds. Objects that start with a particular letter (e.g., egg, elephant, elf) can be sorted into an "e" container; objects that begin with a different letter (frog, flower, fly) can be sorted into an "f" container. As children get more skilled in sorting objects and sounds, an increasing number of containers can be used, and the activity can be modified for difficulty. One modification is for

children to sort objects according to the location of a sound, such as objects that begin with “e,” objects that end in “e,” and objects that have “e” as their middle sound.

Because English contains complicated sound-symbol relationships (e.g., “ou” can be pronounced several different ways depending on the word), many educators believe that using knowledge of word families to identify words is an easier and quicker route than traditional decoding (Gaskins, 1998). In this approach, after children learn their consonant letter names and corresponding sounds, their instruction moves directly to learning word families. Simple word families are taught first, such as all the words associated with the “at” family (e.g., bat, cat, fat, hat, mat, pat, rat, sat, tat, vat, brat, drat, flat, scat, slat, spat, that). Once students have mastered the “at” family of words, the next family is introduced, for example, the “ap” family. “Bingo” will also work for word family practice. *The Reading Teacher’s Book of Lists* (Fry & Kress, 2006) provides a comprehensive presentation of the major and minor word families (also known as phonograms) and the words associated with each family. As children get older, their knowledge of word families can also be used as the key to break down multisyllable words. This approach is known as decoding by analogy and has been found to be effective for both normal and disabled readers (Gaskins, 1998).

Finally, young readers’ and writers’ word identification skills are strengthened by instruction in the area of structural analysis. Structural analysis teaches students to separate words into their roots, prefixes, and suffixes. According to White, Sowell, and Yanagihara (1989), 9 frequently occurring prefixes account for 75 percent of all prefixed words (un, re, in, dis, en, non, in (into), over, and mis). Similarly, 10 suffixes account for 85 percent of all suffixed words (s/es, ed, ing, ly, er, ion, able, al, y, and ness).

Comprehension

Comprehension is the goal of all reading. It is the ability to understand what one is reading. It is also conceptualized as the reader’s ability to construct a message during the reading process. There are many ways that teachers and parents can help improve children’s reading comprehension. These ideas are applicable whether a child is reading to an adult or an adult is reading to a child. The ideas can be thought of as conversations that take place before, during, and after the reading experience.

Before reading, children are assisted in talking about the topic of the text. For example, if a story or book is about a fisherman, a conversation about fishing and people who like to fish would be initiated. The professional term for this activity is “activating and building children’s schemata.” The term schema refers to a child’s knowledge base—everything he or she knows about a specific topic; the plural of schema is schemata. When adults build children’s

schemata, they add new knowledge to children's already existing knowledge base. An important part of the pre-reading conversation is to introduce key vocabulary that is part of the reading text. Other ways to stimulate pre-reading conversations include predicting what the text will be about based on pictures and/or titles and headings.

Once the reading session begins, conversations during reading will help ensure that children fully understand the text that is being read. This occurs when adults stop and ask questions at particularly important and or interesting points in the reading. The most beneficial questions are those that require much language to answer. Examples of beneficial questions are those that ask children to make predictions, provide explanations, and support opinions.

Comprehension is also enhanced by activities completed at the end of a reading lesson. Follow-up activities can be of a broad variety. Popular choices for young children include artistic responses to the text, such as drawing their favorite part or character of the story. Using storytelling props to retell stories has also been shown to increase young children's comprehension of text (Morrow, 2002). Helping children comprehend what they read is an essential part of promoting early literacy development. Activities can be used before, during, and after reading to accomplish this goal.

Fluency

Recently, the importance of building children's reading fluency has gained recognition as an important component of early literacy instruction (National Institute of Child Health and Human Development, 2000). Reading fluency is the ability to read easily, smoothly, and with proper expression. When children do not have adequate fluency, their reading is slow and labored, with an absence of appropriate expression. Listeners often experience disfluent reading as frustrating and painful. Disfluency can often result from a book that is too difficult for students. If a student is making more than 10 errors per 100 words during oral reading, the book is frustrating for the child, and an easier text should be provided. Sometimes children need fluency instruction even when books are appropriate for their reading abilities. Activities that have been shown to increase readers' fluency include the following: paired reading, repeated reading, choral reading, readers' theater, and taped reading. In paired reading, students are put into groups of two and take turns reading to each other. In repeated reading, a student reads a short portion of a text aloud, then the teacher provides feedback, and then the student rereads the text. In choral reading, all students read the text aloud in unison. In readers' theater, students practice reading scripts and then perform their script reading for other, often younger, students. Readers' theater is an enjoyable and meaningful form of repeated reading for young students. In taped reading, students listen to an audio-recorded version of a book or text and then tape-record

themselves reading. All of these activities can help to improve students' fluent oral reading.

Text

Another area that is increasingly recognized as important to early reading success is the text from which children read (Menon & Hiebert, 2005). The difficulty level of a text is evaluated by the number of high-frequency words, the number of easily decodable words, the frequency or repetition of words, the predictability of the text, the clarity of picture-text relationships, and the total number of words. Using these indicators, researchers are currently trying to determine optimal ways of writing beginning texts to facilitate early reading development.

At the present, many publishers code texts for young readers according to readability levels or grade levels that they believe reflect a text's difficulty. Teachers maintain a collection of books at varying levels of readability in their classrooms. These books are often sorted by difficulty and coded by using different colored stickers on their bindings and sorting them into baskets by their code. Such a system allows children to easily find and replace books at their ability level.

A general rule of thumb is that for independent reading, children should be able to read 97 percent of the words in a text without errors. Children should be able to read about 95 percent of the words without errors when a text is used for instructional purposes with help from the teacher. Children should not be given a text in which they cannot read at least 90 percent of the words; such books may be too difficult for them and may lead to frustration and lower motivation. An exception to these guidelines may be made if a child is highly motivated to read about a particular area due to a high level of interest and/or extensive background knowledge on the topic. In cases such as these, providing students with challenging texts may work very well. In general, however, providing children with the right level of text for independent reading and instruction is one of the keys to successful early reading.

Teachers of early literacy often keep a large collection of texts other than beginning-level books in their classroom libraries. These books may be on a wide variety of topics and represent a wide variety of reading levels. Teachers include books that they can read aloud to students to build their vocabulary and background knowledge. Children frequently want to look at these books themselves after their teachers have read them to the class. Teachers also provide books on thematic topics, favorite authors, and poetry. Picture books, word books, and alphabet books are also essential additions to young children's classrooms.

Motivation

Children's motivation to read is another condition that affects early reading success. Four variables have repeatedly been shown to be positively associated

with children's motivation to read: choice, challenge, social collaboration, and success (Morrow, 2001). Children are most motivated to read when they have choices about what they will read, when they will read, and how they will respond to reading material. While teachers cannot always give children choices in these areas, they can sometimes give children choices. The use of a literacy center, an area of the classroom with many activities for independent reading and writing, is highly conducive to promoting student choice. When children work in a literacy center, they can usually decide which books they will read and in which order. They can also often choose between literacy activities, such as retelling a story with props, flannel board pieces, or puppets, drawing a favorite part of a story, or playing with literacy-oriented games. Giving children literacy choices helps them identify their reading interests and empowers them as learners.

Challenge is also positively related to reading success. Challenge refers to the difficulty level of any given task. A child's motivation is increased when reading tasks are at the correct level of difficulty. If tasks are too easy, children will be bored. Similarly, if tasks are too difficult, students will be frustrated, which also lowers their reading motivation. Since students in any given classroom are at many different levels of reading development, teachers work hard to differentiate activities for learners. With careful planning, the use of a literacy center is highly compatible with differentiating reading tasks for students of different reading abilities.

Social collaboration also contributes to students' motivation to read. Social collaboration refers to activities in which students work together. Most children intrinsically enjoy being together, and research has shown that giving them opportunities to be together will lead to improved learning outcomes (Morrow, 2002). Again, the literacy center is ideal for providing opportunities for social collaboration. Students can read in pairs, retell stories together, and play games that lead to literacy growth.

Success is the fourth condition associated with reading motivation. Success refers to the positive sense of accomplishment that children have at the completion of a task. When children believe that they have completed a task well, they have a feeling of success. Exemplary teachers work hard to design learning experiences in which all children experience success.

Writing

Children's writing ability is closely related to their reading ability. Children use writing to express their ideas and to explore the relationships between sounds and letters. Writing can be incorporated into exemplary early literacy programs in at least three ways—traditional, teacher-directed activities; activities in a writing center; and the use of writing materials placed at other centers in the classroom.

Teacher-directed writing activities can take place in whole-class and small-group settings. Teachers often model writing and engage the class in shared writing activities during the whole-class morning meeting. A teacher can say and write a message while children watch, or transcribe sentences that children orally generate. Teachers also provide whole-class writing instruction to students to help them learn to print the alphabet, write sentences and paragraphs, and use punctuation. Writing instruction can also take place in small groups. Small-group writing instruction is ideal for meeting the differentiated needs of students in a classroom.

The establishment of a writing center is an enjoyable and important way to build young children's writing skills. Writing centers are places in the classroom that are equipped with an assortment of writing implements, such as pencils, colored pencils, markers, crayons, and pens, and different sizes and colors of paper or paper that is cut in special ways including shapes, animals, fruits, and flowers. Block, sponge, and stamp letters that can be used for printing enhance a writing center, as do a computer and a typewriter. Pictures can be used to promote writing ideas, and an index box of high-frequency words helps children learn to spell correctly when writing. A mailbox for each child in the class encourages children to write to each other. Designing activities that facilitate social collaboration at the writing center stimulates children's desire to engage in writing.

Adding writing materials to centers other than the writing center also builds children's writing skills. At the early childhood level, it is especially important to add writing materials to the dramatic play and block areas since young children learn through play. A dramatic play area can include a restaurant with menus and pads and pencils for taking customers' orders. Grocery items, coupons, materials to write a shopping list, play money, and a cash register will lead to playing store. Another idea is to include stuffed animals, a stethoscope, and a prescription pad for a pretend veterinarian's office. Children using writing centers may use pencils, crayons, and index cards to create street and traffic signs. In all of these cases, valuable learning about writing takes place as children interact in play.

Technology

Young children also "play" with technology. Like dramatic play with literacy props, play with technology can also lead to significant literacy learning (Tracey & Young, in press). Opportunities to use technology with young children are found at Internet sites, through software programs, and through the inclusion of electronic books in the classroom. Well-equipped early childhood classrooms have one or more Internet-connected computers for children's use, usually found at the classroom computer center. Peripherals such as a printer, scanner, digital camera, and headsets enhance a teacher's ability to optimally

integrate the use of technology in the classroom. Software for very young children (ages two and up) is available to teach children to use a computer mouse, and thereafter enable them to embark on a multimedia journey guaranteed to thrill learners of every age and ability level.

Technology offers teachers another tool through which they can differentiate their literacy instruction. Many software programs are specifically designed to identify students' correct level of educational need, offering increasingly difficult activities for students who succeed at tasks, while providing additional practice for students who are not achieving mastery of a skill. Technology also offers students many learning scaffolds. For example, when reading electronic books, students can click on a word that they don't know and have the computer pronounce the word for them or provide a definition. In fact, if children choose, many electronic books can be read completely aloud to them as the text is highlighted on the computer screen. In one study, kindergartners' independent reading of electronic books was found to be as effective as having parents read traditional storybooks to them (de Jong & Bus, 2004). The use of electronic books in early childhood classrooms may prove to be an extremely valuable tool for literacy development, especially for those whose parents are not able to read to them in English.

Understanding and Promoting Home-School Connections

In addition to the many components of effective literacy programs described above, exemplary programs include strong parent involvement. Parent involvement improves children's academic performance at all school ages, particularly in the area of literacy (Rasinski & Stevenson, 2005). Traditional parent involvement programs provide information to parents about how to interact with their children in ways that have been proven to be educationally effective. These programs are known as transmission programs, because the school transmits information to parents. In contrast, two-way communication programs are more egalitarian in design and seek to create equal partnerships between parents and teachers. These programs seek to elicit information from parents about their children and use that information to help the teacher individualize instruction for his or her students.

A variety of programs have been created to strengthen home-school connections in the language arts. For example, in the "Parents as Partners Program," parents are taught how to improve the quality of at-home storybook reading through a videotape program. In "Three for the Road," teachers send home backpacks with a variety of literacy items related to storybooks, and parents use the books and props to retell stories and extend comprehension. In the "Parents Writing to Children" program, parents came to school and, over a period of 10 weeks, created diaries, memory books, and photo journals with their children. In "Capturing Family Stories," students collected oral retellings,

audio- and videotaped recordings, and written family stories from parents in response to prompts such as, “Tell your child about the neighborhood where you lived when you were a child,” or “Tell your child about a favorite relative you had when you were young.”

Other ideas include encouraging parents to sign up as classroom helpers and/or guest readers. Parents can also be encouraged to come to school to share special skills with children, skills such as knitting, crocheting, or cooking. Young children also like to learn about parents’ jobs, especially when parents can bring along some tools of the trade such as plumbing, dental, or gardening equipment. Another event that is very motivating for children and parents is a “pajama party,” in which parents, teachers, and children come to school in the evening to share books and popcorn on sleeping bags and blankets. All of these ideas stimulate meaningful parent-child conversations that ultimately contribute to children’s literacy development.

IMPLEMENTING EXEMPLARY EARLY LITERACY PROGRAMS

To illustrate the ways in which the literacy components described above are integrated into an exemplary early literacy program, a case study of a kindergarten teacher is highlighted below.

Background Information

Kim Miller is a fifth-year, 1st-grade teacher who recently finished her master’s degree in education with a specialization in reading. She works in a northeastern, inner-city, low-income school district in which approximately 65 percent of the children qualify for free and reduced-cost lunches. This case study aims to capture Ms. Miller’s classroom in March, after her students have had time to master the classroom routines. At this point in the year she has 20 students in her classroom—14 African American students, four Hispanic students, and two European American students. She has a part-time aide to assist her three mornings a week, and two parent volunteers, each of whom comes to class approximately once a week.

Planning/Standards

Ms. Miller is a strong believer in the importance of planning in effective instruction. Accordingly, she completes educational plans at four levels: yearly, monthly/thematically, weekly, and daily. Her yearly plans are based on the standards established by the state in which she works. She uses these standards to make sure her instructional plans cover all of the essential skills that kindergartners need to learn. Ms. Miller also plans at the monthly level. Each month she uses a different theme, to integrate the skills that children need to master

with meaningful and interesting content. Ms. Miller's monthly thematic units are the following: *people in our community, transportation, zoo animals, our bodies, under the ocean, dinosaurs, all about families, cultures of the world, gardening for everyone, and summer fun*. Ms. Miller uses read-aloud books and center activities based on each thematic topic to make learning fun and interesting throughout the year. Focusing on thematic content also helps her students increase their general knowledge of the world and their vocabularies. Ms. Miller stores the materials, books, and lesson plans for each unit in large, separate, see-through plastic boxes, and adds to each unit every year.

Once Ms. Miller knows the skills and thematic topics that she will be teaching during the year, she creates weekly lesson plans for her supervisor. These plans ensure that she is optimally using her instructional time in each academic subject area as well as her "specials"—art, music, physical education, library, and the computer lab. Finally, Ms. Miller creates daily lesson plans based on the needs of the whole child. For example, knowing that young children learn best when active and social, she structures many learning experiences accordingly. She also limits the length of time that her students need to sit still and listen. Ms. Miller's daily lesson plans provide time for whole-group, small-group, and individual activities, and she carefully sequences active and quiet times throughout the day. Ms. Miller typically prepares her yearly and monthly/thematic plans prior to the start of the school year. She completes her weekly plans prior to the start of each week and her daily plans each night before school.

Physical Environment

Ms. Miller is also a strong proponent of the importance of the physical environment in learning. Since this case study was done in March, the class was studying the *all about families* theme. In addition to the standard classroom items described earlier in this chapter, Ms. Miller added thematically related items to all of her centers. The literacy center had a basket of books about families, two posters about families, and two boxes of story retelling props, one for the book *All about Frances* and the other for the book *Frog and Toad*. In the writing center, children were working on making posters about themselves and their families. Ms. Miller was using her classroom aide and parent volunteers to assist the students with this project. Several completed posters were hung as examples. Ms. Miller had added a dollhouse with family member dolls and a playhouse with props to the dramatic play area. The science center had a family of gerbils that the children cared for and studied. The social studies center had picture books showing families from around the world, and also magazines using which the children had to cut out and paste pictures of people they believed were family members. The math center had

several sets of teacher-made index cards. There was a pairing game in which picture cards showing different families had to be matched, and a sequencing activity in which picture cards showing different family members had to be sorted by height. Each sets of index cards was a different color to help the children keep them organized.

Assessment

Ms. Miller believes that exemplary literacy instruction is assessment driven. She is aware that all children come to school possessing a wide range of skill levels, and feels that it is her job to assess students' skill level, facilitate their learning, and track their progress. She also believes that the best way to evaluate children's abilities is through the use of multiple assessment tools and methods. Ms. Miller uses quarterly tests to assess items such as phonemic awareness, letter identification, and knowledge of letter-sound correspondences. She also completes a running record on each child, each month, to track word identification, vocabulary, and comprehension skills. During daily instruction, she takes informal, anecdotal notes on small, blank stickers that are dated and then added to students' files.

To keep track of assessments, Ms. Miller keeps an expandable file folder/portfolio for each of her students. The folders have 10 compartments each—one for each month of the year. Ms. Miller files formal tests, running records, anecdotal notes, sample work assignments, and report cards, and uses these folders for parent-teacher conferences and to complete report cards. At the end of the school year, she passes the portfolios to the 1st-grade teachers, who use them to learn about their incoming students.

The Language Arts Block

Each day, as required by her school district, Ms. Miller devotes a 90-minute block of time to language arts. The 90-minute block is divided into three segments: a 20-minute, whole-class mini-lesson, a one-hour center/small-group reading time, and a final 10-minute, whole-class closing time.

The 20-minute, whole-class mini-lesson is designed to reinforce the sense of the entire class comprising a single learning community. In the mini-lesson, Ms. Miller presents a lesson from the kindergarten basal series. The lesson may be related to oral language/vocabulary, phonemic awareness, word identification, comprehension, fluency, and so forth. The lesson is usually designed to present a new concept and reinforce already learned concepts. It typically involves teacher-directed instruction, modeling, and shared reading experiences. Ms. Miller usually follows the teachers' guide when presenting these lessons, and she observes how students respond to the material. She encourages students' participation and questions during the lesson.

At the conclusion of the mini-lesson, Ms. Miller transitions the students to center time by reviewing the activities that the children need to complete at each of the centers. By this time of the school year, Ms. Miller's students are very familiar with her center management system. They know that Ms. Miller's popsicle-stick chart shows the three centers that they must visit that day (not all children will go to the same centers each day), and that they must put their completed work in the center basket when they are done. They know that they are to "read" a book at their desk if they finish their center work before the bell rings. They also know that going to centers is a privilege, and that if they are poorly behaved at a center they will need to return to their seat for the rest of center time that day. Whenever possible, Ms. Miller uses a classroom aide or parent volunteer to help supervise center time. Although the students love this hour of the day, they are still very young and do not always have the independence and self-regulation necessary to stay on task. Ms. Miller helps them develop these strengths by sending the students with the least amount of self-regulation to activities using as blocks, Lego items, computers, and the dramatic play areas. Because these activities are so intrinsically engaging, even the least mature students are often able to succeed in staying on task. As these children's self-regulation matures, Ms. Miller gradually moves them to more academically challenging tasks.

As students begin their center work, Ms. Miller calls a small group of students for a reading lesson. The students have been grouped based on their developing skills. Grouping students for a portion of the literacy block enables Ms. Miller to provide instruction and reading materials that are ideally suited for the children's needs. The small-group setting also facilitates greater student engagement and helps Ms. Miller more easily keep track of students' progress. The small-group lesson takes approximately 20 minutes. During this time, Ms. Miller introduces or reviews a skill that is developmentally appropriate for the students and helps the students use the skill during the reading of connected text. Usually an extension activity from the small group is assigned for homework, such as rereading a story at home. After 20 minutes of instruction, a second small reading group is called. On most days, Ms. Miller calls two to three reading groups and completes a running record on one child at the end of each group. It is important to note that Ms. Miller does not start to use small reading groups until October of each academic year. She gives the students the full month of September to learn the center management system in her presence before she expects them to be able to independently use the centers. Ms. Miller also uses the extra time in September to collect information that will better help her form her reading groups. Although students can and should be moved from group to group throughout the school year depending on their rate of progress, it is always important to initially group the students as accurately as possible.

At the conclusion of center time, Ms. Miller reconvenes the class in a whole group. She asks the students to report on their activities—both successes and challenges. Ms. Miller uses the closure time to reinforce lessons learned that day—academic, social, and emotional. She strives to have students leave the language arts block with a sense of accomplishment and success as well as with ideas for how the time can be used even more productively the next day.

Daily Schedule

Below is Ms. Miller's daily plan for a school day in March:

- 8:45–9:00. Starting the day. Children arrive at school and put their belongings in their cubbies. They move their name cards into the “here” slot on the attendance board and begin to draw and write in their personal journals. Children who have jobs that week, such as watering the plans and feeding the gerbils, complete their jobs.
- 9:00–9:20. Language Arts Block: Mini-Lesson. Ms. Miller calls the students to the rug for a morning meeting and a brief language arts lesson. The students review the calendar and a message the teacher has written to the students on a large pad. This message is called the “morning message.” Today's lesson focuses on compound words (multisyllable words made up of smaller words, such as “doghouse” and “backyard”).
- 9:20–10:20. Language Arts Block: Center-Time/Small-Group Reading Lessons. Ms. Miller reviews the tasks to be completed at each center and draws students' attention to the chart illustrating the centers that children are to visit that day. She reminds the students to place their completed center work in the basket at each center and that if they finish their work early they are to take a book to their desk. She rings a bell, indicating that the students are to go to their first center, and calls her first guided reading group. After 20 minutes, she rings the bell again, indicating that students are to proceed to their next center, and calls a second reading group. After 20 more minutes, this routine is repeated once more.
- 10:20–10:30. Language Arts Block: Closing. Ms. Miller discusses the language arts block with the students, with the goal of helping the students become more aware of the ways in which they worked independently in the classroom. She chooses several students who did exceptionally well that morning and praises their accomplishments in front of the whole class. She asks for recommendations as to ways the language arts block could be improved for the next day.
- 10:30–10:45. Morning Snack. Children eat their morning snack while listening to quiet music. Ms. Miller praises those children who have brought nutrition-rich snacks to school.
- 10:45–11:30. Math. A 15-minute teacher-directed math lesson is followed by a 25-minute activity-based math experience. The last five minutes of the period are used to review the presented concept.
- 11:30–12:00. Lunch.
- 12:00–12:30. Recess.
- 12:30–12:45. Read Aloud. Ms. Miller reads a story connected to the *all about families* theme.
- 12:45–1:30. Special (Art, Music, Library, etc.).

- 1:30–2:15. Science or Social Studies. A 15-minute teacher-directed science lesson is followed by a 25-minute activity-based science experience. The last five minutes of the period are used to review the presented concept.
- 2:15–2:30. Closing the day. Students gather their items and prepare for home. Ms. Miller reminds the students of their homework and highlights the next day's activities.

CONCLUSION

Early literacy development encompasses children's listening, speaking, reading, and writing skills. Research has shown that these abilities develop concurrently and in an integrated manner. When one area is strengthened, it usually has a positive effect on other areas. When one area is impaired, problems in the other literacy skills are likely.

This chapter has presented a wide perspective of the areas that need to be addressed to foster children's early literacy development. These include the concepts of emergent and balanced literacy, addressing the needs of the whole child, creating literacy rich environments, oral language, vocabulary, phonemic awareness, word identification, comprehension, fluency, text, writing, motivation, technology, and parent involvement. Ideas for implementing an exemplary literacy program in the classroom have been presented. This chapter has included a broad range of information on fostering early literacy; further reading (including the sources in the references) will provide a deeper understanding of associated topics and issues.

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Chapter Eight

READING ALOUD WITH YOUNG CHILDREN

Lee Galda and Lauren Aimonette Liang

Reading aloud from well-written books is one of the best gifts that an adult can give to a child. This common wisdom has been part of the thinking of parents, teachers, and policy makers for many years. The publication of *Becoming a Nation of Readers* (Anderson, Hiebert, Scott, & Wilkinson, 1985), more than 30 years ago, supported this thinking with the claim that “the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children” (p. 23), and that “there is no substitute for a teacher who reads children good stories. It whets the appetite of children for reading and provides a model of skillful oral reading. It is a practice that should continue throughout the grades” (p. 51). Since then, we have learned a great deal about how reading aloud might affect children’s literacy development.

Reading aloud often, although certainly not always, begins at home. It also occurs in preschool and early elementary grade classrooms. Although these contexts differ, they all demonstrate the role of reading aloud in children’s development of literacy. For example, there are many reports of positive connections between being read to and development as readers and writers (e.g. Baghban, 1984). In the mid-1960s, Durkin (1966) found that children who learned to read before school entrance were read to and had someone to answer their questions. Twenty years later, Wells (1986) followed over a hundred children from just after their first birthday until school entrance, finding a clear connection between the early experience of listening to stories and later achievement, and emphasizing the importance of the conversations that

surrounded reading aloud. Heath (1982) looked closely at how parents read to children in different ethnic and socioeconomic groups and how different reading/discussion styles matched the demands of school. Varied cultural practices influence children's literary experiences at home and have different effects on their success at school. What happens at school also has a major impact on the development of literacy. Cochran-Smith (1984) described in detail how teachers' actions construct the ways in which children listen and respond to books read aloud.

At the same time, other studies were beginning to indicate that the type of text that was being read aloud was also important (e.g., Pellegrini, Brody, & Sigel, 1985). From these and other early studies, it was clear that any exploration of reading aloud to children must also include consideration of the text, the way in which it is read, the talk that surrounds the read aloud, and the context in which it occurs.

Literacy researchers now have a more detailed knowledge of how reading aloud to children influences their knowledge of and attitudes toward reading. We have begun to understand the effects of different *ways* of reading aloud, and of the *contexts* in which reading occurs. We know that the *kinds of books* that are read are important. We also realize the importance of *the talk* that surrounds reading aloud in the development of literacy and literate behavior. Although reading aloud is only one of many experiences that are important for literate development, most scholars consider it an important part of a child's early experience (see van Kleeck, Stahl, & Bauer, 2003). Perhaps most important, most scholars now acknowledge the complexity of what might seem a simple act—reading to a child.

For better or for worse, today's schools require that students quickly develop the ability to read and understand text. While our ideas about text are expanding to include the many new types of text that technological advances have provided for us, such as Web sites, computer games, film, and e-mail, school is still about books. Reading aloud allows children access to the world of books. For children not yet reading fluently on their own, reading aloud enables them to share the riches that books have to offer, to have a broad range of experiences, and to develop resources upon which to draw as they continue to learn about their worlds. As children develop cognitively, they link new information with what they already know. If they have listened to a number of books, they have in their repertoire many more experiences from which to draw than they would have without books. For example, children who have never left the city they live in can understand what it is like to live in the country by listening to books, and their rural counterparts can understand city life by the same means. By listening to books, children can explore the world they live in through the many excellent nonfiction and fiction titles available to them. As they listen, they come to understand how the world works. They can visit the zoo, ride on

a train, watch a skyscraper being built, sleep by a campfire, make a new friend. A piece of nonfiction might explain a natural phenomenon, explore a familiar social routine, or describe a place such as a farm or a post office. A story might explore feelings or introduce new experiences. A poem presents new ways of thinking about the world. Experience with different kinds of books opens new horizons for children.

Reading aloud to children also helps children learn what to do with books, both physically and cognitively. Immersion in the world of books helps children develop basic understandings about books and reading in much the same way that they learn about language—through interactions with other readers. Children learn about books by seeing what others do with books, by being read to and talking about what they are doing. Children who are read to learn how to be physically comfortable with books—how to hold them, how to turn the pages. They will often “read” to toys, pets, and other children long before they can actually decode the words on the page, demonstrating their skill and pleasure. Children who are read to also learn to view reading as a positive experience. Reading aloud is a special time between caregiver and child, or between teacher and children, a time when they share the experience of a book. As they listen to and discuss books with other readers, children learn the ways in which we think and talk about books (van Kleeck, Alexander, Virgil, & Templeton, 1996). In these discussions, children learn to think beyond the book, to make inferences and judgments about what they read, to think about books in terms of what they know and what they are learning. They try out their own ideas and listen to the ideas of others, expanding their understandings of the book they have heard, just as they are expanding their understandings of the world. They also learn about how written language works.

When young children are read to at home or at school, they develop important knowledge about how print works. They learn, for instance, that books are read (in English) from front to back, top to bottom, left to right—the principle of directionality that is important in early reading development (Clay, 1979). They learn to distinguish words on a page by following along in books as others read to them, and asking questions about how print functions. A three-year-old who asks, “What that white space for, Mommy?” is becoming aware of the concept of word and the function of white spaces, something essential to learning how to read. The children who ask about white spaces will soon be asking the oral reader to point out specific words—Where it say elephant?—as they solidify their understanding that print carries meaning. Some research suggests that being able to point to individual words as they are being read, something that many adult readers encourage children to do, enhances children’s ability to recognize words, an important skill for learning to read. Children also begin to notice punctuation marks, indentations, all of the conventions of print, as they follow along with the oral reader. These

understandings about the conventions of print are a foundation for learning to read.

Children who are read to develop a sense of the kind of language and literary structures found in stories, poems, and nonfiction. The two-year-old who hands her mother a storybook while saying, "Read me," yet says, "Sing me," when she chooses a poetry book has a clear understanding of the differences in the language of story and poem. Children who are read to before they can read themselves develop ideas about how literature works, ideas that they can draw on as they learn to read and encounter new texts. Hearing storybooks read aloud, for example, helps children develop their understanding of narrative language and story structure, as well as the differences between oral and written language (Smith, 1978). Children who are read to also develop an understanding of abstract or decontextualized language, the kind of language that is necessary for success in school (Dickinson, DeTemple, Hirschler, & Smith, 1992; Olson, 1977; Snow & Ninio, 1986). Books are created from language that refers to things and ideas that exist in our minds, rather than referring to actual things that we can see, taste, touch, hear, or smell. This language experience is quite different from the contextualized oral language that surrounds children. Thus the language of books introduces children to the use of abstract language.

More experience with varied books also develops a better sense of how texts can be organized, and this, in turn, makes it easier to predict and understand new texts. Listening to stories helps children understand that plots are usually sequential, occurring over time. Listening to poetry helps children understand that poems, unless narrative, are different from stories, play with sound by using rhythm, rhyme, alliteration, and onomatopoeia, and are brief capsules of new and interesting feelings. Listening to nonfiction helps children learn that informational texts usually provide details that lead up to a larger idea. When these books are picture books, they also help children learn that information can come from both words and pictures, and that the two are related. All of this often tacit knowledge helps children understand new texts as they encounter them, either by listening or by reading themselves.

Children who are read to also develop their vocabulary and their knowledge of the possibilities of language structure, or syntax, even as they are developing their concept of the word (Morrow & Gambrell, 2000). Written language, especially the carefully crafted language found in the best books for children, is infinitely more varied than oral language, and offers a variety of language models for children to try on as their own. The child who marches around home or classroom declaring, "I trust that is not a rat!" is using Beatrix Potter's (1906) words in his own way. While vocabulary is certainly developed through other experiences, children who are read to a lot have larger vocabularies than do those who have less extensive experiences with books. Repeated storybook

readings increase vocabulary for young children (Morrow & Brittain, 2003), especially when reading is accompanied by talking about the words found in books. Talk about books that includes talk about words and activities that require the use of new words result in increases in vocabulary development in preschool children (Senechal, LeFevre, Thomas, & Daley, 1998). Encountering new and interesting words in books, learning to notice and savor them, and having opportunities to use them in meaningful ways, gives children the resources and the tools to become facile language users.

One of the greatest powers of reading aloud may be its ability to motivate children to engage in the world of print. We know that young children who were read aloud to at home often come to school with a strong desire to learn to read. Children who are read to learn at an early age that books can provide information and pleasure. These children seek out exciting stories, interesting information, and compelling poems. Reading aloud can help motivate children to engage in the important task of learning to read, and to participate in literary discussions and activities that promote higher-order thinking and deeper comprehension of text. In the many studies examining the relationships between reading aloud and literacy development, successful early reading (reading before starting school) occurs most often in children who are read aloud to (Clark, 1984).

Beyond the home environment, reading aloud in school leads to greater motivation to read and subsequent, successful literacy development. Listening to books read aloud led to increased levels of motivation for and interest in reading in at-risk students, more appropriate book selections, greater engagement during reading, and higher reading competency in fluency and comprehension (Wood & Salvetti, 2001). Several similar research studies in the 1990s found that students in classrooms where daily read alouds took place scored better on various measures of decoding ability, vocabulary, and comprehension than students in classrooms without read alouds (e.g., Bus, van Ijzendoorn, & Pellegrini, 1995; Senechal, Thomas, & Monker, 1995). While being read aloud to is not the only experience that contributes to children's literacy development, for most children it does make a difference (Teale, 2003).

It has become increasingly clear, however, that it is not simply the reading of books to children that is important for literacy development, but rather the combination of reading aloud and talking about books with children. Reading aloud to children, either individuals or groups, is a social experience. When a text is read aloud, it can then be commented on, before, during, or after the reading, as reader and listener(s) share the experience of the book. This provides opportunities for talking about books that often lead to increased linguistic development, comprehension of the text, higher-order thinking about the content, and an ability in children to think about themselves and others as readers. The positive experience of sharing in a book with

someone becomes a motivating factor for children to explore other books together.

There has been considerable research on the sorts of interactions and discussions children and adults have when engaging in a read aloud, as shared discussion around a text is often a natural part of reading aloud. Discussions and related activities, such as role playing, retelling, and predicting, before, during, and after story reading has been found to enable children to better integrate the information in the story. Sharing personal reactions, relating concepts to other texts and experiences, and extending information are all important parts of discussion around story read alouds. Talk that goes beyond the information given in a book, in which reader and listener make predictions, analyze information, talk about meanings of words, and make connections between the book and the listener's experiences with the world and with other books, has a positive influence on their literacy development (DeTemple & Snow, 2003). Conversations that are marked by a high level of interaction between parent or teacher and children and that promote analytic talk (about words, ideas, connections, for example) result in increased positive outcomes for children's literacy skills (Reese, Cox, Harte, & McAnally, 2003).

The interactive nature of the read aloud and discussion helps to engage students in the text and often motivates them to more actively construct meaning (Klesius & Griffith, 1996). The connections to life and other books that children made in the classroom that Cochran-Smith (1984) focused on, and that children who are frequently read to make spontaneously, are evidence of this active construction. For example, a five-year-old who was adjusting to life in a new city drew upon her literary experience when she saw an old, vine-covered building and asked, "Mommy, are we in Paris?" She had, of course, been listening to Bemelmans' (1962) *Madeline*.

The conversation that surrounds reading aloud, then, is a crucial element in the effectiveness of reading aloud, both at home and at school. These conversations, or good discussions, certainly vary widely, developing in complexity as children develop in their cognitive ability. Generally they are marked by adult support, or scaffolding, as parents and teachers provide the structures that enable children to successfully connect with the book and participate in the discussion. Over the years, research has documented the many different ways that parents and teachers do this, varying according to the particular book and the individual child (van Kleeck, Stahl, & Bauer, 2003). In classrooms in which book talk is an essential part of the literacy program, this talk is marked by an engaged exploration of the world of the book, an intense interest in and concentration on the issues and ideas that the book raises, and multiple connections between the world of the book and the worlds of the child (Roser & Martinez, 1995).

Good conversations about books in school are marked by extensive preparation for discussions on the part of the teacher. Knowing the focal book well

and preparing questions or activities that will encourage children to spend time thinking about the book set the foundation for fruitful talk. Engaging in true conversations, as opposed to asking questions to test children's knowledge, is also essential. Conversations are opportunities to discover what others think, and thus require thoughtful responses. Intense listening as children are talking is essential, as this enables teachers to build on ideas, support developing thoughts, and clear up misconceptions. Teacher modeling of ways of thinking and talking about books offers children effective strategies. Many successful teachers, for example, help children make connections between what is in the book and their own lives, helping them learn that the ideas in books have relevance in the real world and can be understood in relation to what children know and do (Galda, Rayburn, & Stanzi, 2000). They encourage children to build on their own and others' speculation and comments, to combine their insights and ideas, and to return to the book to assess the ideas that they develop.

Even very young children demonstrate a rather sophisticated understanding of the opportunities that hearing a book read aloud can provide. In a series of studies of young children's comments about picture books during read-aloud sessions in school, Sipe (in press) documented how kindergarten and 1st-grade children responded analytically, that is, made narrative meaning, analyzed the book as a cultural artifact, analyzed the language of the text and the illustrations, and analyzed the relationship between fiction and reality. They also linked books to other books, compared the book to their own lives, and entered into the world of the book. The responses of these children also indicated their growing understanding of how texts work, and their engagement during read alouds.

While many students respond positively when discussing a shared read aloud, sometimes young listeners will offer negative comments about the story, complaining about certain elements (Sipe & McGuire, 2006). It is important that parents and educators remember that these seemingly negative comments are evidence that the child is engaged with the story and attempting to make meaning of it. These early critiques are not a negative reaction to reading but rather the early development of critical literacy, and evidence that the child is likely beginning to engage in higher-order thinking about the text; they are signs of a motivated listener.

Active participation by children before, during, and after a read aloud is key. When adults engage children in talk and activities about the words and structures of books, children learn vocabulary, grammar, and a sense of the possibilities of language. When engaged in a consideration of illustrations and text, children learn how picture books work and develop their visual literacy skills. And when drawing upon prior knowledge and experience or linking and applying new ideas to prior knowledge and experience, children are learning

very basic, crucial comprehension strategies. These kinds of active participation are, of course, predicated on a safe and supportive atmosphere that is established by the adult reader. New ideas and understandings flourish best in contexts in which children feel comfortable. They also flourish best when the books that are being read are outstanding examples of the many wonderful books that are published for young children each year.

Just as how adults talk with children about the books they read together makes a difference in what occurs during a read aloud, so does the book itself. We know that different genres, or types, of books provide different opportunities for children at various points in their development. Generally, nonfiction books offer children specialized vocabulary and concepts, and often generate more child participation in discussion of these books with parents or caregivers. On the other hand, storybooks offer children the opportunity to learn about story structure and to make inferences about characters' motivation, for example. The familiarity of the book being read also seems to change the dynamic of the interaction between parent and child, with children taking on a more active role the more familiar the book is, even as discussion tapers off with familiarity. Finally, the complexity of a book's language also influences the interaction that surrounds book reading, as it relates to a child's cognitive development (van Kleeck, 2003).

It is important that we choose books that will engage children, provide wonderful language models, and expand their literary understanding. Reading from outstanding examples of all types of literature—realistic fiction, historical fiction, fantasy, science fiction, folklore, poetry, biography, and nonfiction—helps shape children's literary taste. Most of the books that young children experience during read alouds are picture books, that special genre that combines verbal and visual art. Picture books may be realistic or fantasy, contemporary or historical, fiction, nonfiction, or poetry, but all are marked by a combination of words (if present) and illustrations that, together, create a template for meaning making. Just as it is important for the language to be rich, it is also important that the illustrations be examples of excellent art that effectively serve the development of meaning. Further, for some children, the illustrations they see in picture books are the primary source of their exposure to art. Fortunately, there are thousands of outstanding picture books available.

Careful selection considers children's interests and experiences, both to connect with and expand upon them. Language that will tickle the ear and delight the tongue is also important. Children won't expand their own language if they encounter only words they already know. Ideas—often called themes or concepts—need to be interesting to children but also to provide new ways of thinking about the world. Complexity of ideas, language, and illustration will vary, depending on the audience. For example, reading Emily Arnold McCul-

ly's (1984) wordless picture book, *Picnic*, with a three-year-old generates a different experience than reading Barbara Lehman's (2004) *The Red Book* with a seven-year-old. *Snow* is about familiar routines and family relationships. *The Red Book* invites readers into the world of the imagination, asking them to participate in the character's fantastic journey into the world of a book, to entertain possibilities for their own lives. Both are wonderful wordless books, offering rich opportunities for discussion and meaning making.

There are so many good books to choose among that it is virtually impossible to recommend specific titles for generic children. A simple checklist of considerations of quality, looking at prize-winning book lists such as the American Library Association's Caldecott Award, and the use of "touchstone" picture books for comparison with other books help parents and teachers make wise selections. First, all picture books should have rich language, with interesting words used in interesting ways, artistically excellent illustrations, and an appealing design. With picture storybooks, the text and illustrations together should establish the mood, setting, characters, and theme of the story just as they also reveal the plot. Nonfiction picture books need to have accurate text and illustrations, both of which impart information, and to be organized in a way that helps children grasp the concept being explored. Picture books that contain poetry should have lyrical language and illustrations that match the feeling established by the text. Beyond this, the "artfulness" of the book as a whole should be apparent. Asking the question, "What makes this book special?" and being able to answer it in terms of language and art probably indicate a book of good enough quality to read aloud to children.

Picture storybooks such as Virginia Hamilton's (2003) *Bruh Rabbit and the Tar Baby Girl*, stunningly illustrated by James Ransome, exemplify the qualities that make a book special. First, the story is both engaging and entertaining, and captivates young listeners with its humor, language, and beautiful art. Hamilton's use of the Gullah dialect is sparing, adding just enough flavor to the telling of the tale that children understand words they have probably not heard before, words such as nary, dayclean, and scarey-crow. The language is cadenced, inviting children to chime in. Ransome's watercolor pen-and-ink illustrations add detail to the story, inviting readers to look closely, and extend the humor of the tale. Before the story even begins, we learn about the happy-go-lucky nature of Bruh Rabbit. Other picture storybooks that could be considered touchstones include Jacqueline Woodson's (2004) *Coming on Home Soon*, illustrated by E. B. Lewis; Peter Sis's (2002) *Madlenka's Dog*; Peggy Rathman's (1995) *Officer Buckle and Gloria*; Amy Schwartz's (2003) *What James Likes Best*; Kevin Henkes's (2004) *Kitten's First Full Moon*; and many others.

Lisa Westberg Peters's (2003) *Our Family Tree: An Evolution Story*, is the perfect marriage of informative text and beautiful illustrations that match and

extend the information presented in the words. Lauren Stringer, the illustrator, spent more than a year doing the research that would allow her to accurately depict the processes that Peters explained in her lucid prose. The result is a book about a complex process that is presented simply, yet accurately, for a young audience. Other books that could be considered touchstones of nonfiction include Steve Jenkins's (2004) *Actual Size*; Rachel Isadora's (2000) *ABC Pop!*; Sandra Markle's (2000) *Outside and Inside Dinosaurs*; and Maria Kalman's (2002) *Fireboat: The Heroic Adventures of the John J. Harvey*.

Poetry picture books offer a special experience for children when they are the brilliant combination of words and art that typify books such as Kristine O'Connell George's (2001) *Toasting Marshmallows*, illustrated by Kate Kiesler, and *Fold Me a Poem* (2005), illustrated by Lauren Stringer. In both of these books the language fairly leaps off of the page while the illustrations add depth and texture. Other poets such as Douglas Florian and Jane Yolen offer children important experiences with the language tools of the poet and the artistic tools of the illustrators.

Reading well-written books to children offers them the opportunity to learn many things. Good books read aloud introduce children to new, interesting words and sentence patterns, and allow them access to different styles of written language. Reading aloud helps children understand that print carries meaning, develops a sense of story, poetry, and exposition, enriches children's general knowledge, and motivates children to read more for pleasure and information. Reading aloud from picture books helps children understand the relationship between word and illustration, and, when selected wisely, introduces them to wonderful art. Reading aloud also models the sound of fluent reading. Reading books that offer rich and varied language and illustrations in the presentation of intriguing ideas, creates multiple opportunities for the kinds of conversations that will promote the many positive outcomes that are possible in the context of effective read-alouds.

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Chapter Nine

CHOOSING AND USING INFORMATIONAL TEXT FOR INSTRUCTION IN THE PRIMARY GRADES

Barbara A. Marinak and Linda B. Gambrell

There is now broad agreement among reading educators and researchers about the importance of exposing young children to more informational books. The Committee on the Prevention of Reading Difficulties in Young Children (Snow, Burns, & Griffin, 1998) concluded that young children must have opportunities to read a rich array of both fictional and informational text. In addition, the International Reading Association (IRA) has taken the position that young readers should be exposed to a variety of genres, including picture storybooks, fiction and nonfiction material, magazines, and poetry (International Reading Association, 1999).

For many decades, classroom reading collections contained primarily fiction. Current definitions of literacy, however, focus on individual competence with a wide variety of print materials (Harris & Hodges, 1995). In addition, the demands seen in virtually all state academic literacy standards require competence in reading and comprehending both narrative (story) and informational (expository) text. A one-dimensional, fiction-only collection in a classroom lacks the rigor and depth required for developing high levels of literacy. As Menon and Hiebert (2005) noted, a range of well-designed curricular materials is necessary for teachers to plan highly effective instruction.

DEFINITIONS OF INFORMATIONAL TEXT

Various definitions of informational text are now used in the field of literacy. According to Harris and Hodges (1995), informational text can be

defined as a nonfiction work of facts and concepts about a subject or subjects. This definition would include both textbooks and nonfiction literature. Some researchers have used more complex definitions. Duke and Bennett-Armistead (2003), for example, define informational text as having the primary purpose of conveying information about the natural and social worlds. According to this definition, informational text does not include biographies or how-to books.

Kletzien and Dreher (2004) define informational text more broadly to include three distinct types: narrative-informational, expository-informational, and mixed. Narrative-informational text conveys factual information using a story format. Expository-informational text also conveys factual information (including biographical information) but does not use a story structure. Mixed text is defined as a hybrid of styles and structures. An example often cited of this type of informational text is the *Magic School Bus inside the Human Body* (Cole, 1990). These mixed texts typically convey information, contain some story elements, and use cartoon-like formatting.

In this chapter, we use a broad definition of informational text. We include text that is primarily designed to convey information, including narrative-informational, expository-informational, and mixed text. Such text comes in many forms, including books, magazines, reference books, encyclopedias, newspapers, posters, pamphlets, and electronic sources such as Web sites.

WHY CHOOSE INFORMATIONAL TEXT?

Research suggests that in primary grade classrooms, the reading collections as well as the reading materials used for instruction are skewed toward fiction, and informational text is underrepresented (Duke, 2000). Both the amount of informational text available to young readers and the number of minutes spent reading informational material are far less than needed in a balanced, comprehensive reading program (Yopp & Yopp, 2000). These studies, based on book counts and surveys of teachers, have found that both instructional reading materials and classroom libraries contain mostly fiction. Current instructional demands and recent research reveal a number of compelling reasons to include more informational text in primary reading programs.

High-Quality Informational Text Is Now Readily Available

There was a time when many of the informational texts for young readers were poorly conceived and poorly written. As many classroom teachers are finding, however, there has been a recent explosion of high-quality informational books for young children. The number of informational children's books being published for the early grades has increased by 200 percent over the last 10 years (Cooperative Children's Book Center, 2006).

Some Children Prefer Informational Text

In a recent study by Mohr (2006), nonfiction books were the overwhelming choice of 1st-grade students. One hundred and ninety 1st graders from 10 different schools were invited to visit a book display. The display included a range of genres, ethnicities, and male/female protagonists. The children had unlimited time to browse and select a book that was theirs to keep. Approximately 85 percent of the children chose nonfiction over fiction.

A study conducted by Pappas (1993) revealed that children as young as kindergarten age showed a preference for informational text. Pappas analyzed children's pretend readings of two stories and two informational books to gain insights into their use of strategies in dealing with these two genres. Young children were just as successful in reenacting the informational books as they were the stories, and they preferred the informational text. Pappas challenged the "narrative as primary" notion, stating that an exclusive emphasis on reading "story" in the early grades limits children's experiences with other text forms and may result in creating a barrier to full access to literacy.

Informational Text Can Help Minimize the 4th-Grade Slump

The 4th-grade slump refers to the overall decline in reading scores that occurs as children enter 4th grade, where they are expected to read and learn from informational text and content area textbooks (Chall, Jacobs, & Baldwin, 1990). Greater exposure to and comfort with informational text may help minimize the effects of the 4th-grade slump. Evidence that reading informational text bolsters reading achievement can be found in data from the National Assessment of Educational Progress (NAEP). Trends on the NAEP from 1990 to the present indicate that 4th graders' reading achievement increases as the diversity of their reading experiences increases. In other words, 4th graders who reported reading a wide variety of text (narrative, information, etc.) had higher reading achievement than students who reported reading only one type of text. Exposing young children to informational text positions them to handle the literacy demands of their later schooling (Duke & Bennett-Armistead, 2003).

Informational Text Supports the Development of Strategic Readers

The primary grade years (K–2) were once thought of as the time when children "learned to read," while "reading to learn" took place in the upper elementary grades and beyond (Chall, 1983). Research in emergent and adolescent literacy suggests that learning to read and reading to learn occur at all grade levels. A study by Kamil and Lane (1997) found that primary students were able to read text well above their grade placement. The students learned strate-

gies for dealing with complicated informational text that should have been beyond their capabilities.

Hall, Sabey, and McClellan (2005) found that text structure instruction in the primary grades is effective for promoting informational text comprehension and that young children benefit from well-structured texts. A number of researchers have shown that text structure awareness is crucial for facilitating text comprehension and recall (Richgels, McGee, Lomax, & Sheard, 1987). These studies found that readers who understand the organizational structures of text typically find greater success in identifying important information and relationships between ideas.

In an attempt to better understand why primary classroom reading collections are not more balanced, researchers discovered several important perceptions. Donovan (2001) found that teachers' preferences for fiction grew out of a lack of comfort and familiarity with informational text. When choosing children's literature, teachers tended to assume that informational text was too difficult and too boring for young readers. In addition, classroom teachers were not sure how to support children's comprehension using informational text and, more specifically, lacked methods to productively teach specific structures.

In the following section, we describe the elements that are common to informational text. We know that young children become aware of and comfortable with narrative story structure (characters, setting, problem, events, solution) at an early age. It is just as important that they become aware of and comfortable with the predictable elements that occur across informational text. In the following section, elements of informational text are described and examples of instructional activities are provided.

Informational Text Elements

As young readers interact with printed materials to construct meaning, comprehension is significantly affected by the characteristics of each selection. For example, knowing the text type—fiction, nonfiction, book, magazine, picture book, a novel with short chapters—helps the reader anticipate what the text might contain. Awareness of the actual elements of the text enhances predictability and can foster comprehension (Williams, 2005).

Fictional text contains a story structure that has been taught in classrooms for many decades. Primary and elementary teachers routinely organize their instruction with regard to fictional text around the basic elements of characters, setting, problem, events, and solution. Informational text also contains predictable elements, but with less informational text being used in primary classrooms, instruction using these elements has not occurred as frequently.

There are five text elements that commonly occur across most informational text. These include the author's purpose, major ideas, supporting details, aids, and vocabulary.

These five elements provide an instructional framework for supporting young children in becoming aware of common features of informational text:

1. Author's Purpose: To provide information about the topic.
2. Major Idea(s): The key points the author wants the reader to understand.
3. Supporting Details: The information that supports and clarifies the major ideas.
4. Aids: The variety of pictorial, graphic, typographic, and structural representations used to convey information.
5. Vocabulary: Technical words that are needed for a full understanding of the text.

The practical suggestions provided in the following section use these five common elements of informational text during three instructional contexts that commonly occur across the early literacy curriculum: read alouds, discussion, and writing.

READALOUDS, DISCUSSION, AND WRITING

Theories of child development suggest that it is the social environment that provides learners with the opportunity to observe higher levels of cognitive processing (Vygotsky, 1978). Read alouds, discussion, and writing activities provide opportunities for primary students (kindergarten through grade 3) to witness how others (e.g., teachers and peers) work together to collaborate and construct meaning using informational text. It is especially in the primary grades that teachers model awareness of informational text features during read alouds and think alouds and that students are engaged in learning the language of informational text (major ideas, supporting details, etc.).

Using Informational Text Elements during Teacher Read Alouds

Using teacher read alouds is an effective way to introduce young readers to high-interest informational text, and to begin teaching the predictable elements found in most informational books. A teacher read aloud is the oral sharing of a book for the purpose of modeling strategic reading behaviors and generating instructional conversation. According to McGee & Richgels (2003), teacher read alouds can be used to promote deeper understanding and interpretation of text; allow children to take an active role in understanding text; and prompt children to begin using mental activities that will become automatic as they begin reading independently.

Using Informational Elements during Interactive Read Alouds

An interactive read aloud requires a great deal of conversation between children and their teacher. This give and take conversation around a shared text engages children in predicting, inferring, and thinking and reasoning

Engaging children in an interactive read aloud of an informational text is not only an effective way to increase the amount of informational text that children experience, but it is also an effective way to introduce children to the common elements of this type of text.

In the classroom vignette shown in Table 9.1, a primary grade teacher uses an interactive read aloud to help children become familiar with the elements of informational text (author's purpose, major ideas, supporting details, aids, and vocabulary). The text used for the interactive read aloud is *Outside and Inside Sharks* by Sandra Markle (1996).

Table 9.1
Interactive Read Aloud: *Outside and Inside Sharks* by Sandra Markle

Informational elements	Teacher dialogue	Focus
Author's purpose	"Boys and girls, today our read aloud is an informational book called <i>Outside and Inside Sharks</i> by Sandra Markle. What was Sandra Markle's purpose for writing this book?"	Sandra Markle wrote <i>Outside and Inside Sharks</i> to teach readers about a shark's anatomy and behavior.
Major ideas	"The title of this book gives a hint about the two major ideas in this book. Remember, the book is called <i>Outside and Inside Sharks</i> . What do you think the two major ideas are?"	The major ideas in this book are the features found on the outside of a shark and the features found on the inside of a shark.
Major ideas	"Do you think our major ideas are correct? Which major idea are we reading about first?"	The first major idea in the text describes the outside of a shark (fins, gills, etc.).
Supporting details	"What two supporting details did we learn about the outside of the shark? What did you learn about the gill and tail of the shark so far?"	The two supporting details related to the outside of the shark are gills and tail.
Aids	"What did we find on these three pages to help us? What important information did we learn about sharks from the photograph?"	The aids in the text are color photographs and a photograph (a labeled photograph) of sharks.
Vocabulary	"What do you notice about important vocabulary words such as oxygen and operculum on page 5? What does the author do in the sentences that contain italicized vocabulary words to help you learn new words?"	The vocabulary is italicized to help the reader recognize new or challenging words. The definitions of the italicized vocabulary words are found in the same sentence.

Using Informational Element Sorts

In the next example, a primary grade teacher uses an interactive read aloud as the basis for a vocabulary activity that is designed to help children become familiar with the elements of informational text. This activity will also help students learn some of the specific vocabulary from the book. The text used for the interactive read aloud is *Fighting Fires* by Seymour Simon (2002) and the vocabulary activity is an informational element sort.

The Informational element sort is an activity where children engage in sorting words by categories (Zuttell, 1999). In this activity, the teacher guides the students in grouping or sorting words into the categories of author's purpose, major ideas, supporting details, and vocabulary. Once the text has been shared, the teacher engages children in thinking about the words and sorting them into the informational element categories. Word sort activities enhance vocabulary development and comprehension by actively involving students in the categorization process (Gillett & Kita, 1979).

An informational element sort encourages children to reflect on the content of the text as they sort words into categories that reflect the elements of informational text. For example, after reading aloud *Fighting Fires* by Seymour Simon, the teacher presents the elements of informational text as the sort categories. In our example, shown in Table 9.2, 12 words are selected from the text by the teacher. The students sort the words into each of the element categories used in this activity. (Note that in this example only four categories are used because the aids in this text are photographs that are not accompanied by captions. Without captions there are no aids words to sort.) In the example, an informational element sort shows the teacher-selected vocabulary as well as an example of the completed sort, including some annotations.

Depending upon the words selected, interesting discussions might take place as children discuss the best category for each word. For example, in our sort, the words "bucket" and "buckets" appear. In this story, a "bucket" is a piece of equipment on a pumper truck and "buckets" are said to have been used to fight fires before fire trucks were available. Including interesting word choices provides for an excellent vocabulary discussion about multiple-meaning words and singular and plural word forms.

USING INFORMATIONAL TEXT ELEMENTS DURING DISCUSSION

Rich discussions occur when the thoughts, ideas, feelings, and responses of all participants contribute to a better understanding of the text. Discussion is a balanced oral exchange, where roles of leadership and understanding may frequently shift. In a discussion, the teacher does not lead the students to interpretation; rather, interpretation is mutually constructed by the group. Students

Table 9.2
Element Sort: *Fighting Fires* by Seymour Simon

Teacher-selected words

water	hoses	bucket	off-road
buckets	foam	rescue	collapsed
fireboats	pumper	special	tiller

Completed sort with annotations

Informational elements	Sort words	Examples of teacher's and/or students' reasons for including a word in a category.
Author's purpose	Special	Seymour Simon describes the special types of vehicles that are used to fight fires.
Major ideas	Pumper, off-road, fireboats, tiller	The major ideas in this book are the 11 types of vehicles used to fight fires.
Supporting details	Water, hoses, foam, bucket*	The supporting details are examples of the substances and/or equipment found on fire-fighting vehicles.
Vocabulary	Buckets,* rescue, collapsed	These are a few important vocabulary words that describe fire fighting.

*In this case, bucket(s) is an interesting word. It is both a supporting detail and a vocabulary word.

who are invited to talk about what they have read are more likely to engage in reading, resulting in deeper comprehension (Gambrell & Almasi, 1996).

Using Informational Elements to Guide Discussion

The five elements of informational text can serve as an organizer for teacher-guided discussions of informational text. Table 9.3 presents questions that are appropriate for informational text.

In the next example, the teacher has read aloud (or the children have silently read) *The President's Cabinet and How It Grew*, by Nancy Winslow Parker (1978). Table 9.4 shows teacher-constructed questions based on informational elements and possible responses that children might give. The teacher-posed questions use language that is specific to the information text elements (major ideas, supporting details, etc.) that children need to know and understand. Using questions of this type helps children become more comfortable with the predictable elements of informational text.

USING INFORMATIONAL TEXT MAPS DURING DISCUSSION

An informational text map is a type of graphic that can be used *following* reading to organize information using the five elements of informational text.

Table 9.3
Guiding Discussion Using Informational Elements

Informational elements	Generic discussion questions
Author's purpose	Why did the author write this book/selection? What information did the author want to convey?
Major ideas	What are the major ideas of the book/selection? How are the major ideas presented?
Supporting details	What are the supporting details for each major idea? How are the supporting details presented?
Aids	What aids does the author use to convey meaning? What information is included in the aids (major ideas, supporting detail, vocabulary)?
Vocabulary	What key vocabulary words are used to convey major ideas? What vocabulary words are used in the supporting details? What words should you understand to discuss or write about this book/selection?

Table 9.4
***The President's Cabinet and How It Grew*, by Nancy Winslow Parker**

Informational elements	Discussion questions	Possible answers
Author's purpose	Why did the author write this book/selection?	To teach us about how the Cabinet was formed and how it grew.
Major ideas	How are the major ideas presented?	The major ideas are presented in two ways—in relation to each president and each Cabinet secretary.
Supporting details	How are the supporting details presented?	Details about each president's Cabinet are discussed. The job of each Cabinet secretary is described.
Aids	What aids are used to help the reader learn about the Cabinet?	The aids are illustrations of the presidents and members of their Cabinets. There is also an illustration showing how the Cabinet sits at meetings.
Vocabulary	What key vocabulary words are used to convey major ideas? What key vocabulary words are used to convey the supporting details?	president, Cabinet secretary, job, chief

In the example given here, primary grade children read about animals in *Seashore Babies* by Kathy Darling (1997). *Seashore Babies* is an appropriate choice for such a discussion. In this colorful text, each double-page spread contains a brief description of several seashore babies along with a descriptive paragraph and an attribute box containing important characteristics about each animal.

The teacher presented the basic informational text map (on the board, on sentence strips, or on chart paper) and asked the students, “Why did this author write this book?” As comments from the children were gathered, the teacher recorded the children’s responses. The teacher then pointed out that there were two major ideas in this text. As the children talked about the two major ideas, the teacher reminded them that they had read about two animals. As the children talk about the penguins and sea lions, the teacher recorded “Penguins” and “Sea Lions” under “Major Ideas” on the text map. Then the teacher guided the discussion to supporting details, aids, and vocabulary, adding the children’s contributions to the text map (see Table 9.5).

Once the informational text map was completed, the teacher asked the children to find a partner. Using the informational text map, the teacher asked the children to share with their partner what they had learned about seashore animals and to use the informational text map to get ideas. Children can also be encouraged to use interesting text vocabulary as they discuss and write about the topic.

USING INFORMATIONAL TEXT ELEMENTS TO SUPPORT WRITING

Children as young as kindergarten age are not only capable of writing informational text but they do so naturally and spontaneously (Newkirk, 1989). Several studies indicate that the more children write, the more they differentiate among genres (Boscolo, 1996; Chapman, 1995; Donovan, 2001; Kamberelis, 1999). They begin writing informational text and the text they produce looks like the text found in informational books. There is, however, an important reciprocity between writing and reading. In order to engage in writing informational text, children must read and reread a wide variety of informational books.

Table 9.5
Text Map: *Seashore Babies*, by Kathy Darling and Tara Darling

Author’s purpose	To share information about young seashore animals
Major idea	Penguin
Supporting detail	Baby animal is called a chick.
Major idea	Sea lion
Supporting detail	Baby animal is called a pup or calf.
Aids	Photographs, attribute boxes, symbols
Vocabulary	Birthplace, littermates, enemies

There is evidence of important benefits to be derived from having young children engage in informational writing. Researchers note the importance of nurturing the natural desire in young children to conduct research and write about their findings (Korkeamaki & Dreher, 2000). Analysis of the text created after a hands-on experience indicates that not only do young writers describe events and results but they do so using important text features such as descriptions, definitions, classifications, headings, and graphic representations (pictures, charts, etc.) (Pappas, 1986). Therefore, contrary to the argument that primary children are too young to engage with informational text, it appears these young writers make interstitial connections when reading and produce sophisticated informational texts during writing (Moss, Leone, & Dipillo, 1997). Finally, studies indicate that both overall writing proficiency and the number of texts produced increases when children are encouraged to write informational text (Donovan, 2001).

Writing also has been found to be an important support, or scaffolding experience, for discussion. Children have more positive attitudes toward non-fiction books and display deeper understanding of the material after writing in response to text (Moss, Leone, & Dipillo, 1997). In addition, Bobola (2003) found that discussions were richer and more specific if students engaged in writing prior to discussion.

Using Informational Pattern Guides

A pattern guide for writing can be created to provide additional scaffolding as readers prepare to write. An informational text map (see Table 9.5) can be transformed into a pattern guide when the teacher provides some element information. In the pattern guide for *Rosie: A Visiting Dog's Story*, by Stephanie Calmenson (1994) (see Table 9.6), the teacher provided the three major ideas (Rosie as a puppy, Rosie in training, and Rosie visiting), the children then filled in the supporting details.

Table 9.6
Pattern Guide: *Rosie: A Visiting Dog's Story*, by Stephanie Calmenson

<i>Rosie: A Visiting Dog's Story</i>	
Major idea	Rosie as a puppy
Supporting details	
Details about Rosie as a puppy	
Major idea	Rosie in training
Supporting details	
Details about Rosie in training	
Major idea	Rosie visiting
Supporting details	
Details about Rosie visiting	

Table 9.7**Summary Frame: *Rosie: A Visiting Dog's Story*, by Stephanie Calmenson**

The following is a summary of _____.

This informational book is about _____.

Rosie: A Visiting Dog's Story is a special kind of informational book. It is a biography that describes the life and training of a visiting dog. The book is by _____.

It is illustrated with photographs by _____.

The first major idea tells about Rosie as a puppy. When she was a puppy, she _____.

Another major idea describes her training as a visiting dog. When she was in training, she _____.

The last major idea follows Rosie as she visits hospitals. When she visits, she _____.

Rosie: A Visiting Dog's Story ends with an author's note. In the author's note, I learned _____.

After the children completed this activity, they used the pattern guide to generate their own written summary of the book.

Using Informational Summary Frames

A summary frame provides support for students as they generate informational text. Table 9.7 shows a summary frame for *Rosie: A Visiting Dog's Story*. In this case, the frame was used to model the construction of a summary. Summary frames can also support independent writing by younger children or children who would benefit from additional writing support. The example shown here uses informational elements to structure the frame. The major ideas and transition words were provided by the teacher. Children completed the summary by filling in supporting details from the pattern guide (see Table 9.6).

CONCLUSION

In this chapter, we stress the importance of choosing and using informational text in the primary grades. Most educators agree that young children are far more familiar and comfortable with narrative, or story, than they are with informational text. It is important to teach young readers the common elements found in most informational text (i.e., author's purpose, major ideas, supporting details, aids, vocabulary). Helping students read, discuss, and write using the elements is a critical step in preparing them to comprehend all types of informational text, including children's books, content area textbooks, newspapers, magazines, and the Internet.

Several practical instructional techniques have been presented in this chapter (e.g., interactive read alouds, text maps, and summary frames) as techniques that can be used during primary instruction. These instructional techniques familiarize children with the elements of informational text and afford them opportunities to read, write, and talk about books by using the language of informational text. Proficiency with informational text helps students build the skills they need to be successful in school, work, community, and everyday life (Pearson, 2003).

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Chapter Ten

EARLY LITERACY INSTRUCTION FOR LINGUISTICALLY AND CULTURALLY DIVERSE STUDENTS

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In this chapter, we present a repertoire of instructional practices aimed at supporting the literacy development of culturally and linguistically diverse pre-kindergarten through 3rd-grade students. According to the U.S. Department of Education, National Center for Education Statistics (2004), the percentage of language minority youth in the United States (youth speaking other languages than English at home) has increased greatly in recent decades. The number of language minority individuals between 5 and 24 years old in the United States has more than doubled, growing from 6.3 million in 1979 to 13.7 in 1999, representing a 118 percent increase in this population. It is not surprising then that the number of teachers encountering language minority students or English language learners (ELLs) in their classrooms has also increased.

Language minority students include a wide range of diverse students; they do not represent a homogeneous group. They may be U.S.-born Americans who come from households where languages other than English are used or where more than one language or dialect is used. These students may have been identified by schools as limited English proficient or may have been removed from this classification. Language minorities also include recent immigrants. Some of them may have received formal literacy instruction in their first language, and even some instruction in English in their country of origin. They may also be students with little or no formal literacy instruction in their first language. Language minority students also include refugees. Unlike most immigrants, refugees for the most part have had little choice of where to go since they have

been escaping from dangerous situations and have had little time to prepare for coming to a new country (Dien, 2004). When we refer to linguistically and culturally diverse students, we also include African American students, who because of their use of African American Vernacular English (AAVE) are also considered to be language minority students or bilinguals. Such diversity within language minority students challenges any notion of an idealized English language learner.

Although there are certain states that traditionally have had larger concentrations of language minority students, the U.S. Bureau of the Census (2000) reports that they are spread all over the United States, even in states like Maine, West Virginia, Vermont, Iowa, Georgia, Nebraska, and Washington, where the number of Latinos keeps increasing. They live in both rural and urban areas. They come from diverse socioeconomic backgrounds, although unfortunately, poverty is high among many of these groups (e.g., Latinos: Pew Research Center, 2005). This diversity in terms of backgrounds, residence status, and geographical location implies that one of teachers' primary roles is to know their students and learn about their backgrounds and communities, in order to be able to connect with them and address their needs. In this chapter, we highlight some literacy practices that have been documented as important for different communities. As we discuss later, there are intragroup differences within these communities; teachers need to attend to the local literacy practices of their students and to individual differences and needs. Attention to out-of-school culture and context is pivotal, given the ways that these conditions mediate learning, as highlighted by sociocultural theories of learning.

We begin our discussion by briefly reviewing the aspects of literacy that are brought to the forefront when literacy is viewed from a sociocultural perspective. We follow that discussion by focusing on the literacy practices of particular communities, and by describing literacy activities that different teachers have found effective to support early childhood literacy of language minority students in their classrooms. The chapter ends with implications for educators.

LITERACY FROM A SOCIOCULTURAL PERSPECTIVE

We approach literacy as embedded in sociocultural practices, not just as processes that take place inside a student's head. Vygotsky's (1934/1987) work reminds us that higher mental processes in the individual have their origin in social processes. This view of learning highlights the importance of cultural resources in the formation and development of thinking (Moll, 1990; Vygotsky, 1934/1987), by attributing to language a major role in this development. By language, we refer to the totality of the linguistic resources that children possess, including both their home language and the social languages learned outside of their homes, in their communities and in schools.

Research on language socialization (Heath, 1983) has shed important light on the roles of social context, families, communities, and schools in language and literacy acquisition. As Zentella (2005) points out, researchers examining immigrants' literacy practices go beyond thinking that "the problem is they don't speak English" to the idea of "ask which language and literacy practices do immigrant families keep and pass on to the next generations and why, which do they leave by the wayside or transform, and which new practices do they adopt?" (pp. 13–14).

Widely recognized is the importance for the success of language minority students and students in general that teachers and curriculum designers develop deep understandings of the particular resources or funds of knowledge that their students have available outside of school. "Funds of knowledge" refers to the accumulated bodies of knowledge and skills essential for household and individual functioning or well-being; for example, family members' knowledge of business, agriculture, form filling, and so on, and any other knowledge that is relevant for their lives (Moll, Amanti, Neff, & González, 1992). Usually, that knowledge and expertise is shared with other members of the family and the community, creating social networks in which people exchange their resources and expertise with one another. These bodies of knowledge and skills include the literacy practices that people engage in at home and in their communities. For students living in poverty (as is the case with many language minority students), educators' and curriculum makers' expectations involve assumptions about the kinds of literacy that these students possess or lack. Not surprisingly, many researchers have expressed concerns about the fact that the local literacy practices of language minority students and students of color are overwhelmingly ignored in school curricula. As Mercado (2005) asserts: "because of their lower social value, local literacies . . . often go unrecognized in dominant discourses about literacies" (p. 238).

One reason for this situation may be that these practices are not aligned with the mainstream literacy practices valued at school (Heath, 1983). Another reason is the difficulty that educational institutions have in viewing working-class or poor minority students as emerging from households rich in intellectual and social resources (González, Moll, & Amanti, 2005). For these reasons, the research conducted collaboratively by teachers and researchers to document families' funds of knowledge has much potential to help teachers gain a more accurate picture of the resources their students have at home. This work has the potential to make the students' and their families' hidden literacies visible. Those involved in documenting the funds of knowledge of their communities have proposed that to find those literacies, researchers need to go beyond searching what kinds of things people read, to observing how literacy operates in their daily lives (e.g., Mercado, 2005).

A major goal in examining the funds of knowledge of language minority students' households is transforming the relationships among students, teachers,

and families and providing teachers access to these social and cultural resources so that they can develop curricula that successfully integrate this knowledge, as some teachers have already done (Moll et al., 1992). A major question is: "How can teachers support the literacy and biliteracy development of their students when their students' home languages are different than their teachers?" We believe that part of the answer is found when we learn about the cultural and linguistic resources students bring to the classroom and when we begin to learn about each individual student. Although this is not enough, it is a critical component of effective teaching for linguistically and culturally diverse students. The next section aims to support teachers in learning more about the cultural and linguistic resources of children from various communities, as well as to give some important highlights of the collective experience of these groups in the United States.

LITERACY AND FUNDS OF KNOWLEDGE IN VARIOUS AMERICAN COMMUNITIES

We reject any attempt to describe language minority children from specific cultures as a monolithic group, that is, a group that shares the same characteristics, styles of learning, or styles of interactions. We agree, however, with McCarty and Watahomigie (2004) when they state that "children from diverse ethnolinguistic backgrounds do bring to the classroom unique learning dispositions developed in the context of their socialization within families and communities" (p. 91). Members of these groups are bounded not only by their language or cultural practices but by their place of origin and their collective experience, which includes the circumstances of their arrival in the United States.

Some groups, such as Mexicans from what became the U.S. Southwest, Puerto Ricans (who are citizens of the United States by birth), African Americans, and Native Americans, have survived a long process of Anglo-European colonization. This process involved a systematic effort to eradicate their languages. Other groups have arrived in the United States either searching for better opportunities for their families (including recent Mexican immigrants and Latinos from other Central and South American countries), or as refugees (including people from El Salvador and Vietnam). We need to stress, though, that given the intra-group differences within each of these communities, there are no typical Puerto Rican, Mexican, or Vietnamese households (Mercado, 2005).

Literacy Practices and Funds of Knowledge within Latino/a Communities

We use the name Latino to refer broadly to female and male youth of Latin American or Caribbean heritage with roots in 21 Spanish-speaking nations

(Zentella, 2005). In 1999, about two-thirds of the almost 14 million language minorities in the United States between 5 and 24 years old (or 65 percent) were Latinos. Puerto Ricans and Mexicans form the two largest Latino communities in the United States, and researchers have documented the literacy practices of some of their communities. The number of Dominicans and immigrants from Central and South America is also increasing rapidly, and their literacy practices and funds of knowledge are beginning to be documented as well.

When receiving language minority students in the classroom, it is important to find out whether they are U.S.-born students or recent immigrants. The length of time they have lived in the United States plays a major role in their use of language. For example, for many Mexican American children, their home language may be English or a combination of English and Spanish or an indigeneous language. In fact, in studies on the funds of knowledge of both Puerto Rican homes in New York City and Mexican American homes in the Southwest, one of the main findings involved the way English and Spanish (and any variants of the two) were interwoven into the day-to-day activities of households (e.g., Mercado, 2005). The alternation of the two languages, called code-switching, is not a sign of language deficiency or lack of vocabulary but a tool for thinking, and for some students the ability to code-switch and to use their home language represents an important part of their identity (Zentella, 1997).

In her home visits with teachers to document the literacy practices of their students, Mercado (2005) found that the families used reading and writing for a variety of purposes. Those purposes included, among others, their use of literacy for understanding everyday issues related to health, legal issues, the upbringing of children, and identity issues, and for satisfying the need for spiritual comfort and guidance. They also used literacy for social participation in different groups such as churches, clubs, and parents' associations; and for private leisure, reading about the lives of music, film, and TV personalities and documenting life through photos and souvenirs. Most of these uses of literacy have been also found in the homes of Mexican and Mexican American families in the United States. Teachers and researchers documenting the resources of families living in the Southwest found extensive knowledge of agriculture and mining, business and construction, contemporary and folk medicine, household management, and religion (Moll et al., 1992). These funds of knowledge have great potential for supporting learning and literacy development in classrooms.

Language and Literacy Practices in American Indian and Alaska Native Communities

There are about two million American Indians and Alaska Natives living in the United States. These are people with diverse backgrounds, representing more than 175 languages (McCarty & Watahomigie, 2004). According to

McCarty and Watahomigie (2004), nearly one-quarter of this population consists of school-age children who attend a variety of schools, most of them located on reservations. Nevertheless, “56% or more than 250,000 Indigenous students attend public schools with less than 25% Indian/Alaska Native enrollment” (U.S. Department of Education, National Center for Education Statistics, 2000, as cited by McCarty and Watahomigie, 2004, p. 79.)

Researchers have found that people in indigenous communities respect their elders and value the collective or the group over the individual. This emphasis on the collective may be reflected in Indigenous students’ preference for cooperating in small groups. Another important aspect of Indigenous communities is the strong way in which language and identity are intertwined. Also important to American Indian and Alaskan native communities (and for Latinos and African Americans) is the tradition of oral storytelling (McCarty & Watahomigie, 2004). These cultural resources have implications for classroom instruction that is organized to support literacy.

Language and Literacy Practices in African American Communities

There are clear group distinctions among African Americans, depending on their geographical locations and shared experiences, which help create unique African American communities with distinctive customs, traditions, and dialects (Smith, 2004). African American scholars have documented the respect for adults and parents and the importance of oral practices and oral traditions within African American communities. Many of these literary traditions find their roots in various oral performance genres found in Africa, such as praise songs, formal speech, epics, and stories. For African Americans, storytelling, with the use of double-entendre, exaggeration, and religious-based phrases, is part of the literacy practices shared in their everyday life (Smith, 2004).

Because African American students’ home language has been for the most part stigmatized or devalued in schools, many scholars are concerned about the fact that African American students “are overly represented in the lower reading groups for reasons other than ability” (Smith, 2004, p. 229). It is important that teachers value African American children’s home language as they try to socialize them into the academic and standard discourse of schools. African American Vernacular English (AAVE, or Ebonics) is an important linguistic resource. This language has been described as a rule-governed language, highly structured, and with meaning-laden patterns (Smith, 2004).

Language and Literacy Practices in Asian American Communities

Asian Americans represent a diverse group. They may have arrived in the United States either as refugees, as in the case of Vietnamese Americans, or as

voluntary immigrants, as in the case of Chinese Americans. Wealthy families as well as families living in poverty can be found within Asian American communities. Some Asian American students are doing very well in schools, but others are considered at risk (Dien, 2004). It has been argued that the needs of Vietnamese American students, in particular, have been neglected by our educational system (Dien, 2004).

According to Dien (2004), Vietnamese students seem to thrive in a non-competitive environment and seem to prefer collaborative work and peer-group discussions. Some Vietnamese American students have been described as valuing accuracy over speed and as worrying about writing personal experiences that could be misinterpreted. Like Latino parents, parents of Asian American students teach their children respect for adults and teachers. Even in situations where parents cannot help their children with their homework, they support their students by monitoring their homework and their school attendance even when they do not make school visits.

PRACTICES AIMED AT SUPPORTING ELLS' LITERACY DEVELOPMENT

As Smith (2004) and other researchers have emphasized, it is crucial for students' success that teachers believe in their students' potential and ability to learn, and that they have high expectations for all students. Teachers demonstrate high expectations as they organize a curriculum that engages students intellectually. There are as many ways of organizing intellectually challenging and responsive curricula as there are teachers. One type of curriculum that has been documented as effective in supporting minority students is a curriculum that is organized around the local knowledge of students' communities and is based on students' inquiries.

Integrating Local Knowledge from Students' Communities

Teachers working with children from different communities have provided examples of how to integrate students' funds of knowledge and local literacy practices into the curriculum. For example, McCarty and Watahomigie (2004) described how Navajo 2nd-grade students engaged in learning and literacy through a unit on the government created in response to students' questions related to the presidential elections. The students prepared a mural by using butcher paper to illustrate events in their community that reflected the processes and procedures of government. The teachers worked in partnership with parents, grandparents, and other community elders. This partnership involved home visits as well as parental visits to the classroom. The teachers explored the community together with parents, elders, and children and became learners themselves.

Similarly, in an Alaskan community, teachers, teacher assistants, and elders came together to develop a curriculum by using the mathematics and scientific concepts embedded in everyday fish-camp experiences (Lipka, 1994, as cited in McCarty & Watahomigie, 2004). This was a collaborative effort to co-create a curriculum that integrated Indigenous knowledge. Another example of how to develop a curriculum based on the local knowledge of students and their communities came from a 2nd-grade teacher and researcher, Sandoval-Taylor (2005), who after visiting her Yaqui and Latino students' homes in the Southwest of the United States learned that many of the families had construction experience. So, she decided to create a curriculum around the concept of construction, to increase her students' reading, writing, and mathematics proficiency. The teacher incorporated the students' questions and interests with regard to construction into her planning. The students became inquirers and researchers into a topic in which their parents were consulted as experts, and so the parents were also integrated into this learning experience. Writing assessments at the beginning and the end of the unit documented the students' learning.

An integrated curriculum across the content areas of such subjects as language arts and mathematics supports language minority and culturally diverse students in many ways. This type of curriculum has the potential to offer prolonged engagement with literacy without rushing learning (Dien, 2004). This has been said to contribute to language minority students' learning. Students have more time to think about and focus on one issue by making connections across subject areas and knowledge from different sources. Such a curriculum also enables extensive and meaningful uses of literacy and language, as we show next.

A Curriculum for Primary Grade Minority Students

The belief that students first learn to read in the primary grades and then later use reading to learn is still pervasive in many primary classrooms. This belief is harmful for language minority students, especially when teachers also believe that students need to begin to speak standard English before engaging in meaningful literacy learning, and believe that decoding precedes comprehension. Julia López-Robertson's 2nd-grade classroom in a primarily Mexican American community was organized around a different belief—the belief that reading is a meaning-making process from the very beginning (Lopez-Robertson, 2003). This teacher believed that her students would benefit from engaging in learning to read by reading, by learning about reading, and by using reading to learn about life and about themselves, as Short (1997) proposed in applying Halliday's (1979) work on language learning. This principle applies to writing as well. We extend this idea by introducing in the next section some ways to engage learning found in classrooms designed to support second-language literacy development.

Drop Everything and Read (DEAR): Learning to Read by Reading:

Drop Everything and Read (DEAR) in Julia's 2nd-grade classroom was conducted during a 45-minute period that was part of the language arts block. In this period, the students experienced DEAR by choosing their own reading materials, including audio books, and by reading alone or with others for their own enjoyment and for their own purposes. DEAR offered multiple alternatives for children to engage with books and served several purposes, supporting the students in becoming lifelong readers. The main purpose of DEAR in Julia's classroom was to promote reading for the enjoyment of reading and to establish the habit of reading. DEAR was used to develop a wide background in reading, in story structure, and in literature. Students developed ownership of their learning and reading since they had many choices of reading materials.

DEAR also supported students' reading fluency and confidence. The students chose the books that they wanted to read, so that their level of reading difficulty was not imposed on them. Finally, DEAR supported second-language acquisition as students chose reading materials written in both their first and second languages, and as they participated in buddy reading with a student whose dominant language was not the same as theirs. Students also used puppets to enact stories and drama. It was during this time that Julia held individual reading and writing conferences with the students to offer individual support.

Guided Reading: Learning about Reading

Guided reading took place during the language arts block. A small group of students met with Julia to read the same book aloud together. These books were chosen by the teacher based on the students' reading abilities. Since this was a bilingual classroom, small groups were organized by language dominance (English or Spanish) and reading proficiency. The groups met for 20–30 minutes with the teacher while the rest of the class was involved in DEAR. Each group met two to four times per week according to the needs of the students. Guided reading was done to support students' learning about the reading process; to increase the students' repertoire of reading strategies; and to increase the students' confidence as readers. The practice of guided reading communicated messages to the students that reading involves knowing different strategies to construct meaning, and that reading is not just done for accuracy but is a process that involves trial and error.

Literature Discussions: Learning through Reading

Julia organized her curriculum in such a way that she alternated guided reading groups with literature discussion groups. Literature discussions can

benefit all children, especially ELL students and bilingual students. There were two kinds of literature discussions in Julia's classroom—whole-class discussions and small-group literature discussions. Students would sometimes discuss the books read aloud during story time. The students shared their ideas about the books by making comments about the stories, their illustrations, and the connection between the stories and the illustrations and between the stories and their own experiences. Julia also posed questions, not to evaluate comprehension but to help the students predict, to help them think about specific parts of the stories, and to make meaning.

Small-group literature discussions or literature circles consisted of groups of four to five students who read or listened to the same book, and who then met to discuss their understandings of the story, as well as their connections to and ideas about the book. The literature discussion groups differed from the guided reading groups because the students had a choice in the selection of literature. The groups were not organized by reading proficiency or language dominance but were mostly heterogeneous groups organized by students' book choices (from texts offered by the teacher). Small-group literature discussions in Julia's classroom were considered mainly a curricular engagement suitable for encouraging meaningful and critical discussion about books with all of the children, regardless of their reading proficiency or language dominance. All students participated in the literature discussions by sharing their ideas about the texts and by putting questions to their peers about their interpretations. They helped each other when people needed assistance with their second language. Even students who could not read the books independently engaged enthusiastically with the written text and worked at different points to read the texts by themselves, because the stories were interesting and culturally relevant for the children.

Literature discussions offer opportunities to young children to talk about texts and support students' identities as readers and as persons, especially when teachers include multicultural literature. Even when teachers do not speak the language of their students, they can still honor their students' languages and cultures. One effective way to accomplish this is through the use of multicultural literature. Some texts are even published as bilingual editions. It is important to examine these texts' cultural authenticity. Day (2003, pp. xvii–xx) proposes the following criteria to examine books for cultural biases:

- Omission (exclusion of minority characters and experiences)
- Illustrations (stereotypes, tokenism, characters' roles)
- Story line (whose standards lead to success, resolution of problems, role of females)
- Lifestyles (oversimplified, exotic depictions?)
- Relationships between people (which people possess the power?)

- Heroines/Heroes (whose interest is the hero/heroine serving?)
- Effects on a young person's self-image
- Author's or illustrator's background and perspectives
- Use of loaded words
- Copyright date

The following Web sites are sources for quality multicultural literature. The American Library Association's website (<http://www.ala.org>) has information about the Coretta Scott King Award and the John Steptoe Award, two awards that honor authors and illustrators of African descent. It also includes information about the Pura Belpré Award, offered to Latino/a writers. The Americas Award honors work that authentically and engagingly portrays Latina America, the Caribbean, or Latinos (see http://www.uwm.edu/Dept/CLACS/outreach_americas.html). Another Web site includes information about an Asian-Pacific American award for literature, which is presented biennially (<http://www.uic.edu/depts/lib/projects/resources/apala/laward>). The Oyate On-Line organization reviews Native American children's literature for cultural authenticity (<http://www.oyate.org>). The National Council of Teachers of English has many resources available online on the use of literature, and provides information about effective strategies to support the literacy development of language minority students (www.ncte.org).

FAMILY LITERATURE DISCUSSIONS

Robin, a 1st- and 2nd-grade teacher, also used the engagement of literature circles in her sheltered English immersion classroom, where English only is used for instruction and students' languages are used for clarification. She emphasized parental participation. The second author of this chapter conducted collaborative research with Robin and documented her use of literature circles (Fain & Horn, 2006). Prior to involvement in the literature circle, each child self-selected a book in Spanish or English and then the children read and talked about these books with their families in their homes. Parents were invited to participate through a bilingual letter and by attending an informational meeting on literature circles. Robin also invited families to respond to the literature the children were reading, using a family-response notebook. Robin recognized that her students spoke two languages and although her classroom was not bilingual she emphasized that all responses were welcomed in whatever language the family chose.

Robin and the second author intended this invitation to discuss books to be open ended. They wanted to provide parents with the freedom to construct and facilitate conversations about the books from their own perspectives and insights, and to conduct the discussion in the languages spoken at home.

Because the sheltered English immersion model emphasizes just English, Robin and the second author felt that the children's bilingual backgrounds needed to be supported by encouraging families to discuss in their first language at home before having to discuss the books at school in English (Fain & Horn, 2006).

Each of the families then constructed a format that was meaningful and purposeful in their specific family context. The families' conversations were initially influenced by school discourse, such as occurs when teachers dominate the talk by initiating questions to which students respond and then teachers evaluate the responses (Cazden, 2001) Three families used questioning strategies to facilitate the discussions, but their conversations progressed, gradually moving toward meaning-based dialogue about the literature. Each family carefully and purposefully constructed its literature conversations from a different perspective. Table 10.1 summarizes the various ways in which three bilingual families created meaningful dialogue connected to children's literature.

Families used these discussions as a part of maintaining their first language and practicing their second. The family discussions created a language-rich literacy activity by using the discussions to promote the families' first and second languages. Families made conscious linguistic choices that deepened the level of their talk connected to the children's literature.

Storytelling

Another important literacy activity found in the homes of many culturally diverse American communities is the practice of storytelling. Research on

Table 10.1
Family Discussion Formats

Rafael	Elena	Kristina
<ul style="list-style-type: none"> • His mom and sister used question strategies • Included all siblings in discussions • Started with broad questions • Moved to wanting his opinion • Reflected on family's heritage • Encouraged written response and she wrote her response as well 	<ul style="list-style-type: none"> • Her mom and sister discussed the books • Spanish books had longer discussions • Asked questions within discussions • Made sense of both languages with questions • Used 30–60 second wait time as a way of allowing time for response • Wrote and responded in response journal 	<ul style="list-style-type: none"> • Read books together • Discussed books • Then taped discussions • Wrote in response journal • Made sense of books using knowledge in Spanish and English • Used Spanish dictionary

the literacy practices of Latinos, American Indians, and African Americans has described storytelling as part of students' funds of knowledge (Martínez-Roldán, 2003) and as a very valuable literacy practice that in the case of African Americans has been used in families and communities for multiple purposes, including "entertaining, education, working through problems, sharing history, and recording community events" (Smith, 2004, p. 221). When recognized as a valid literary experience in classrooms, storytelling supports students' ethnic and academic identities. Teachers can use students' stories to build a bridge from oral to written language.

Writing Workshops

Included in Julia's language arts instruction was a 40-minute writing workshop period, in which students engaged in prewriting, creating a rough draft, editing, revising, and sharing with their peers a piece of writing sometimes about self-selected topics and other times responding to an assigned focus. Sometimes the students did group writing. Each day, four or five students signed up to share their writing with the class by reading it aloud. The writings were kept in each student's writing folder. At the end of the month or trimester, students went through their folders and chose a piece of writing that they wanted to expand into a poem, a story, or a published book. There was an authors' celebration at the end of the trimester when the students shared their written and published pieces with their parents.

The writing workshop also seemed to support students in the process of becoming readers. The students were learning genre conventions and letter-sound relationships. There was a great deal of rereading as the students went through the editing process. As part of this process, Julia had conferences with the students on an individual basis to discuss selected pieces of writing. With the less experienced readers and writers, she tried to conference every other day. Only the pieces that were going to be published were edited and revised for grammar or spelling. The messages that the writing workshop sent to students about reading and writing point to the interconnections between these processes and to the variety of purposes that writing serves. For example, one message students received from the experience was that writing promotes learning about reading and reading promotes learning about writing. Another message that the students received was that people read and write for different purposes and use different genres.

Today's Page

Another literacy activity intended to support literacy in Julia's classroom was called "Today's Page." The day always ended in this classroom with a five-minute shared writing experience where the students recorded the most

important events of the day. After the students brainstormed as a class the events of the day, they chose five or six events that were written down by Julia on a single sheet in big letters. As Julia wrote what the children were dictating, she slowly read aloud each word, giving the children an opportunity to focus on letter-sound relationships and other aspects of language conventions, such as letter formation, syntax, representation of meaning, and genre formats. After finishing the writing, the whole class read each sentence with the teacher and a student illustrated the page in a space that was left for a drawing. At the end of the month, Julia put together all the pages in a book, which became the history of the class as well as reading material for DEAR. Through this activity, the students could learn that reading and writing are ways to record history, and through this recording, a sense of community was being strengthened.

Addressing Differences through Grouping

Teachers of culturally and linguistically diverse students organize their literacy curriculum in such a manner that students have opportunities to participate in different kinds of groupings, including homogeneous and heterogeneous groups, and individual work. Homogeneous language or reading groups in which teachers can check for understanding and assist learners are vital to support language minority students' learning. These groups are reconstituted periodically as individual needs are addressed, and as new reading and writing strategies are learned. Heterogeneous groups are formed on the basis of students' language, literacy, and content expertise. These grouping patterns help all students to contribute something to the group's learning. These groups are also crucial in providing students with opportunities to negotiate different perspectives and identities. Working in groups develops students' sense of community, which in various language minority communities is valued over a sense of competition.

Finally, one-on-one interaction with students through reading and writing conferences provides teachers with opportunities to follow up on students and provide the specific support each student needs. These individual conferences can be distributed over one or two weeks. Teachers may conference with individual students while the rest of the class is engaged in other learning activities. Over time, this pattern develops into a predictable routine.

Assessment

The topic of the assessment of linguistic and culturally diverse students deserves a chapter of its own. Many scholars have raised concerns about the negative impact of standardized assessments on language minority students and about the limitations of evaluating English language learners only in

English. Here, we want to focus more on assessment that can inform teaching. We highlight some ideas that can help teachers reflect upon their current assessment practices.

When assessing the literacy development of language minority students, teachers would benefit from the use of a range of assessment strategies to get the most comprehensive picture of their students' learning. A major assumption of this assessment is that teaching and learning should not be separated. The most informative and useful assessment is that which uses children's processes and products to document their learning and progress over time, such as Hudelson's (1999) close observation of the literacy development of a bilingual girl across time or Peyton and Reed's (1990) development of profiles of individual writers. By collecting samples of students' work and systematic notes on students' work and participation in literacy activities, these authors were able to present a more complex picture of the students' learning than any test or card report can offer. Peyton and Reed developed profiles of nonnative English speakers based on the analysis of students' journals. These examples offer teachers an indication of the types of writing, patterns of development, and kinds of changes that teachers might expect from their students.

Another important point to remember when assessing language minority students is not to confuse students' ability to express their learning in English with their actual learning. In reading, for instance, students may be able to comprehend English texts far better than they can show through retellings or tests in English (Martínez-Roldán & Sayer, 2006). Therefore, teachers will be in a position to do a more accurate assessment of their students if they take into account the role of language, and particularly the ways in which students may use their first language to mediate and support their reading and writing in English.

Pérez and Torres-Guzmán (2002) offer a variety of examples of assessment strategies that can help teachers document their English language learners' and bilingual students' literacy development. These authors describe and show examples of assessment strategies in chapter 7 of their book. For example, they describe the development of a portfolio system, the use of emergent literacy checklists, and the use of reading assessment strategies. Assessment strategies include the cloze procedure in which every fifth word is deleted and students fill in the blanks; the teacher then checks students' responses to see if they are grammatically appropriate and make sense in the context, resulting in a determination of students' ability to read the material. Another assessment strategy is the informal reading inventory. This measure consists of short reading passages at various difficulty levels followed by comprehension questions; students' responses result in a determination of their independent reading level (their ability to read on their own), their instructional level (their ability to read with some assistance), and their frustration level (the level at which reading

is too difficult).. Other writing assessment strategies include journal writing, rubrics for scoring writing, peer-group assessment, and self-assessment.

IMPLICATIONS FOR EDUCATORS

Because there is no typical Puerto Rican, Mexican, Asian American, Native American, or African American community, it is imperative that educators examine their own assumptions about minority students and engage in a process of learning by acknowledging intragroup differences among their students. It is crucial that teachers' and policy makers' decisions reflect an understanding of the fact that children with different proficiency skills and contrasting orientations to literacy and books can be found in the same classroom, community, or family (Zentella, 2005). An implication of this diversity is the need to consider the individual linguistic and cultural backgrounds of each learner within the classroom and the linguistic resources and funds of knowledge that they bring to the classroom. Teachers can learn about these funds of knowledge through home visits designed to learn from the families, not to teach them.

The use of scripted programs in primary classrooms leads often to curricula that overlook and ignore students' cultural and linguistic resources. We argue that educators must begin to creatively build upon their students' local literacies by constructing and implementing literacy teaching that invites all students to learn and to become competent, literate members of different communities in and out of school. Family and community literacy practices can be incorporated in the classroom if teachers make conscious space for authentic learning experiences that involve inquiry, as well as reading and writing for real purposes. Teachers can look for resources, artifacts, multicultural literature, and family and community members to create a curriculum that honors multiple voices within the classroom while socializing students in the use of the genres and social languages that they will need to succeed at school.

Even if teachers do not know their students' languages, teachers can still help their students in many ways. As Cummins (2007) noted, regardless of institutional constraints, educators have individual choices. Educators have choices in how to interact with students, in how to engage them, in how to activate their prior knowledge, in how to use technology to amplify their imaginations, in how to involve parents, and in what to communicate to students regarding home language and culture. As Cummings noted, our society needs all of the intelligence, imagination, and multilingual talents of all of our students.

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Chapter Eleven

THE IMPACT OF DISABILITIES ON THE ACQUISITION OF LITERACY

Kathleen M. McCoy

WHO IS LITERATE?

Children and adults who read and write are demonstrating conventional literacy. Students who enjoy reading and learning from print are typically excellent readers and writers. Some children, however, even though they are involved in the same reading programs as their more skilled peers, fail to develop literacy or continue to be nonresponsive readers and writers. Some children with disabilities have difficulty accessing meaning from print.

Many children with disabilities become literate, but exceptions frequently occur. Most often, children with neurological or perceptual disabilities remain emerging readers—they can use language to describe important events in their lives, interact well with others, and appear to have very active imaginations, but do not develop the same level of reading and writing fluency as their peers. Less often, some children with mild and severe disabilities will be unable to demonstrate conventional literacy; these children are nonresponsive to reading and writing instruction.

Children who are eligible for special education services can still become literate. For example, children with Down Syndrome have achieved reading competencies equivalent to 5th-grade levels, and Down's children as young as three and four years old, although lacking all the typical preskills of reading readiness, including alphabetic knowledge, have been able to learn sight words. Many, but not all, children with disabilities can read and write.

Difficulty in acquiring reading literacy skills is a predominant characteristic of many individuals with disabilities. Most of the approximately 2,887,217

school-aged children in the United States who are receiving special education services have qualified for those services because of poor reading ability (Lyon et al., 2001).

Problems acquiring reading are not limited to students with high-incidence disabilities, such as behavior disorders, learning disabilities, and mild mental retardation, autism, or speech and language impairments. Students who do not qualify for special education services may have reading problems, due to a variety of conditions, such as ineffective instruction, cultural background, and insufficient opportunities to develop reading skills. Both students with and without disabilities can be reading below grade level. Achievement differences in literacy are particularly noticeable in children from urban areas among specific ethnic populations (National Assessment of Educational Progress, 2000). Students' reading scores have not significantly improved over the last three decades. .

WHO ARE THE POOR READERS?

Children with low levels of literacy have difficulty completing assignments in school and taking tests and do not view themselves as bright and capable individuals. No one knows for sure why not all children develop conventional literacy, but many theories have been developed. The most popular theories include causes such as auditory disabilities, visual difficulties, rate or time-processing issues, anxiety, or combinations of these behaviors, for example, poor visual processing or slow auditory processing coupled with anxiety when approaching a reading task. Ironically, some children with these problems do become literate; some children with documented disabilities learn to read and write at the same level as their peers or beyond their peers'.

Most students with disabilities who also exhibit poor literacy skills desperately want to be good readers. They want to be like their peers who can sound out words and understand and remember what they have read. Many students with disabilities cannot sound out words, and cannot comprehend or remember many of the words they can decode. Some children who do not demonstrate conventional growth in literacy are said to exhibit a condition called dyslexia.

DYSLEXIA

The term dyslexia has multiple meanings, but they all imply that an individual cannot read or write very well. Dyslexia and related reading disabilities have been attributed to neurological problems, such as a limited capacity for storing, manipulating, or processing information, an inability to recall speech-based sounds, or a difficulty retaining the visual-spatial information found in

letters and words. Reading disabilities have also been attributed to ineffective or inappropriate teaching practices.

Determining the cause of reading disabilities is challenging at best and frustrating at worst. If, however, specialized programs designed to address reading problems are not successful, then most likely the problem is inherent in the way the students are processing the information needed to acquire reading literacy. The results of various reading studies strongly suggest that reading difficulties resulting from problems in language are more difficult to remediate. One simple measure that suggests processing difficulties is listening to the sequence of events in a story while trying to understand what the story means. Children with certain types of intrinsic language-processing problems have difficulty keeping information in their memory while dealing with incoming ideas. This measure can be used to distinguish typical from atypical processors and to develop appropriate literacy programs early in a student's program.

NEED FOR LITERACY

Without belaboring the obvious, the ability to read is a critical factor in successful school achievement. Not surprisingly, a strong correlation exists between poor reading ability and school failure. Students with disabilities who do not have access to the information contained in textbooks and related materials are at a significant disadvantage in acquiring the knowledge contained in the school curriculum. Hence, the search for techniques to raise literacy levels for students with disabilities such as behavior disorders, learning disabilities, mild mental retardation, autism, and speech or language impairments, who constitute about 85 percent of the approximately 5 million school age youth classified with disabilities, is a high priority for educators.

Improving early reading instruction is an important goal for general and special educators alike. "Matthew effects" is a phrase used to identify the theory that small problems in reading ability in the primary grades spiral to huge gaps by the elementary and upper grades, resulting in some children being placed in special education classes. Students' poor reading skills are magnified at every successive grade level as opportunities for intervention diminish.

Although many extensive and praiseworthy efforts to develop techniques to prevent reading problems have been attempted, an overwhelming number of middle and high school students with disabilities read significantly below grade-level expectations. Only 26 percent of students who display literacy disabilities in 3rd grade will be successful readers; 74 percent of students with reading disabilities will continue to struggle to access print in 9th grade and beyond (Lyon, 1995).

LITERACY DURING PRIMARY YEARS

Developing literacy during the primary years has received strong emphasis. Many children with disabilities entering kindergarten and 1st grade, however, have not developed physiologically and cognitively to the point at which they are able to learn the relationships between abstract symbols and meaning. Fine motor skills involving the hands and the eyes may not be well developed in these early years. Some five- and six-year-old children with disabilities have not developed sophisticated language concepts. Some young children with disabilities have not yet learned how to communicate with others. Although most children with disabilities have been exposed to print, not all are ready to learn to read effectively through traditional approaches.

The reading methods to which a learner with disabilities has been exposed may be excellent for typical students but be a poor fit for students with disabilities. For example, Reading Recovery is a reading program designed to raise the lowest-achieving readers in 1st grade up to the average of their class within four months. Children whose reading skills seem very similar at the initiation of the Reading Recovery program may show very different competencies after 16 weeks of instruction. One child may be reading at grade level, but another may have made no progress whatsoever. The reading program may be an excellent match for one student but a poor fit for another. For children with disabilities, the instructional solution is to find the best fit between students' strengths and the instructional method or combinations of methods.

BEYOND PRIMARY LEVEL INTERVENTION

Reading, writing, and thinking are interrelated processes that foster communication. Reading and writing are socially constructed communicative practices that grow in sophistication as students' skills become more refined. Intervention at the beginning levels of reading and writing may be able to create a sound foundation for more sophisticated literacy practices. Reading and writing are not an end product but an ongoing and lifelong developmental process. With a little assistance from a sound intervention, many floundering young readers can become literate. Some children with atypical communication may flourish with early intervention, while others may not develop age-appropriate skills from language intensive programs.

Even with instructional emphasis on early literacy, not all children with disabilities learn to read in grades K–3. Although the skill levels of beginning readers and older poor readers may look the same, a quick look at the physical differences between a 5-year-old and an 11-year-old suggests otherwise. Interventions for older children with disabilities need to take into account experiential interests, as well as the impact of past instructional strategies and the physical, emotional,

or cognitive effects of a disability. Interventions for middle school and secondary school readers are often modeled on strategies used with much younger children. These approaches fail to take into account the impact of the disability on the acquisition, maintenance, and generalization of literacy skills.

By middle school, most struggling students with or without disabilities have made several failed attempts to become better readers and writers. They are not very receptive to beginning the reading process again, especially when most of the reading material is written at a very low level. Even when poorly skilled middle and upper level readers do attempt to read, they typically fumble through texts to the point where comprehension is compromised. Many nonresponsive readers over age nine would rather not engage in reading activities that promise more of the same embarrassing and uninteresting “little kid” materials that they have experienced over and over again.

Middle school students with literacy issues are given the almost impossible task of reading complex textbooks. These texts are built on the premise that middle and upper grade readers possess vocabularies and comprehension skills that are suitable for accessing curriculum content. Not all students, however, have highly developed language skills that are in tune with the language of the textbooks or related materials. Some children have language deficits caused by having a first language other than English, making the struggle for literacy with printed English overwhelming.

Many primary-aged students with literacy issues will continue to experience reading-based learning problems well into adolescence and beyond. Reading disabilities do not end with high school graduation. The good and bad news is that some students in college and even graduate school are dyslexic; their reading continues to take a lot of effort, time, and energy. Many older readers with serious skill deficits are so delayed that they struggle with remembering words, sounding out new terms, and comprehending simple information (Fletcher, Morris, & Lyon, 2003).

ACTIVE AND INTERACTIVE NATURE OF READING

Many definitions of reading propose that reading is an active and interactive process between the author and the reader or between the printed page and the past and current experiences of the reader. The most popular reading definitions are based on some variation of a cognitive-constructivist model. A cognitive-constructivist model is a view of the reading process as composed of many interrelated components, some of which are based on higher-level thinking processes usually associated with comprehension and some of which are grounded in lower-level mechanical skills usually associated with word recognition and sound-symbol correspondence.

Reading could be considered *thinking guided by print* or *print guided by thinking*. Realistically, however, a person can think with and engage in all kinds of comprehension activities, such as following verbal directions, or understanding the main ideas of stories read orally or videos, but not be able to read print. In turn, an individual can sound out symbols and recall whole words but not be able to comprehend. Reading from print requires the ability to engage higher-level skills with lower-level skills, but in different degrees of interaction depending on the nature of the reading material and the developmental, linguistic, and experiential sophistication of the reader.

With many instructional reading approaches, the first steps in acquiring reading ability typically focus on sounds and symbols and word recognition. Yet, these mechanical components of reading are meaningful only when the emerging reader can use mechanical skills and associate words or sounds and symbols with prior knowledge. For example, most five-year-old children are engaged in the act of reading as they carefully sound out words. They have been organizing their individual bodies of knowledge, called schemata, since the day of their birth. Stored in their brains are personally meaningful memories, some of which were experienced directly and others vicariously. All the objects, situations, events, and actions and their respective sequences that children have valued have been carefully stored and internalized in their young minds, and now they are matching their schemata with the print in front of them. Typical five-year-olds have many schemata; these may include a schema for animals, like birds and cats, for situations like being in kindergarten, at church, and at a best friend's house, for events like going to the movies or the mall, for smells like popcorn and chocolate, and for sequences of events, like preparing to go play with a friend.

Most five-year-olds are making sense of what they are reading by seeking meaning between the printed word and their schemata. When a match between the reading material and their schemata is found, they relate the new experience to similar experiences or concepts. When a match is not found, the information is put into a new category to be matched with future experiences. Students are organizing and networking concepts in their minds. Having rich and interconnected networks of schemata assists children in having almost instantaneous access to massive amounts of knowledge. Too many isolated categories negatively impact reading; a network-poor child will not be able to make matches between text and prior experience rapidly or efficiently with print. Some children with disabilities have difficulty relating past to current experiences. Some children with disabilities are network poor.

EFFECTS OF DISABILITY

The type of disability is a factor that forms experiences and is integral to the development of schemata. Disability affects schemata development. Children

with disabilities, including many who have language and learning disabilities, often display expressive and receptive communication difficulties. Typically, children with language issues engage less in social interactions than students with more typical language skills. These children's experiences and resulting schemata are different from the norm and may be impoverished due to lack of social interaction—an important source for acquiring incidental knowledge. Incidental knowledge is gathered informally from life experiences in contrast to formal classroom-based instruction. Incidental knowledge is a powerful contributor to developing schemata. Children with various types of disabilities can learn to read, but they may need specialized techniques to access print.

The type of disability a child has shapes the number, kind, and quality of mental networks he or she develops. Children with visual impairments, for example, will have different experiences with sounds, letters, and words than children whose language deficits are distorted due to blocked access to hearing or saying letter sounds and words. Some children who are heavily medicated as a result of their disability either intermittently or continuously may lack focus, which in turn impairs the development of their schemata. Children who do not have access or who have limited access to sensory input develop schemata, but their references or networks are built upon somewhat different experiences than the schemata of children with more typical sensory and motor skills.

Disability labels do not and cannot identify the appropriate reading and writing approach for any child. Labels such as learning disabled, autistic, physically disabled, or hearing impaired, for example, do not determine a corresponding methodology for teaching reading and writing. For example, one child might have severe visual restrictions: the child is not blind, but does have low vision. Such children are partially sighted and typically require special aids, such as large type, magnifiers, and special lighting so they can complete work that requires detailed vision. Other children also labeled partially sighted can have different types of visual impairments, for example, visual issues involving ocular fine motor control impacting the ability to maintain near or far point focus. As their visual system tires, so does their ability to concentrate. They must use a great deal of energy to keep their ocular system focused, but eventually, depending on the level of involvement, after a time ranging from seconds to minutes, the letters on the page may become blurry, melt into each other, and/or eventually simply disappear.

READERS AT RISK

A phoneme is the smallest unit of sound in a language that differentiates one word from another; for example, the word *fat* involves blending three phonemes, /f/ /ae/ and /t/. Letter-sound knowledge and the ability to manipulate phonemes is an important predictor for growth in reading for children at risk

for reading disabilities (Savage & Carless, 2004). Many ways to develop phonological awareness exist. Some children expand their phonological awareness informally by becoming sensitized to sound-related events in their daily lives. Without any formal instruction, some children understand the relationship between sounds and letters by experiencing nursery rhymes and songs, listening to stories read by relatives and teachers, or manipulating plastic letters on the front of the refrigerator. Television programs like *Sesame Street* also help students heighten letter-sound correspondence.

Some children with disabilities may also experience nursery rhymes and songs, listen to stories, and manipulate plastic letters, but unlike their counterparts, no matter how often they watch programs like *Sesame Street* they do not or cannot integrate such phonemic information when attempting to read. These children, especially those at risk for reading disabilities, become phonologically sensitive primarily through formal instructional approaches. The development of phonological awareness cannot be left to chance for most children with disabilities, because their disability puts them at risk for reading problems. For children with disabilities who are at risk for reading failure, phonological awareness must be explicitly taught. These children need to be taught how to identify rhyming and nonrhyming word pairs, how isolated sounds blend to form words, and how spoken words can be segmented into individual syllables.

EXPLICIT INSTRUCTION

In the last decade, many reading intervention specialists have concluded that some form of explicit and direct instruction in phonemic awareness/analysis and decoding skills is essential for students who are at risk for or those who already demonstrate reading difficulties. This work was discussed in Torgesen, Rashotte, Alexander, Alexander, and MacPhee (as cited in Papalewis, 2004). Children with disabilities in language, hearing, and vision are usually categorized as students at risk for reading failure. The techniques most often associated with explicit instruction incorporate elements of direct instruction. Direct instruction includes direct explanation, modeling, and guided practice, with continual monitoring and feedback, review, and mastery learning. Letter sounds and names, syllable identification, and common vowel rules are explained, modeled, and practiced in a variety of reading situations, and are checked and rechecked for understanding and reviewed until the phonics skills are automatic and fluent.

Instruction in decoding can be a major boost for the acquisition of reading proficiency. This is the case for many at-risk readers with disabilities, but even explicit instruction will not be appropriate for all students. Some students can receive direct instruction in a phonics-rich reading environment, but in spite

of instruction that specifies letter-sound relationships, practice in converting letters to sounds, and making words out of letters, some children show no gains in reading. About 30–50 percent of low-achieving children, despite exemplary and explicit instruction, never acquire sufficient language and decoding skills to become fluent readers (Fuchs et al., 2001).

FACTORS CONTRIBUTING TO VOCABULARY DEVELOPMENT

For nonresponsive primary-aged readers, the reading picture is indeed dismal. Even with special education services and after years of instruction, the techniques for improving reading and spelling skills for nonresponsive readers beyond the primary grades remain unclear. Repeating phonics instruction and expecting significant change in reading performance for nonresponsive readers is futile. Learners must be fluent readers before they can derive meaning from text, but most nonresponsive readers cannot develop enough fluency in applying what they have learned about letter-sound combinations to be able to derive meaning from the printed words. Students with phonological processing problems have difficulty with basic word recognition and reading comprehension.

A student's capacity for remembering words is also a predictor of who will be a good reader and who may need extraordinary means to access meaning from print. Even the most efficient readers probably have an upper limit to the number of new words that they can recognize and remember (Hiebert, Martin, & Menon, 2005). When asking children to read words in short, predictable books, the best readers remembered 30 to 160 new words; the middle ability readers recalled 15 words, and the lowest ability readers remembered only 6 words (Johnston, 2000). Children whose disability includes memory issues are likely to be considered nonresponsive readers.

Children's experiences play a large role in determining their vocabulary growth. Long before children come to school, they have developed word identification strategies. They use *picture cues* and *environmental cues*. They associate meaning with pictures or print in their everyday world. Children often develop a word recognition strategy called reading *by configuration*—figuring out a word by its shape, length, or even its significant letters, such as the first letter of a child's name.

For children who are experiencing physical, cognitive, or emotional issues or whose surroundings are print poor, access to environmental, picture, and configuration cues may be limited or distorted. Many children with disabilities are disadvantaged relative to their peers in acquiring words through environmental, picture, or configuration cue strategies. Children's visual, auditory, motoric, affective, or cognitive challenges in their everyday world may limit their contact with the environment. For some children, physical or emotional

disabilities keep them in and out of hospitals during much of their early lives, and limit their experiences. Complications from the primary condition can create secondary issues, such as fatigue, lack of concentration, and distractibility, which have significant ramifications for the acquisition of literacy.

FLUENCY

Fluency, speed, and accuracy are significant characteristics of reading. Speed and accuracy are developed as readers start to internalize letter-sound correspondence, word patterns, and matching the pronunciation of the word to its spelling. Fluency is the development of speed after accuracy has been established (Spinelli, 2006). Repeated reading of words is usually the final step that anchors words in the reader's memory and speeds sight word recognition during reading. The more quickly the reader can recognize a word, the more quickly communication is gathered from print. An appropriate level of fluency provides the reader with more cognitive space for processing the meaning of the word or text.

Beginning readers rely heavily on phonics to learn new terms and commit words to memory. Children's mental resources, which have been focused on sounding out letters at the beginning reading stage, can as they progress be redirected to tap into their schemata, their interconnected and multiple networks of meaning. A reader's schemata, phonics awareness, and word recognition cannot be separated, but play different parts at different developmental levels.

Nonresponsive readers cannot construct meaning from the text and do not develop oral or silent reading fluency. Beginning readers and less-skilled older readers typically read aloud slowly, haltingly, and with little or no expression. These readers are not likely to develop a high level of literacy.

A variety of fluency levels have been established, identifying appropriate reading rates at each grade level. Systems based on broad guiding principles for minimum oral reading fluency rates, like the one provided by Guszak (1985), also include grade level criteria: (a) 60 words per minute for grade 1; (b) 70 words per minute for grade 2; (c) 90 words per minute for grade 3; (d) 120 words per minute for grades 4 and 5; and (e) 150 words per minute for grades 6 and 7.

As with any generalization, exceptions will be common, especially for children who have disabilities. Many children with disabilities will read at the same rate as their nondisabled peers, but the effects of disabilities on some children may interfere so strongly that a particular number of words per minute may be irrelevant or may never be achieved. Children whose speech and language skills are affected by motoric issues, significant intellectual challenges, and visual and auditory processing difficulties are unlikely to demon-

strate minimum oral reading fluency rates. The reading rates of many children with disabilities will be influenced by the nature of their problem.

Since the goal of word recognition is to establish communication from print between the reader and the author, teachers must monitor word recognition development by assessing the reader's ability to comprehend text. Rate will play a factor, but rate is not sacrosanct. Forcing readers with disabilities to meet the expected norms for their peers without disabilities may be damaging at best and lethal to word recognition at worst.

DIFFERENTIATING INSTRUCTION

Children with disabilities, even more so than their typically developing peers, need differentiated programs of instruction. Program development must be based on the needs of the student. Progress in learning to read and write is, among other factors, strongly related to individual differences in language, phonological skills, listening comprehension, and vocabulary knowledge. A child's disability may or may not affect his or her reading progress, but must be analyzed relative to the child's strengths and weaknesses. To provide effective instruction, programs must address the development of fluency and comprehension in accordance with the child's intellectual, emotional, and sensory repertoire.

BALANCED READING PROGRAMS

Most instructional theories recognize aspects of text-based and reader-based models. In text-based models, the reading process is presented through explicit and direct instruction with words and word components, practice, and correction. Text-based models place instructional focus on processing skills in a sequential and systematic manner.

Proponents of reader-based models generally believe that reading begins with the reader making a hypothesis about the author's intentions. Readers read to verify or refute their hypothesis and do so by selecting words or passages to validate their thoughts. In these models, readers use the *lower units* of reading, such as letters, only to a limited extent. Instructional reading programs must incorporate a differentiated approach in which text-based and reader-based lessons are complementary and fit the instructional needs of the student.

As students become more proficient with low-level strategies, such as sounding out words, most will advance to word recognition and meaning. Most students, when given the opportunity, will move back and forth between high- and low-level reading strategies, blending techniques provided through text-based and reader-based models.

All students are unique in their literacy attainment and development. To develop literacy, students with disabilities need a balanced program. *Balance* refers to providing students with differentiated instruction according to their level of achievement and their cognitive, affective, and sensory abilities. Larger amounts of instructional attention and time spent with students who have reading deficits are characteristic of a balanced literacy program (Rasinski & Padak, 2004). A fundamental source of differentiation in a balanced, comprehensive, and equitable reading program is time. For some students, the balance will tilt toward more time spent on acquiring phonics skills; for others, the balance can lean more toward whole-word acquisition. Struggling students need more time in instruction than students who are developing literacy with ease, and that time must take account of the unique levels of cognitive, affective, and sensory abilities found in children with disabilities.

MODIFICATIONS

Not all students are going to be able to use textbooks without major modifications to the text. Many learners, especially those who are eligible to receive special education services, are struggling readers. Readers who do not make reading progress even with well-crafted programs may need extraordinary means to access print. Accessing print is the key to literacy. Technology may provide the way into text content for some children previously locked out of meaningful use of print.

Fortunately, assistive technology offers an affordable means of using the text for those students who will not be able to access print in a meaningful manner. Compensatory approaches involving technology can be provided if learners' persistent performance deficits are directly addressed. These approaches may reduce or eliminate the effect of the disability and allow struggling readers to use textbooks as information sources.

Technological resources that help students with disabilities to access texts include (a) text to speech capability; (b) varying text size; and (c) reference resources, such as online dictionaries. These are found in electronic books (e-books), online publications, and digital libraries. Students can also access print through the use of specialized hand-held pens that can scan, store, and transfer printed text.

The advantage of many assistive technology devices is that they provide audio feedback. The devices allow the learners literally to hear the message encoded in print. Assistive technology can open the floodgates of knowledge for students previously trapped in a nonmeaningful world of print.

The overarching focus of all literacy instruction is the reader. Each child is actively constructing new meaning based on comparisons he or she is actively making with his or her prior knowledge and experiences. Children, regardless

of disability, are engaged in constructing meaning. They need the support and guidance of teachers who eliminate learning barriers and build on children's prior experiences and knowledge to enable the children to read meaningful content.

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Part Three

FOUNDATIONS FOR EARLY LITERACY DEVELOPMENT

Chapter Twelve

CHALLENGING THE READINESS MYTH: PARENTS' INVOLVEMENT IN EARLY LITERACY DEVELOPMENT

Christine Walsh

We knew that our six-year-old son, James, was really thinking like a reader or a writer when he participated in the following exchange after spontaneously hitting his father: “Why did you hit Dad, James?”

“It wasn’t a hit; it was an exclamation point!”

My husband, Brian, and I looked at each other with huge grins on our faces, both thinking, “Did he really say that?”

The instant at which James compared a nonverbal gesture (hitting Dad) to a punctuation mark (an exclamation point) told me so much about his level of understanding of language. It showed his ability to think abstractly and symbolically; we know he can linguistically use one object or idea to represent another, and he can draw comparisons. In his mind, the hit reminded him of a heavy punctuation mark or “hit” at the end of a sentence.

In most cases, a child learns spoken language before he learns to read or write; oral communication is the basis for all other language processes (Cambourne, 1988). I believed in this assumption for many years as a literacy educator. There was no reason not to believe it until I began closely watching a real language learner in my own home. In James’s case, and possibly in many other children’s cases, this was not the route literacy took. James, diagnosed with autism and global developmental delays at age three, did not speak before he could read and write. Until he was three and a half years old, we waited impatiently to hear “Mama” and “Dada,” but heard nothing. We wondered if he would ever have expressive language. Instead, James learned to read, write, and then speak.

Much has been written in past years about reading readiness, a theory that suggests there is a stage children pass through before they become readers (Leu & Kinzer, 1995), and that nonreaders really have no reading skills or abilities. If this is true, then if a child exhibits certain preacademic literacy behaviors now, can you predict how well he will read later? I laugh when I think about what this theory suggests. How can anyone really know for sure what literacy behaviors are going to lead to others, especially with children for whom language development is atypical? Literacy development is recursive and more complex than this; there are no lockstep stages or steps that all children must pass through. Even parents can't understand all the thinking that takes place for a child who is nonverbal. In James's case, he was more than ready to read even before kindergarten; he was already reading and we would have never known it had we not watched and listened carefully to what he was "telling" us.

LISTENING AND WATCHING, MOVEMENT AND GESTURES

We need to listen to children to learn how to teach them. But how does a parent listen when a child doesn't have a voice? How is James's early language development similar to and different from other children's because of his autism, because of the absence of oral communication, and because of his different way of "reading the world"?

There was really no consistently workable communication system for this very bright little boy who wanted to hear his own voice and see that it was being heard. Clearly, he wanted to make things happen but could not figure out how. So we learned and signed (using American Sign Language) a handful of words (e.g., "yes," "no," "please," "more," "thank you," "stop," "open," "all done," "play," "yellow," "blue," "stop"). In addition to signing, James and I would also touch the boldly printed word labels on particular objects I had placed around the house (e.g., TV, chair, door, cart, books, computer) and use flash cards with objects around the house to reinforce the idea that each thing has a series of letters (a word) that represents it. He was passing my "quizzes" with flying colors, and that is how I know he learned to read before he learned to speak. When I held up the card that said "door," he'd touch the door. When I showed the card for "computer," he would touch the computer. At three and a half, James spelled "books" out loud with no prompting as soon as he started talking because it had been written on every bookcase in the house.

Pointing and showing are two milestones in literacy, though these expressions are often taken for granted and neglected in literacy education textbooks. Most young children exhibit both as forms of purposeful communication. Pointing to objects, near and far, pointing to observations made, then looking to see if the parent/caregiver notices, is a highly complex skill. Bringing, shar-

ing, and showing objects that they find is another way children demonstrate their interpersonal literacy skills and understandings, even before solid oral communication patterns are developed. James did neither. No checking with us to see if we saw what he saw. No excitement over a toy or other object to the point where he'd bring it to us. At five, he began repeating the same phrase or word again and again, each time waiting for a response from the listener. He gets upset when there is none. In the car, he now points at and identifies all the signs and places as we pass by them. He is still developing the reciprocity of language that most children develop between two and four years of age. Literacy is happening, just not in the same order or in the same fashion as with other children.

James could nod "no," but nodding "yes" presented a problem. He still moves most of his upper body when nodding "yes," a more global body gesture instead of just a head bend from the neck. The up and down of "yes" for some reason is more difficult than the side to side of "no." So we decided to wear lanyards around our necks with signs/pictures for YES/NO on one side, and MORE/ALL GONE on the other. This became a constant in our communication exchange each day. He would point to the symbol that represented his desired response. We would also offer him choices throughout the day by showing our fists: one fist for milk, one fist for juice. Again, he would point to the fist that represented his desired choice. It served as a breakthrough in helping James find a voice he could use for real purposes in life. Thank you, early intervention!!

When I really watch carefully, I see that James's mind always seems to be more engaged when his body is also engaged (tactile, kinesthetic). I suspect this might be the case for most children. As adults, think of how much easier it is for us to exercise when we're conversing with a friend. We often walk longer distances when we partner walk and engage our minds in some kind of stimulating activity. Bodies and minds really need each other, a fact that some of us tend to forget after we leave childhood. Each morning before school starts, James and I dance and sing to at least one Wiggles song on the TV or CD player. His teacher thinks this helps him concentrate better once he gets to school. It literally "gets the wiggles out"!

WE LEARN TO READ BY READING

The single most important thing I have done as a parent is reading to James every day since shortly after he was born. I made sure to begin by telling him the title and the author of each book before starting it, and I would usually read two or three different books each time we read, such as *Goodnight Moon* (Brown, 1947) and *The Runaway Bunny* (Brown, 1942). These books are still his favorites and have the worn pages to prove it. Shortly after learning to

speak, James began reciting favorite titles and their authors like a seasoned reader. Even before learning to speak, he would choose a few books before bedtime each night, or he would find the books that he was asked to find in the book basket. It was probably a combination of the illustration and color and the words on the front cover that allowed him to remember authors and titles so quickly. I made sure to change the books in the book basket regularly so that he would be exposed to a variety of texts, but not so often that he wouldn't have a chance to fall in love with one or two or ten.

James could identify letters and spell and read words long before he could make his mouth produce sounds. We know this because as soon as he did begin speaking, he was uttering two, three, and four syllable words, spelling words, and reading words from picture books. I had barely heard my son's voice when one day, he looked at my coffee creamer on the kitchen table during breakfast, pointed to the words and said, "Coffee-Mate." I had to look at the label to believe it myself. I looked back at James in disbelief, "James, you're a reader!?" How in the world did that happen?

How did James learn to read? I am in awe at how invisible this process really was. If I had to attribute it to one thing, I would have to say that he learned to read simply by reading. Like the rest of us, he still is learning to read, the process still evolving at a good pace. But young readers literally learn language patterns, letter sounds, and relationships among ideas very naturally by participating in frequent, enjoyable reading events with more capable readers. We have always maintained and asked his teachers and therapists to maintain high expectations for him, to always assume he will be able to do something as opposed to starting with a deficit model, or believing that, because of his disability, he probably cannot accomplish something. James has far exceeded our expectations.

When teachers and parents encourage children to use picture/text connections in books they enjoy, by pointing to the picture and then the word as we read aloud to them, over time they will do the same. Taking picture walks or wonder walks with young readers is a great way to orient them to books. Young children often think in pictures, as do many autistic individuals (Grandin, 1995). Allowing James to create meaning with text through pictures was a motivational step that sustained his interest throughout his nonverbal years, so that by the time he began speaking, he was already hooked on reading and books.

I never allowed his disability to interfere with the idea that James would be literate, despite his inability to speak until almost age four. Now he jumps in bed each night ready with his favorite storybooks: *Curious George*, Jan Brett's *The Mitten* (1989), and the old standbys, *The Tale of Peter Rabbit* (Potter, 1991) and *The Poky Little Puppy* (Sebring, 1945). He still loves *The Runaway Bunny* (Sebring, 1942), because now he knows how to decode the words instead of

just reading the pictures and memorizing the words we have read over and over again. He loves Alexander's "no-good very bad day" books (Viorst, 1972), and just about all of Mem Fox's books, especially the rhymes in *Sleepy Bears* (1999) and the beautiful expression of love between mother and child in *Koala Lou* (1988). As 1st grade progresses, he is also branching out into nonfiction and informational stories: *Icky Bug Shapes* (2003) by Jerry Palotta and *Stellaluna* (1993) by Janelle Cannon are new favorites. All of this could not have happened in a split second, or even over the course of a week or a month, as soon as he learned to speak at almost four years old. It must have been gestating for some time!

All the while we were under the impression that maybe James's literacy skills and abilities were not going to emerge, that they might not even exist, his literacy development was alive and well, hard at work, probably working double time, trying to find a voice, meaning, purpose, and audience in his quiet little world. Why do we sometimes assume, when someone cannot express himself well, that he must have little of value to express?

James's wonderful speech therapist, Kristen, had a firm belief in repetitive, isolated drills in phonics, which challenged my long-standing philosophy in teaching literacy using a purely holistic approach. "He needs to know sound/symbol correspondence first in order to learn to read." I disagreed. Did she know from her years of working with autistic kids that he probably was already learning to read even though he wasn't speaking much yet? I felt it a waste of time to focus on letter sounds when he hadn't yet found his own voice.

James had many pre-reading skills before having this phonemic awareness. Thus, over the years, James was exposed to a variety of literacy activities, both discrete skills-based (e.g. applied behavior analysis, as described in Maurice, 1993) and holistic/child-centered (e.g., Greenspan's floortime model, 2006). Without Kristen's rigid instruction in letter sounds, I wonder if James would be reading as well as he does now. That combination of both approaches seemed to be a key, at least for one language learner. Children are "excellent critics of our theories" (Kane, 1995) once we stop and look and listen.

LEARNING TO WRITE AND DRAW: THE POWER OF VISUALS

Emergent readers often embed much of their meaning of stories and communicate many of their ideas in pictures before they learn to represent meaning in sound/symbol correspondences (letters and words). For many autistic people, too, seeing and thinking in pictures is much more powerful than just hearing language (Grandin, 1995). Simply put, some people create meaning more readily through patterns and visuals. When the members of James's kindergarten class were asked to draw a picture of their family standing in front of their house, then add and color the clothes that each family member might

be wearing, I was heartbroken for James, who was just learning how to draw a circle with eyes, nose, and mouth on the paper. In his mind he was likely thinking of Mom and Dad and James and our dog, Khemo; however, given his delayed fine motor and motor-planning skills, he could only eke out a huge happy face with two eyes. I remember being amazed at the detail in other children's illustrations.

Calkins (1994) encourages us to "read" our children's drawn stories as much as we listen to their spoken stories and to encourage them to add more detail and embellish upon the good ideas. "How much was it?" "What color were they?" "How long did it take?" "What were YOU doing when this happened?" By asking probing questions like these, we are first and most importantly telling our children that their ideas are interesting and important to us and we want to know more about what and how they are thinking. In addition, we are getting them to think more laterally and more deeply about each thought they are sharing with us. We are giving them tools they will need to add description and detail to their written work later, when writing becomes a viable communication tool for them. Adding detail to pictures now will lead to more vivid detail and description later. If we make it a game and probe regularly, they will begin asking us and then themselves the very questions we ask them: except when the child cannot draw what he is thinking.

Instead of James's kindergarten teacher asking him over and over again to draw these pictures on large blank pieces of white paper all year long (which other children loved and he dreaded!), she could have fostered his sense of story through oral language first, since he was talking by then. She needed to show him that his language does count, that it does have a shape to it. She needed to help him get the detail down somehow if that was the objective, then later attempt to teach him to draw what he was saying and thinking. Doing it in a way that reversed the order in which his language processes were acquired might have helped James progress more as a literacy learner.

LEARNING TO SPEAK: LAST BUT NOT LEAST

Communication and interaction with others are what form and sustain our relationships in life. But parents and teachers cannot make the assumption that for all people these abilities simply develop; they are neither a natural progression nor an effortless event for all children. I am often reminded about Greenspan's "communication circles" and how they changed my way of thinking about early literacy. Greenspan suggests, after years of researching hundreds of young children of varying abilities and ages, that in one act of communication between a sender/speaker and a receiver/listener, there can be 30 or more completed circles, depending on the relationship between the two persons. Saying one thing and getting a response back is one circle. Nonverbal

gestures, such as sharing a toy, a quizzical look, or a wave signifying “hi,” are also parts of one circle. An example of a completed circle would be saying “Hello!” to someone and receiving a “Hello!” in return, or giving someone an object and getting a smile in return.

When I started taking a closer look at James’s communication patterns at the time when he was three and four years old, I was counting maybe one or two circles at any one time, meaning that if I said something to him and he acted on my comment or question (first circle), then I would initiate a second circle by making a comment or asking a question and receive a response of some kind back (second circle). And that would be the extent of our social interaction. It happens in a matter of seconds. Ideally, we want to continually increase the number of consecutive circles that occur between the parent and child. Often people with autism will not respond after the first or second initiation, or their response will not relate directly to the speaker’s content, which means it takes much longer for one circle to be completed. After many years of therapy and good modeling, James is now able to complete up to 10 communication circles, again depending on with whom and about what he is interacting.

We were encouraged by a behavior consultant to withhold granting James’s requests until he made good enough approximations in signs or pointing or with pictures that communicated what he wanted (picture exchange communication system). Even though I knew instinctively what he wanted, I had to pretend I did not know, until he was able to show me/us somehow what it was. This was one of the hardest things I had to do as a mother. We are so quick to react, to give, to nurture, even if it means our child is becoming more and more dependent on us. I needed to be reminded that our goal was for James to become more independent, more skilled at communicating his own needs.

Interestingly, as soon as James began speaking, he went around the house taking down each and every word label! He also could orally spell any of those words without looking at them, if quizzed. He still can. His visual memory is simply amazing. He can sometimes recite much of a 30-page book verbatim after seeing it and reading it aloud with me only four or five times. So while we remained under the impression that maybe James’s literacy skills and abilities were untapped or nonexistent, his literacy development had progressed immeasurably. His young brain was probably working very hard, trying to find a voice, meaning, purpose, and audience for language in his quiet little world. Finally, after years of worrying that he would never speak, the first words we heard were: “mud puddle” as he pointed to one outside. Then “purple” the same day. Hooray!

EARLY LITERACY AT HOME AND SCHOOL

Nothing can replace reading with a child at home. Pamela Michel, in *The Child’s View of Reading* (1994), explains that children’s perceptions of reading

at home are very different from their perceptions of reading at school, and that “the child’s perspective is critical to understanding how children learn to read” (p. 11). This was clearly illustrated when I was helping James choose a book to read before bed one night. I picked up a book we had not yet read, one that came from his school library. (I often wonder how James goes about choosing books during library time.) “No, Mom, I don’t want a school book; I want this one.” Each week he has a few school library books in his backpack, but none of them ever make it to the top of the read-aloud pile at home. Most times they are returned without being opened.

Likewise, elementary school reading instruction too often moves children away from seeing reading as a meaning-making activity and instead gives children the idea that reading in school is “stand up, sit down,” “fill in the blanks,” and “too much seatwork” (Michel, 1994). Sadly, paper and pencil activities and teacher directions have replaced pleasure and engagement in the process of learning to read in these classrooms. We desperately need to give our children a more hopeful and purposeful version of what reading really is, by doing it at home with them every single day and letting them be in charge.

Parents need to create a print-rich environment in their homes that models for children the literacy they are expected to acquire in their world. This will help them learn from what they read and plan their behavior according to what the signs say to them. As we play at home, we put up railroad crossing signs, store signs (Home Depot, Target, etc.), stop and go signs, end of the road signs, North, South, East, and West signs. He loves the fact that “JCT” stands for “junction,” then he looks for that sign when we drive around. Now he says that “W” stands for “West” and “N” stands for “North,” which I never mentioned to him.

As parents, we can teach so much about language to children by taking them for a ride in the car and using our language to describe how and where we are going. New vocabulary words abound, including directions such as “left,” “right,” and “yield.” “Yellow means caution!” James yells from the back seat. Prepositions are also easy to teach when you are doing something fun: “under” the bridge, “over” the hill, “next to” the farmhouse, swinging “up” high, “behind” the building! The colors red, yellow, and green coordinate with the “red light, green light” game played in physical education class and at swim lessons at the YMCA: kick hard for green, slow down for yellow, stop kicking for red. This is all purposeful, authentic communication consistently and happily modeled by adults in real contexts. “Children benefit when we establish literacy in the social and cultural contexts of their everyday lives” (Taylor & Strickland, 1989, p. 275).

Though at home each night James reads 20- and 30-page books independently, at school he is unable to focus on text for more than a few pages at a time. When asked to choose a book for free choice reading, rather than select-

ing a text on his true reading level, James chooses *Chicka Chicka Boom Boom* (Martin, 1989), a preschool favorite that tells more about his social/emotional age than it does about his actual literacy development. His teachers do not fully know yet what James's literacy successes are. I need to stay in touch with them, with him, so we all get to know the complete James. We will all nudge him toward literature choices that will challenge him, while giving him some measure of control over books he loves to read just for fun.

James's 1st-grade teacher has already found out that when she puts her arm around him during reading group time, he laces his arm around hers, and he is able to sit and pay attention for longer periods of time than when he is sitting on his own without that tight comforting feeling. She is creating for him that homey feeling that he gets every night as we lie in his bed with our heads on the pillow taking turns reading a page at a time.

LOVING GOOD LITERATURE

An important question for literacy teachers and parents is what kinds of texts motivate children to read? James reacts to storybooks quite differently than to what I would call nonsense literature. Despite his relatively well-developed sense of humor, he doesn't seem to be greatly motivated by texts with which he cannot make meaning. It seems as though texts whose primary purpose is to reinforce the interesting sounds and spelling patterns of our language do not turn him on. While the characters are silly, the silliness does not hold his interest.

Tonight we barely made it through another lengthy nonsense text that asks the reader to consider a similar scenario on just about every page. James's legs were up in the air, his feet hitting the book, his humming clearly telling me that he was done. When I asked him if we should stop reading, he first said "no," but then when I paused a few pages later, he quickly threw the book to the bottom of his bed. I am secretly happy he has graduated from this stage of development! James rarely abandons a book once we've started reading it. But this one had no plot, no real meaning. And he wasn't going to be fooled. It's okay to let children abandon a book if it has little interest for them. There are so many books available that will be motivating; let's not waste our time on ones that are not. Good teachers allow the child to determine and let us know which are right for them at certain times.

Likewise, James has no interest in reading photocopies of stories that are sent home every Friday night, with a homework assignment to read them again and again and keep them at home. They contain contrived sentences with no flow and characters that are not real. I don't blame him for not wanting to read these books when he has hundreds of really exciting stories to listen to and read and look at, books with interesting sounds and spelling patterns. He is getting more from books of high interest, books that have

characters he can really relate to, books that have sentences that relate to each other, books that have a variety of words to roll off his tongue like real English language, all of this combining to form a story with meaning that a young reader can think about, learn from, and enjoy. Imagine having a discussion about something other than the short “a” and short “i” sound after reading Harcourt’s *Ham? Hat?* (Williams, 2005) the purpose for which is also to teach the short “a” sound.

I don’t know about James, but I was having trouble keeping all the names straight myself! I had to turn back a page or two to make sure I kept the characters’ names straight. Too many words with similar sounds made fluency and comprehension nearly impossible even for an experienced reader. Plus, I couldn’t have cared less about who had the ham and who had the hat at the end.

I allowed James to skim over these books when I saw his lack of engagement. I can focus on the short vowel sounds in so many other, more fun books if need be. If, and only if, James were having difficulty decoding words like a 1st grader, I might consider pulling these fake (oops!) books out over the weekend, but that is not the case. James is an excellent decoder. When I begin reading these books with him, I see his anxiety increase. I try to get him to say why he doesn’t like what we are reading, but I don’t think he quite knows why he doesn’t like it. It seems hard for him to make his mouth twist around to fit all of these sounds that usually do not go together. It’s English, but no one speaks or writes this way in real life. He knows it. He understands language enough to know this. Why do teachers continue to spend valuable instructional time making strong readers sound out words and read artificially created texts, just to teach the skills they have already mastered? What is the effect on student motivation when they do this?

I watch and listen and respect James’s wishes. We last about two pages into the basal story when he runs to get something better, like this one, from H. A. Rey’s (1941) timeless picture book, *Curious George*:

George wanted to get out.
 He climbed up to the window to try the bars.
 Just then the watchman came in.
 He got on the wooden bed to catch George.
 But the watchman was too big and heavy.
 The bed tipped up,
 the watchman fell over,
 and, quick as lightning,
 George ran out through the open door. (Rey, 1941, p. 34)

James is glued. This story has suspense, a funny and interesting story line that is easy to follow, a character children can relate to, and text that challenges young readers to develop their decoding skills while they are comprehending and

learning new (not artificially selected) vocabulary. Children deserve to escape to the worlds offered to them through good literature. So do adults. Why not do it together? Imagine the rich discussions you can have together after reading about George and all of his curious antics! Now when we go to the local library, James looks for other *Curious George* books, videos, CDs, and so on. We hold his stuffed Curious George monkey from the 1960s while we read about George!

I will tell James that there are many kinds of reading, and that the little nonsense books are just one type of reading. They are different, but that they can teach us things. I do not want him to think that his teacher can make up a homework assignment and we can simply choose not to do it. Just as Jeanne Reardon (1990) teaches her 1st graders that reading tests are just another genre, I also need to show James that reading these texts serves a purpose, too. Maybe I will tell him we are practicing reading words with the short “a” sound, and that we aren’t going to be looking for a story or funny characters. Or maybe I’ll just have him read the list of high-frequency and decodable words at the end of the story, and if he is successful, I’ll say we’ve done the homework for tonight. He does feel like such a big boy when it’s homework time, always glad to do it before playing. There are so many different purposes for reading and it’s never too early to point them out.

CONCLUSION

Until now I assumed all children needed to learn literacy in the same order: speak, then read, then write. James is a perfect example of our need to revisit our beliefs about language acquisition and language learning, as educators who are prepared to teach all children, not just children who fall into the neat mainstream of education. How many other parents and teachers are attempting to help their children speak, then read, and then write, in that order? Just as the writing process is recursive, so, too, is the process of learning all language. It is very individual, nonsequential, and nonlinear. It cannot be taught in a formulaic way to all children with identical results.

What kind of literacy support do teachers and parents, who teach children for whom the “normal” progression of developmental steps is out of order, need? What do we do with the children who challenge our assumptions about how children learn to read, write, speak, and listen for a variety of purposes? As James has taught us, contrary to the readiness theory, there is no one natural way to get ready to read or learn to read. Children’s progression through literacy processes may not follow a neat, logical order, and might instead result in something completely unique. Our scaffold must support the process, whatever shape it takes.

James has also taught us that when there is a voice, there is literacy in one form or another. With any luck, James will have teachers who empower him

to use his own voice to make his own decisions and to show the world who he is and what he is capable of. When we stop more often, look more closely, and listen more carefully, parents and teachers alike can use what our children teach us to make critical literacy decisions that can influence them for a lifetime.

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Chapter Thirteen

PLAY AND EARLY LITERACY IN THESE TIMES

Kathleen Roskos and James Christie

Play has long had a key role in early childhood education, where it has been viewed as an efficient medium for promoting all aspects of child development (e.g., Van Hoorn, Nourot, Scales, & Alward, 2007). Preschool programs have routinely allocated large blocks of time to play-related activities. Play has indeed been at the center of the early childhood curriculum.

Recently, major policy shifts in early childhood education, including the standards movement and the new science-based perspective on early learning are threatening to erode play's stellar curricular status. Zigler and Bishop-Josef (2004, p. 1) warn:

In recent years, children's play has come under serious attack. Many preschools and elementary schools have reduced or even eliminated play time from their schedules.... Play is being replaced by lessons targeting cognitive development and the content of standardized testing, particularly in the area of literacy and reading.

Long-standing beliefs about play as the antithesis of work and a lack of strong evidence linking play with academic outcomes have worked together to marginalize play as a context for learning school readiness skills. In today's pragmatic climate, if an activity is not directly linked with the skills needed for school success, that activity can be quickly forced out of the early childhood curriculum.

Play is resilient and its defenders steadfast, however. Even as current policy initiatives threaten play's role in early childhood education, these same policies also open up new possibilities for understanding and promoting the play-literacy

interface. Recent curriculum guidance in the UK, for example, sets out a *pedagogy of play*, broadly defined as providing play-based activities, designing play-learning environments, and using play-supportive teaching techniques (Wood & Attfield, 2005). Movement in this direction is also occurring in the United States. At the Play = Learning conference held at Yale University in 2005, a number of play scholars argued convincingly for play-learning links at home and school (Singer, Golinkoff, & Hirsh-Pasek, 2006).

Over the past decade, we have reviewed play-literacy studies through different lenses, observing the strengths of the relationship and the yet unknown. Given the rapid changes in early education at the start of this century, we think it is useful to revisit this area of research again, to benchmark what we know and still do not know about the play-literacy interface. We have organized our review of play/literacy studies around three perspectives: (a) what play does for the child's developing mind; (b) how it contributes to the literacy learning environment; and (c) its role as social activity that scaffolds literacy performances and mediates literacy practices.

THE PLAYFUL MIND

Is play biological or cultural in origin? There is a long-standing debate about this issue. Although no clear answer is in sight, neuroscience is unearthing new data showing that the young brain is amazingly versatile and a "jungle of potentials" (Sutton-Smith, 1999, p. 246). Play may be a biological necessity in early childhood because it supplies the brain with what it needs to grow: exploring, testing ideas and skills, combining materials and actions, repeating actions to the point of automaticity, inventing, and pretending. This playful mind perspective opens up new avenues of thought about the play-literacy interface.

Examining the play-literacy relationship from the perspective of what is going on the child's mind addresses the question, "Does play promote cognitive growth that lays the foundations for literacy learning?" In a recent review, Smith (2007) cited three sources of evidence of play's role in cognitive growth: (a) the evolutionary history of play, which suggests that play may be a general-purpose learning mechanism; (b) cross-cultural evidence that pretend play is always present in young children and thus is likely to be useful; and (c) evidence on the extent to which play is designed to provide opportunities develop specific cognitive skills, such as narrative skills and theory of mind, that in turn may promote literacy learning.

Smith examined the "design" research studies in more detail, focusing on evidence that pretend play contributes to the development of theory of mind, the awareness of one's own and other people's knowledge and beliefs. Results from both correlational and experimental studies suggest that make-believe

play may increase children's theory of mind, which may later help them with planning, guiding, and monitoring their own intellectual activity, including reading and writing (Flavell & Hartman, 2004). Smith points out a number of methodological limitations of both types of research, however, such as the difficulties that "third factors" can create in correlational studies and a multitude of issues that can confound the findings of experimental research (e.g., inappropriate controls, experimenter bias).

Smith concludes that evidence supports that pretend play may *help* to bring about theory of mind and other cognitive skills, but the current evidence does not support the contention that make-believe play is *necessary* for their development. Make-believe play appears to be one avenue for developing the cognitive equipment that will lay the foundation for successful literacy acquisition, but these same skills can be also learned through direct instruction. Smith does point out that play has one advantage over instruction—play is highly motivating and enjoying, giving it an important advantage with young children. Little research has been done to explore this potential motivation advantage, however.

Along these lines, a recent study conducted by Sawyer (2002) focused on the "design features" of pretend play that may lead to the development of narrative competence, the ability to express and make sense of experiences through stories. He points out structural similarities between pretend play and narrative. Both make-believe play and narrative (a) are framed as alternative worlds, distinct from everyday life; (b) have fictional characters; (c) involve decontextualized language; and (d) have plot elements (characters, goals, actions to attain goals, and resolutions). When pretend play becomes social and occurs in groups of children, another even more important parallel arises. Group make-believe play and narrative both involve *collaborative emergence*, in which the outcome of the activity is not determined by an individual; rather it results from the collective contributions of each member. Sawyer proposes that group make-believe provides children with experience of a form of improvisation. When children collaborate in play, their contributions are evaluated and sometimes accepted and other times rejected by playmates. Each contribution builds on the prior turns of others, resulting in the gradual emergence of an improvised narrative. To successfully participate in group pretend play, children must negotiate with each other and coordinate their actions and symbolic transformations (e.g., everyone needs to know that the rope is a pretend hose to be used to fight fires). This negotiation draws children's attention to the features of narrative and also requires them to make judgments about what other players know and understand—the theory of mind discussed in Smith's (2007) review. The collaborative nature of this play improvisation creates mutual enculturation, in which children learn to construct meaning in conventional ways that can be understood by others, building a foundation for writing.

Rowe conducted two related studies, one with her colleagues and one alone: (a) a nine-month naturalistic study of two- and three-year-old children's book-related play in a preschool classroom (Rowe, Fitch, & Bass, 2003); and (b) a case study of her own child's literacy learning from ages two to four (Rowe, 1994). Data from both studies showed that the young children's book-related play involved a number of cognitive activities that may promote literacy acquisition. For example, the young children used book-related toys to connect book content to concrete objects (e.g., miniature dinosaurs) and to express personal responses to books (e.g., the use of a toy to punish another toy that represents a "bad" character in the story). This type of play has the potential to bolster the development of symbolic representation. Rowe also discovered that children engaged in play that appeared to clarify the author's meaning and build new concepts. She gives an example of how her son was confused about the concept of a steam engine in the book *Mike Mulligan and His Steam Shovel* (Burton, 1939) and used play to sort this out. He pretended that his closet was the boiler and that a wooden spoon was a coal shovel.

Our view of the play-mind connection is that it appears likely that pretend play *can* lead to the development of cognitive skills that promote early literacy learning. It is also likely, however, that these same early literacy skills can be learned just as well, if not more efficiently, through other means such as interactive storybook reading, shared writing, and age-appropriate forms of direct instruction. As Smith (2007) pointed out, play does appear to have some potential advantages as a learning medium for young children, such as high interest, engagement, and motivation. Yet these features of literacy-related play have not yet received much attention from researchers. We think back to the excitement that was initially generated by Sylva, Bruner, and Genova's (1976) finding that play has a facilitative effect on children's problem-solving abilities. In this study, children had to solve a problem that involved clamping sticks together in order to retrieve a marble or piece of chalk that was out of reach. Children who were allowed to play with the clamps and sticks did just as well at solving this lure retrieval problem as the children who were directly trained to solve it. In addition, the play condition had an *advantage*. The children who played with materials were much more persistent in their attempts to solve the problem than those who were taught to solve it. Failed attempts did not appear to frustrate them, because they were just playing around with the materials. Later research indicated that these results may have been partially due to experimenter bias (Simon & Smith, 1983), but the notion that play has a motivational edge warrants further study.

Our point is that in this new era of early literacy "basics," it is going to take more than studies to show that play *can* result in children engaging in

activities that are *likely* to promote early literacy. Research is needed to show that play experiences or curricula that have a strong play component are at least as effective as, if not more so than, alternative means of instruction.

THE PLAY-LITERACY INSTRUCTIONAL ENVIRONMENT

Are playful early experiences with print and books beneficial? That question has been asked often in the play-literacy research—and the answer is yes. Literacy-enriched play environments encourage more play with print, support book-reading, develop language skills, and motivate children to read and write (Roskos & Christie, 2004). What remains unanswered, however, is the question as to whether playful experiences with literacy result in meaningful improvements in children's later academic achievement? If so, how do language and literacy-rich play experiences and the play environment help shape literacy development in different ways at different times?

We have recently examined the relationship between play, literacy, and instruction at the curriculum level by focusing on the concept of *networked play* and its role in helping children learn the new preschool academic basics (Roskos & Christie, 2007). Our review examines the rise of three megatrends in early education and their impact on play: (1) the new science-based approach to early education; (2) the movement toward early childhood learning standards and standards-based education; and (3) the view that early literacy is the cornerstone of school readiness. We view the impact of these trends as less dire than do many play advocates, provided that early educators expand play's role to complement and enhance the new pre-K basics. In the past, play has functioned as a stand-alone activity, isolated from the rest of the curriculum. Play themes and materials were chosen on their own merit to elicit rich play, with little regard for how this play was connected to what went on during large-group circle time and small-group instruction. This needs to change. We believe that if play is to thrive in the current educational environment, a considerable amount of classroom play needs to be closely connected or *networked* with the academic curriculum. This can be accomplished by linking play environments and activities with the standards-based content taught in large- and small-group settings. In addition, teachers need to take an active role during play periods and guide children's play activities toward instructional goals.

As a case in point, Han's (2004) recent research examines the play-literacy instructional environment at a more specific level by looking at how child characteristics—play style and literacy ability—relate to children's access to the play environment and supportive teacher interactions. Previous research on literacy-enriched play environments has tended to be unidirectional, focusing on the effects of the environment and teacher scaffolding on children's

play and literacy behavior. Han examines these interactions from a multidirectional, bioecological perspective: the environment affects the child and the child influences the environment. Han's findings suggest that children's play preferences appeared to influence their choice of play setting, which, in turn, influenced their access to play materials and opportunities. Children's play predispositions also appeared to affect the amount and type of interaction that children had with teachers. Dramatists, who expressed a keen interest in people and group pretend play, spent more of their time in the dramatic play and art centers and were exposed to richer oral language, interactive story-book reading, and other supportive teacher interactions. Patterners, who were interested in objects and their design possibilities, spent most of their time in the block and computer areas and received less attention from teachers. Han interpreted her findings to indicate that the literacy-enriched play strategy, as it is commonly implemented, may be more effective for dramatists than for patterners. She pointed out the need to develop literacy play strategies that accommodate the interests and abilities of children with diverse play interests.

We believe that current research offers a ray of hope for the future of play in the current science-based early education environment. However, there is difficult work to be done. In an earlier review, we have pointed out the need for connecting many (but not all) play activities with the academic curriculum, so that play directly supports standards-based educational outcomes (Roskos & Christie, 2007). There is great need for carefully controlled experimental studies to compare this type of networked play curriculum with programs that rely mainly on direct instruction and tiered interventions (i.e., skill-and-drill curriculums). It's not enough to argue that play is beneficial for the whole child. We need evidence that play-based curricula are as effective as programs that do not include play, if not more effective. Our hunch is that, if given a fair test, programs that connect play and instruction will do just as well as instruction-only programs in terms of learning the basics. In addition, networked play programs should produce some extra benefits in the areas of child engagement, motivation, and self-regulation.

Han's research (2004) points out the importance of taking individual differences into account when designing curricula and doing evaluation studies. Effective curricula should include activities that appeal to the interests of different genders, cultural backgrounds, and basic personality characteristics such as play predisposition. For example, curricula that network play and instruction should include literacy-enriched, theme-related activities in all centers—dramatic play, blocks, manipulatives, art, and computers. This will help ensure that *all* children get the academic, social, and emotional benefits of

play activity. Evaluation research should always use designs that allow subject by treatment interactions to be examined.

THE PLAY-LITERACY SOCIAL CONTEXT

Can social relationships and local literacy-in-play practices shape literacy development? We have only scratched the surface on this question, which shifts the focus of attention from *what's going on in there* (inside the head) to *what's going on out there* (outside the head in the social milieu). Fundamentally the sociocultural perspective seeks to understand the influences of social participation and human relationships, whether in peer-led or adult-led situations. It attempts to describe children's participation in local literacy events, their position or role in these events, the ideological assumptions that literacy events hold, and the literacy objects and spaces used to engage in literacy activity (Rowe, 2006). A sociocultural focus expands the agenda for play-literacy research by broadening the scope of the *who, what, when, and where* of investigation. It broadens the lens on literacy development, attempting to trace change from its earliest roots, and urges new prospective theoretical models to capture this dynamic, as in microgenetic studies (Yaden, 2006). The study of the play-literacy interface from this perspective is moving forward, but in many ways it is a slow go due to the methodological challenges of documenting multiple, interacting systems.

Three studies are noteworthy here. Neuman and Gallagher (1994) investigated the effectiveness of an intervention program designed to help teenage mothers enhance the quality of their communicative interactions with their children during everyday home literacy activities and routines. This everyday literacy approach differs from that of previous family literacy programs that have attempted to train parents to provide school-like experiences for their children. The Neuman and Gallagher intervention used a guided participation strategy, derived from Rogoff's work (1990), that prods children use their imaginations, make plans, and take personal responsibility for accomplishing everyday tasks. In short they try their hand at mental work that holds much in common with that of literacy. Mothers are taught a four-step strategy: (a) Get Set, in which the mother adjusts her level involvement to match the child's abilities; (b) Gives Meaning, in which she focuses the child's attention on certain aspects of activity through labeling, comparing, contrasting, and/or elaborating; (c) Build Bridges, in which she helps connect the current activity to her child's prior knowledge and experiences; and (d) Step Back, in which the mother phases out her support so that the child takes control of the task.

Neuman and Gallagher investigated the effectiveness of the four-step strategy in three contexts: storybook reading, instruction, and play. Findings

revealed that the storybook reading context provided the most opportunities for mothers to give meaning to experience. In the play context, mothers were more likely to build bridges, helping children employ their imaginations. This can promote distancing, the ability to separate one's thinking from concrete here-and-now reality. Instruction appeared to provide a situation in which mothers could step back and hand over responsibility to their children.

Examining the sociocultural side of play-literacy connections from another angle, Hall (2007) approached the in-school/out-of-school dichotomy from a more critical perspective that draws heavily on a social literacy, a view that emanates from anthropology and sociology. Social literacy emphasizes how literacy is used in everyday life outside of school settings. Hall uses the distinction between *ideological* (everyday life) versus *autonomous* (school) literacy as the rationale for a new type of adult involvement in play. Hall argues that teachers should set up situations that require children to use *ideological* forms of literacy in connection with their play. This involves setting up problems or obstacles that children need to overcome before they can continue with their play (e.g., getting planning permission to build a play garage). This is quite different from the play facilitator role that is typically advocated in the play-literacy literature (Roskos & Neuman, 1993; Enz & Christie, 1997). Rather than simply assisting children's play efforts, Hall recommends that teachers stretch children's literacy skills by presenting them with challenges that link play with real life. Here the teacher acts as a gadfly or provocative stimulus, presenting children with situations and problems that link play with real-world *ideological* literacy activities. Further research is needed to understand the promise of this strategy in literacy-enriched play settings.

Deeply rooted in a Vygotskian perspective, Bodrova and Leong (2006) have investigated the play-literacy connection in a series of formative field studies. Make-believe play, according to Vygotsky, creates its own zone of proximal development for acquiring the mental tools (e.g., symbolic representation, metalinguistic awareness, and self-regulation) that are needed to learn to read and write. Bodrova and Leong have developed a *play-planning* strategy that promotes the acquisition of these mental tools. The teacher leads a 10-minute, play-planning period prior to center time in which each child makes his/her own plan for what he/she will do in centers. Teachers guide children to use these plans to manage their own behavior and to resolve conflicts with other players. Initially, children's play plans consist of meaningful scribbles. In time, the plans progress to drawings and then to emergent writing. When children are ready to use writing in their plans, teachers support the process with scaffolded writing. They teach children to write lines that serve as placeholders for the words the child wants to write. Initially, the child dictates words, and the teacher writes them on the child's lines. Soon, children begin writing their own words using invented spelling. Again, the teacher provides a support tool:

picture alphabet charts. Eventually, children begin reading each other's writing, providing social motivation to use more conventional forms of spelling to represent words.

One theme that connects all of these sociocultural-based studies of the play/literacy relationship is that each expands the definition of literacy beyond traditional academic boundaries and recognizes that literacy is a social practice in which children create meaning with the help of others. Neuman and Gallagher's family literacy intervention is embedded in everyday interactions between mother and child. Hall's approach to literacy-enriched play is connected with real-life literacy activities such as dealing with planning permits, help-wanted ads, and job applications. Literacy in Bodrova and Leong's play-planning intervention involves meaning-laden scribbles, drawings, and scaffolded writing used to plan and manage play activities. Another common thread found in the sociocultural perspective is adult scaffolding. Parents or teachers supply temporary assistance to promote children's play, language, and early literacy. This scaffolding takes several forms: guided participation (Neuman), play challenges and hurdles (Hall), and play planning (Bodrova and Leong). In each of these strategies, the adult raises the bar, while at the same time providing temporary assistance that helps children progress to the next level of development.

RESEARCH TO PRACTICE

So where are we now in this endeavor to understand the zone of convergence between play and literacy? From our at-a-glance survey, we can see clearly the cognitive processes that merge in play and literacy (e.g., using symbols to convey meaning), especially in the renewed emphasis on children's developing theory of mind. But we lack the benefit of basic neuroscience research that goes to the core of the neural mechanisms that play and early literacy precursors may share (e.g., self-regulatory abilities). The developing mind, after all, is housed in a developing brain that organizes core processes at a neural level. Basic research along these lines has the potential to add a new dimension to our understanding of the playful mind.

Some new studies show that we are gaining ground in learning about the external environments that support the transfer of play's processes and skills to the demands of literacy. Environments differentially support individual play propensities with consequences for early literacy exposure. We are also making headway in understanding the role of instructional resources as capacity builders in the educational environment for linking play and literacy in more productive ways. Networked play curricula and more knowledgeable teachers, for example, increase the potential of the learning environment for connecting play and literacy activities. Future studies should attempt to unbundle

(and reassemble) the key components of instructional capacity in the early childhood classroom environment, including the factors of teacher knowledge, quality of materials and play objects, and overall culture of learning.

Too little attention, however, has been paid to the digital turn at the play-literacy interface, which is surprising given the rapid expansion in modern societies of new technologies such as televisions, DVDs, computers, handheld computers, cell phones, and computer games (Larson & Marsh, 2005). Clearly this is an area ripe for new studies that examine the links between play processes (e.g., engaging in semiotic activity) and new concepts of print involving nonlinear, nonsequential, multilayered negotiations of multimodal texts (Hassett, 2006). Early literacy learning in a new media age, in fact, may spur a resurgence of social play in early education because its demands for complex, abstract thinking (e.g., imagining, negotiating, improvising) are closely related to those needed for negotiating multimodal texts (navigating screens, interpreting images, parallel processing).

While the research base on the play-literacy connection is relatively thin, there is enough evidence that specific play strategies may yield early literacy learning benefits. Providing for book-related dramatic play and group collaborative pretend play has important implications for children's narrative competence. Creating high-quality, literacy-rich environments that appeal to children's different interests and preferences supports literacy engagement. Coaching play by scaffolding play sequences and introducing challenges into play scenarios can make a difference in literacy play quality. Play, in sum, earns its place in a strong preschool and kindergarten curriculum, even in this era of accountability and early childhood content standards.

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Chapter Fourteen

MEDIA, POPULAR CULTURE, AND LITERACY LEARNING IN THE TWENTY-FIRST CENTURY

Donna J. Grace

At the very moment when children's literacy learning in school is increasingly dependent upon a narrow, skills-based curriculum focused on decoding and encoding print, their out-of-school literacies encompass communicating and meaning making in multimodal worlds composed of sound, symbols, images, and interactivity. In addition to books, children are growing up interpreting and making sense of a multitude of texts that include film, television, videos, DVDs, computer and video games, and Internet Web sites. Electronic images have as much, or more, presence in students' lives as printed texts. As David Buckingham (2003) contends, the media have become the major means of cultural expression and communication.

Print literacy is no longer adequate to address the realities of children's experiences or to prepare them for life in a rapidly changing world. Yet the classroom continues to privilege the printed word. Children learn much from the media they engage with in their everyday lives, yet there is much more they could and should learn. The need to broaden school definitions of literacy and bring children's out-of-school interests and communicational practices into the classroom is long overdue.

In this chapter, I draw from research and the results of a two-year project with six-to eight-year-old children in an elementary school in Hawaii to argue for the inclusion of media and popular culture in the school lives of children (Grace & Tobin, 2002). This research contributes to a growing body of evidence demonstrating that incorporating students' out-of-school interests and experiences in the classroom provides (i) pathways into classroom literacy

practices for reluctant readers and writers; (ii) opportunities for the transfer of children's knowledge of the media and popular culture to literacy in school; (iii) spaces for children to rework some of the messages of the media; (iv) sites for the exploration of identities; and (v) contexts for developing critical literacy skills necessary for analyzing and evaluating media. I begin with a discussion of the obstacles to this process.

PERCEPTIONS ABOUT CHILDREN'S RELATIONSHIP WITH THE MEDIA

In 1984, Patricia Greenfield wrote that "Television, video games, and other computer technology are here to stay, and . . . their growing pervasiveness makes it all the more urgent that we discover how best to use them" (p. 3). Yet, more than two decades later, the potential to build upon and expand children's knowledge of and experience with the media and popular culture lies largely untapped in the classroom. There are at least three underlying reasons for this: perceptions about the detrimental influence of the media and popular culture on children; teachers' lack of familiarity with and knowledge about children's interests in these areas; and the blurring of boundaries between the high (traditional academic content) and the low (popular culture) in the classroom.

Television, more than any other medium, has been blamed for numerous social ills. It is seen as seducing children away from reality and contributing to delinquency, amorality, acts of aggression, obesity, and declining literacy skills. Liberals and conservatives converge in their condemnation of this medium. The former have blamed television for transmitting particular worldviews, values, and lifestyle choices, and creating unnecessary wants and desires. Concerns have centered around war toys, stereotyping, consumerism, materialism, and the promotion of poorly made products and unhealthy food choices. On the other hand, those with more traditional and conservative political views have criticized television for violent and deviant content, for the destruction of American morals and values, and for generally turning children's brains to mush. Representative of this conservative position, Neil Postman (1985) has blamed the negative influence of television for what he sees as a decline in literacy, rational and analytical thought, and public discourse. In all of these positions, the child viewer continues to be seen as essentially passive, helpless and manipulated, and viewing pleasures are considered to be a form of deception, depravity, or a mindless waste of time.

A second reason for the failure to build upon children's knowledge of the media and popular culture in school is that students often have more knowledge about the media and popular culture than do their teachers. As noted by Chris Richards (in Buckingham, 1998, p. 142), school knowledge is typically considered to be what teachers possess and students do not. Students, unlike

most of their teachers, have grown up in a media-saturated world. Thus, they are often the experts in this area, leaving teachers on unsafe and unfamiliar ground. Teachers no longer have the upper hand, and therefore they avoid using the media and popular culture in the classroom.

The third reason for resistance to popular culture in the classroom relates to the deprecation of popular pleasures. Since the advent of comic books, the radio, and film, the media have been at the center of middle-class moral panics. Consequently, these areas of students' experience have typically been banned or frowned upon in the classroom. Considered to be a low form of culture, the popular is seen as lacking in worth and importance. It is rarely regarded as knowledge worth knowing.

What have we learned from the research regarding the impact of the media on children's literacy learning and academic achievement? After more than a half century of studies, there is actually little convincing research to back up the theories and speculation about the dangers of the media (Buckingham, 1993). There have been several studies, dating as far back as the 1950s, that found a negative association between television viewing and the development of reading skills and abilities. However, an association does not prove causation. In other words, one factor does not necessarily cause the other. Children who do not engage with their schooling, for various reasons, may prefer to watch television rather than read or do their homework. It might be another factor, or combination of factors, that causes their poor reading performance. In fact, when IQ is controlled for, the negative association between television viewing and academic achievement is greatly reduced or eliminated (Koolstra, van der Voort, & van der Kamp, 1997). In other words, it appears that children's basic levels of intelligence may have more to do with the development of reading skills than does television viewing. In addition, many of the studies that found a negative relationship between television viewing and academic achievement have been criticized for bias and flawed methodology. A major limitation of these studies has been the focus on a single factor, the number of viewing hours, without taking into consideration the context of the viewing or the type of programs viewed (Tyner, 1998).

Several longitudinal studies conducted in the United States have concluded that television viewing has no effect on the development of reading skills (Gaddy, 1986; Gortmaker, Salter, Walker, & Dietz, 1990; Ritchie, Price, & Roberts, 1987). A 1998 U.S. Department of Education review found no conclusive evidence that television viewing has any association with or correlation to reading scores (Tyner, 1998, p. 143). As asserted more recently by Alphonse Kohn (2000), "The conclusion that emerges from a review of more than a hundred empirical studies [is that] there is very little about television viewing, per se, that is cause for alarm, according to the available evidence" (p. 168). Other more important influences impacting children's literacy learning include

the home environment, parents' education, parenting characteristics, socioeconomic status, the community in which students live, peer social group affiliations, and students' intellectual abilities.

Although positive research findings about the media do not make the headlines as often as negative reports do, there is a growing body of evidence that not only dispels many of the fears about adverse effects but also suggests that the media may actually contribute to children's literacy learning. Earlier research in the area of cultural studies demonstrated that children are active viewers and do not absorb the messages of the media like sponges. For instance, children and youth have demonstrated their ability to interpret televisual texts in varying ways including acceptance, negotiation, and resistance to the texts' intended meanings (Hall, Hobson, Lowe, & Willis, 1980).

The findings of Hodge and Tripp (1986) have provided further evidence that television is not necessarily time out from thinking, as is commonly assumed. These researchers state that children need a diet rich in explicit fantasy cartoons, because such programs can help them to discriminate between reality and fantasy rather than confusing the two. Hodge and Tripp found that by the ages of eight or nine, children were able to interpret ideological messages in cartoons and identify contradictions and gaps in the story lines. The researchers conclude that children use television to think, and that their thinking is shaped by their stage of development.

The work of Hodge and Tripp is reinforced by Howard's findings (1998), which demonstrate that the three- and four-year-old children in Howard's study were intellectually stimulated by their favorite television shows and used these programs to think and talk about how the images related to reality. Roberts and Howard (2005) also found that the children participating in their research, two years old or younger, were active meaning makers when watching the television program *Teletubbies*. These children's attention levels were high and they frequently joined in with the action on the show. They were also able to make inferences and predictions, and put into practice language that they learned from the program.

Neuman (1988) found that young children who watched television between two and three hours per day had higher reading scores than those who watched one hour or less. Browne (1999) reported two studies with similar results. The first is a 1995 survey study conducted by the National Foundation for Educational Research (Brooks, Schagen, & Nastat, 1997), involving approximately 5,000 young students, in which the researchers found that children who watched little or no television were not necessarily better readers than children who watched moderate amounts. In fact, the children who watched television sometimes achieved higher scores than the children who never watched television. The second study, in India (Shasti & Mohite, 1997), concluded that the average reading achievement scores of children who were

heavy, moderate, and light television viewers were not significantly different on tests of listening, comprehension, and silent reading. Heavy viewers did, however, score lower than light viewers in the area of oral reading. Gentzkow and Shapiro (2006) found that students who watched television during their preschool years scored well on standardized verbal and reading texts later in life, especially children from homes where English was not the primary language, children whose mothers did not complete high school, and nonwhite children.

Hence, there is ample research refuting the view that television viewing is inherently detrimental to the development of children's academic skills. There are also research findings disputing the commonly held belief that children's use of the media displaces reading as an out-of-school activity. Browne (1999) reported an Australian study in which children with access to two television channels read more books than children in communities with one channel or no television. Margaret Mackey (2001) found that spin-off products from popular books such as the Harry Potter series, including movies, video and computer games, board games, Internet sites, and toys, do not replace the reading of the books but actually support it. Mackey contends that children's interests in popular cultural products accompany rather than undermine their interest in reading. Marsh and Millard (2000, p. 50) reference a 1997 study by Robinson in which Robinson notes that although the Thomas the Tank Engine books have been around a long time, book sales increased after the television series appeared. The fact that children are frequently motivated to buy books related to their favorite shows and movies demonstrates that the media and popular culture may enhance rather than diminish children's interest in reading. Although the media and popular culture are frequently seen as being in competition with books, the research suggests that they more often coexist, and may even be mutually supportive of one another.

Video games have also been the subject of recent research. The findings of several studies call into question the commonly held assumption that children's involvement in this activity is basically mind numbing and without redeeming value. Greenfield (1984), one of the first researchers to investigate this topic, asserted that playing video and computer games held the potential to positively impact retention, spatial skills, parallel processing, motivation to learn, critical viewing, problem-solving skills, eye-hand coordination, cognitive development, motor skills, and an understanding of the narrative genre. Gee (2003) has produced what is probably the most comprehensive investigation of young people's use of video/computer games, and has identified more than twenty principles of learning that can be developed through engagement with them. These principles will be explained in a later section.

Hence, there is a lack of evidence to support the view that the media have supplanted reading and writing in children's out-of-school lives. In fact, the

results of numerous studies suggest that children's experiences with the media and popular culture may actually sustain or enhance their literacy-related interests and skills. Although the media may contribute negatively to school achievement for *some* children, in *some* environmental contexts, the media are only one of many potential influential factors on literacy learning and academic achievement. Other conditions must be taken into consideration.

When children lead a balanced life and are involved in a variety of different activities, television can provide relaxation, entertainment, and education, just as it does for many adults. Needless to say, it is the responsibility of family members to monitor how much and what kind of TV is viewed by children in their households. Children's understanding of television programs is enhanced when parents watch and discuss the shows with them. In the process, the skills needed to analyze and evaluate media can also be developed. Children also benefit from seeing the enjoyment of reading in the home. Heavy television viewing, or other forms of media consumption, may have a negative effect on their academic progress. Parents need to trust their judgment about the amount of time their children spend with popular media in contrast to other activities, and be aware of research that provides evidence that the media is not an inherently bad part of children's lives.

INTEGRATING STUDENT VIDEO PRODUCTION IN THE PRIMARY GRADES IN HAWAII

In the study by Grace and Tobin (2002), children's interests in and knowledge of the media and popular culture were brought into the classroom through the process of student video production. The study was part of a school-university partnership, headed by Joseph Tobin, who was a faculty member at the University of Hawaii. I was part of a team formed to assist the classroom teachers in integrating technology into the literacy curriculum. Although the overall project involved eight classes of students in the 1st through 6th grades, I focus primarily on our work with four classrooms of six- to eight-year-old children.

The objective of the project was to integrate reading, writing, speaking, and visual literacy through technology, while developing the children's skills as communicators and meaning makers. Media education has typically been structured around a deficit model of teaching, with children positioned as passive, vulnerable, and endangered in their relationship with the media. Our intent was to implement a strengths-based model of media education by building on students' knowledge of and experiences with the media in ways that were positive and educationally sound. The emphasis in such a model is on preparing children for life in our media-oriented society, rather than protecting them from it (Buckingham, 2003). In this project, we found that even

six- and seven-year-old children were able to use the video camera and equipment with practice and guidance from the teachers. As discussed by Tyner (1998), video is an excellent tool to help students explore narrative structure in the video stories they produce. The equipment is sturdy and simple to use, and they are able to view their videos immediately after taping them (p. 184).

The Hawaii teachers were enthusiastic about the video production project but wondered about the possibility of a negative response from the parent community. Over half of the parents expressed concerns about the amount of time their children spend engaged with the media, but they were overwhelmingly supportive of the project. In their survey comments, parents commented that the project held potential to motivate children, enhance self-confidence, develop oral speaking skills, instill responsibility, increase understanding of television productions, provide experience in using technology, and make learning more relevant and fun.

The parents seemed to believe that much could be gained through enabling students to produce videos, rather than merely viewing them. Assured of parental support, the video curriculum was subsequently developed by the teachers and the university team. After introducing the children to the basic roles and jobs involved in video production (writers, actors, camera person, and director), to the technical terms, and to hands-on work with the cameras and equipment, the first project involved small-group work where the children were helped by the teacher and university team to script, storyboard, and tape a video version of a favorite storybook.

The use of a familiar story allowed the children to move relatively quickly to the production stage, where they still needed much assistance. It was, thus, a good way to support the children's learning as they moved to the next project, in which the groups collaboratively wrote and taped short stories. In some ways, the experience was similar to that of producing a school play. There were differences as well. Plays are associated with books, the written word, and the literary canon. They are considered to be a higher form of art, more socially approved and educationally sound. In contrast, video production is linked to the media and popular culture. We found, however, that video production provided children with the tools to enter into the genre and use it for their own purposes.

When the children were given free choice in story topics, it quickly became apparent that many of the characters, plots, and themes were drawn from the movies, videos, and television shows that the children enjoyed. Their scripts were filled with X-men, ninja warriors, cartoon characters, Disney heroes and heroines, monsters, and superheroes. Tensions arose for the teachers as popular culture crept into the curriculum. The teachers expressed concerns about the influence of the media and video games on the children, the appropriateness of the content of their stories, and the

intermingling of the “high” and the “low” in the classroom (see Grace & Tobin, 2002, for discussion of these issues).

Over time, however, the teachers found value in creating a space for the children’s popular-cultural interests within the curriculum. As state and national literacy and technology standards were being met, the children were actively engaged in a curriculum that blended their out-of-school interests with school literacy learning. During the course of the project, data were gathered from observations, field notes, teacher and student questionnaires, and teacher interviews. The results of integrating the media and popular culture into the literacy curriculum through student video production are summarized in five general categories and discussed below.

PATHWAYS INTO CLASSROOM LITERACY PRACTICES

The video production project created interest and generated enthusiasm for the literacy curriculum. The teachers frequently commented on the self-motivation and excitement they observed in many of the students throughout their video work, as well as their eagerness to use the equipment. On a student questionnaire, 96.6 percent of the children in the 1st through 6th grades reported enjoying producing videos in school.

We found, as have other researchers, that bringing popular-cultural texts into the literacy curriculum has a strong motivating effect on the children. Jackie Marsh (Marsh & Millard, 2000) reports on a study in which preschool children who were not confident or interested in literacy were motivated to engage in reading and writing activities when a superhero area was set up in the classroom. Leonie Arthur (2005) found that four-year-old boys who were reluctant readers and writers became actively engaged in these processes when Pokemon cards, magazines, and toy catalogues were added to a literacy center.

Comic books, typically considered to be a less valued form of reading, have also been reported to provide entry points into literacy for students. John Lowe, department chair at the Savannah College of Art and Design, recalls that as a young boy, he “started reading comics and then got into other types of fiction and literature,” and that he would not “have made the leap into literature if it weren’t for comics” (“Council Chronicle,” 2005, p. 2). In a similar vein, Jason Ranker (2004), writes about his work with an eight-year-old boy who lacked confidence and interest in writing. When allowed to pursue his interest in superhero comics, the child turned a corner in his writing, producing his own series of comics. As his writing drew the attention and appreciation of several of his peers, he developed confidence and a positive identity as an author.

In the video project, we also observed struggling readers being motivated to read and write through the use of popular culture in the curriculum. Ronny,

for example, was a 3rd-grade boy who had a history of failing to engage with his schoolwork. In the initial stages of the project, he showed very little interest in his group's efforts to develop and write a video story. Ronny was usually found sitting at the back of the group, rarely paying attention, and often distracting anyone near to him. However, when one of the children suggested writing a scary story, Ronny immediately perked up. He suggested they base it on "the Chucky movie" (*Child's Play*), which he then began to retell with great enthusiasm. His teacher and I were both surprised by his level of interest and involvement in creating this story. Although the teacher had hesitations about the potentially violent content of the story, Ronny's eagerness to participate convinced her to wait and see how the story actually turned out:

Chucky II

There was a boy named Chucky who went to a park and had some fun. At the park, Chucky saw a boy and his name was Justin. Then Chucky made friends with the boys and Chucky said, "Let's play hide the needle." Justin said, "Okay." Then, Chucky said, "Close your eyes." Justin closed his eyes while Chucky went to hide the needle. When Chucky came back, Justin went to look for the needle. When he was looking behind a tree, he saw an ugly, horrible monster! Justin screamed and Chucky came to save him. Chucky tried to kill the monster with a knife, but the monster said, "Wait! I want to help you. I want to be your friend." So Chucky, Justin, and the monster became friends. They lived in a really beautiful house together. And they never fought again.

The teacher's initial fears about the content of the story were clearly not realized. In fact, the resulting script bore little resemblance to the horror movie that it was based upon, and ended with the monster being nice and becoming a friend. Whether or not it was appropriate for Ronny to have watched the movie *Child's Play* is another issue, but, as will be discussed in a following section, writing this story may have offered Ronny a means for working out some of his fears associated with the movie, while at the same time providing an inroad to reading and writing in the classroom.

In addition to providing an entryway into literacy for students like Ronny, the teachers in this study also saw the video project lead to impressive growth in literacy skills and self-confidence in other children, including those who were typically shy and quiet, those who were easily distracted, and especially those who were identified as special education students. As one teacher commented, "The video project was particularly good for the special ed. students. It's something they can all participate and feel successful in." Another added, "When I think of the self-esteem, for once they [the special ed. children] are really shining."

Others have also suggested that popular culture provides topics for children to talk about and to base play upon, and thus can be particularly beneficial for language development, vocabulary building, and confidence in language use,

especially for children for whom English is not their first language (Arthur, 2005; Marsh & Millard, 2000). In this context, popular culture can potentially serve to bridge cultural diversity in the classroom by offering children a common ground upon which to interact and socialize.

TRANSFER OF CHILDREN'S KNOWLEDGE OF THE MEDIA AND POPULAR CULTURE TO LITERACY IN SCHOOL

In addition to being motivated to engage in classroom literacy, children also gain knowledge from the media and popular culture that can transfer to reading and writing in school. Gee (2003), for example, has documented more than twenty high-order learning principles, developed in good video games, that can be applied to classroom learning. These include critical, metalevel, strategic, and reflective thinking; predicting, hypothesis testing, risk taking, logic and problem solving; eye-hand coordination, effort, and perseverance.

Comic books, like video games, have also been found to contribute to children's literacy learning in several child-friendly ways. In "The Council Chronicle" (2005), teachers share how comics and graphic novels can be effectively used in the classroom. Since pictures are more prominent than text in comics, Hong Xu (p. 2) uses them to help students learn about inferences, and sees this transferring to book reading. Sawyer-Perkins (p. 2) adds that comics provide an excellent vehicle for teaching writing, as a story has to be pared down to its most basic elements: beginning, middle, and end. Sawyer-Perkins also uses comics to teach paragraphing, punctuation, and the use of dialogue (p. 8). In addition, comics have been shown to be useful in developing understanding of genre, characterization, and plot (Pahl & Roswell, 2005).

Students also learn a great deal about genre, plot, character development, setting, and narrative structure from the films, television shows, and videos that they watch; this can transfer to print literacy (Braggs, 2002; Browne, 1999; Neuman, 1997). Evans (2005) reports on a study in which students learned about structuring and sequencing stories from their engagement with media; this also transferred to the classroom. In addition, Linda Sheldon (1998) found that the five- to twelve-year old children in an Australian study understood many codes and conventions of television shows, including the use of flashbacks and dream sequences, that can be applied to creative writing in the school setting.

Similarly, the teachers in the video project frequently commented that the children's familiarity with popular media facilitated their production work. Drawing from favorite television shows, movies and videos provided the students with a sense of narrative structure that helped in the writing of their collaborative group stories. Their knowledge of different media genres was also evident when they created their own news, cooking, and quiz shows in

the classroom. The teachers all reported that student growth had been demonstrated throughout the project in reading, writing, vocabulary, sequencing, and story grammar. The gains in sequencing skills were particularly impressive. A test was administered at the beginning and again at the end of the first year of the project. In these assessments, the children had to sequence scenes in a clip taken from a popular children's movie. Not only did the posttest results greatly surpass the pretest results for each grade level, but the posttest scores were all consistently higher than the pretest scores of the *succeeding* grade level, indicating that the growth in sequencing skills was over and above that which would be expected to occur during the course of the school year without the intervention.

The Hawaii teachers also commented that the video project promoted collaborative learning and problem solving. Janet Evans (2005) cites a similar study by Reid, Burn, & Parker (2002), which also found that, when digital filming and editing were integrated into the school curriculum, "problem-solving, negotiation, thinking, reasoning and risk-taking" were developed (Evans, 2005, p. 34). These examples all demonstrate how students' popular-cultural interests can transfer to classroom literacy learning, while bridging the worlds of home and school.

SPACES FOR CHILDREN TO REWORK SOME OF THE MESSAGES OF THE MEDIA

Due to the prominence of the media and popular culture in the Hawaii children's video products, we initially feared that they would lack creativity and imagination. We expected to see little more than empty reproductions of the television shows and movies that they had viewed. However, these fears did not materialize. Rather than merely mimicking existing media texts, the students used them as springboards to develop their own inventive stories. As others have noted, borrowing from other texts, or imitating them, is an essential part of literacy learning (Browne, 1999; Buckingham, 2003).

When incorporated into student scripts, the themes, characterizations, plots, and scenes drawn from the media and popular culture were reshaped through the students' own childlike lenses. Rather than replicating the remembered plots and themes, the children adapted, modified, and transformed the media texts from which they drew.

Superheroes, ninjas, and X-men also prominently figured in the students' video stories. Through video production, the students were able to experience power and pleasure in portraying these strong, bold, and brave characters. The 3rd graders were asked to write in their journals about how they would feel if they were ninja warriors. Not everyone responded approvingly, but for those who did, the most common adjectives listed were cool, great,

awesome, radical, strong, fast, brave, tough, and powerful (Grace, 2003). As Browne (1999) suggests, children may “seek to overcome their feelings of anxiety and vulnerability through identification with superheroes,” and this identification may contribute importantly to their emotional development (p. 164).

In addition, ghosts, monsters, and other scary creatures were frequently featured in the students’ videos. Carol Clover (1992) tells us that the appeal of horror has long been explained by its association with repressed fears and desires. Evidence of this was provided when the members of a class of 3rd graders in our project were asked to describe a scary dream they remembered. Many of the elements that were turning up in their videos were found on their lists. Anna Freud (in Turner 1969) explains that by identifying with terrifying objects (fierce animals or monstrous beings), children are able to symbolically rob them of their power. Browne (1999) adds that “adopting a role and playing it out enables the child to take control of it and, in so doing, work toward a resolution in terms of the fear or anxiety induced by the character or the situation or the video or TV program” (p. 110).

The students’ “scary” stories contained little, if any, evidence of the frightening or violent aspects of the real movies or television shows from which they were drawn. Instead, they had much more to do with everyday childhood concerns such as being teased or bullied, being friendless, or not being believed by grown-ups. In their re-creations, the children selected the parts of the movies to which they could relate, and made sense of them in their own ways. The majority of their stories ended with everyone making up, being friends, and living happily ever after together.

These examples suggest that through video production, the students were provided with the opportunity to incorporate their interests and pleasures into the curriculum, explore their fears and fantasies, make their own meanings, and mediate some of the messages of the media in the safety of the group.

SITES FOR THE EXPLORATION OF IDENTITIES

As the children explored different roles in the video project, the possibilities for thinking about their ways of being in the world were expanded. As Davies (1989) asserts, when children talk, write, and play, they are “making conscious and unconscious investments of themselves in particular storylines, subject positions and readings of the social world” (p. 66). Identities are constructed socially, in numerous ways, in our day-to-day interactions. Student video production provided a safe space for the Hawaii students to try out and experiment with different roles and identities. In their performance of gender, the students sometimes reaffirmed traditional roles and relationships, and sometimes reworked them.

We were pleased to find that the girls, particularly the younger ones, showed a strong interest in working with the video cameras and equipment, along with the boys. It may be that with computers, DVD players, digital cameras, and MP3 players becoming increasingly commonplace in children's home lives, girls are growing up feeling more familiar and comfortable with technology. In addition, as discussed elsewhere (Grace, 2003), the girls often took on aggressive and action-oriented roles that are typically reserved for males. Although some girls opted for traditional female roles such as mother, wife, or girlfriend, many of the girls chose to play superheroes, "bad guys," or aliens from outer space. The reverse was rarely the case. Although a boy once played a waitress, and another dressed up as a female teacher, most boys gravitated toward typically masculine roles. The fact that it is more socially acceptable for girls to move into male roles than it is for boys to swing away from them may explain why the girls seemed to experience more freedom in breaking with tradition in this area.

Similarly, in another study, Marsh (Marsh & Millard, 2000) found many of the young girls taking on assertive roles as Batwoman. These examples of girls exploring alternative identities are encouraging, particularly as they try on strong and powerful roles. However, much work remains to be done in broadening identities for boys, particularly in supporting and validating more sensitive, caring, and nurturing behaviors typically considered to be feminine.

CONTEXTS FOR DEVELOPING MEDIA LITERACY SKILLS

In developing literacy skills and abilities, children need to be offered a variety of modes for communication and meaning making including sound, images, and new information and communication technologies involving computers and the Internet. They should have choice and ownership over decisions about which modes to use and how to use them, depending upon their goals and purposes. Working in multimodal forms of literacy can and should start in preschool. Children are naturally inclined toward active, tactile, multimodal, and experiential learning. As demonstrated by Evans (2005), children as young as three and four years old can learn to use computers, webcams, and editing software. And, as found in the Hawaii project, even 1st graders can become adept at using video cameras and equipment.

The very notion of literacy itself needs to be broadened, if we are to prepare students with the critical, analytical, and technological skills needed for life now and in the future. As Victoria Carrington (2005) argues, students should be involved in literacies that enable them to produce and disseminate texts "that engage meaningfully with the world outside the classroom" (p. 24). The Hawaii project took steps in that direction.

Bringing students' interests in the media and popular culture into the curriculum through video production motivated the children to read, write, speak, and perform, while broadening the terrain for student expression. In the process, the students became producers rather than merely consumers of media. Through hands-on learning they developed technical skills, understanding of the production process, and awareness of key concepts of the media, including a sense of audience and issues of representation. Today's youth are the media makers of tomorrow. Thus, they need to become informed and astute in creating and evaluating media, and we need to encourage them to hold high standards for its quality.

CRITICAL LITERACY SKILLS

Literacy today needs to encompass far more than reading and writing. As Nikki Gamble and Nick Easingwood (2000) contend, literacy must involve "access to ideas that challenge our thinking and promote new ways of looking at our world" (p. 4). Critical literacy involves developing in students the skills needed to analyze and assess the media. Although students are often more media-savvy than their teachers, they have rarely spent much time in thinking critically about the media with which they engage. Given the prevalence of the media and popular culture in the lives of children and youth, they have both a need and a right to develop these skills in school.

The media are not neutral carriers of content. Without a doubt, they convey many stereotypical, derogatory, and discriminatory messages regarding gender, ethnicity, culture, class, age, body-ability, and body size and type. Furthermore, children will not all come away from their media experiences with the same meanings. Thus, there is a need to provide time in school for structured reflection upon the media, evaluation, dialogue, and the consideration of multiple perspectives.

In conclusion, we need to move away from viewing children's engagement with the media and popular culture as a problem. Instead, we need to utilize and build upon these experiences in the classroom. This can serve to democratize the classroom by making a space for students' everyday interests, while providing a foundation for helping them to acquire new skills and abilities. As stated by Gamble and Easingwood (2000), failing "to harness children's emerging capabilities or to offer a progression and continuity to them" results in "a clear waste of both potential and opportunity" (p. xii). The media and popular culture have a prominent and ever-growing place in the lives of children and youth. They are here to stay. If we are to have an active, informed, and critical future citizenry, new literacies must include a knowledge of how to use, integrate, evaluate, interpret, and produce various media forms in school.

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Chapter Fifteen

COMPUTER TECHNOLOGY AND DIGITAL LITERACY IN THE EARLY GRADES

Linda D. Labbo

Over twenty years ago, the Head Start Bureau, a national government initiative to provide preschool children from poverty backgrounds with early literacy instruction, banned federally funded programs from purchasing computers in the early grades (Cuban, 2001). At the time, the Head Start administrators made a wise decision, because computer applications for children were sparse, dull, and derived from a behaviorist learning perspective, a learning approach based on the idea that human beings learn by getting positive or negative feedback that shapes behavior, and the applications consisted of boring skill and practice exercises. In the 1990s, the Head Start Bureau lifted the ban, because computers became more portable, less expensive, and developmentally appropriate for young children. In addition, national professional literacy-related organizations circulated position statements recognizing the critical need for better use of computer technologies in the early grades (see National Association for the Education of Young Children, NAEYC, 1996).

More recently, the National Educational Technology Standards (NETS), which have been made available online by the International Society for Technology Education in 2002, set out guidelines and performance indicators for what educators and caregivers can expect pre-kindergarten through 2nd-grade students to learn about technology. In addition, NETS includes six pre-K- to 2nd-grade performance indicators: (1) Youngsters will be able to use computer input devices, such as the mouse and the keyboard, as well as output devices, such as monitors and printers, to operate computers; (2) Young children will use various types of media for both

directed and independent learning activities; (3) Children in the primary grades will be able to talk about technology using developmentally appropriate terminology; (4) Young students will be able to use multimedia resources such as interactive books, software, and electronic encyclopedias to support learning; (5) Pre-kindergarten through 2nd-grade children will be able to work cooperatively with classmates and family members to use technology; (6) Young children will demonstrate positive ethical and social behaviors when using computers; (7) Youngsters will be respectful, demonstrating responsible use of computers; (8) Young students will be able to create developmentally appropriate multimedia presentations with support from peers or adults; (9) Young children will be able to use technology resources such as digital cameras and creativity programs for solving problems; (10) Students in the early grades will be able to gather and communicate information in collaboration with others using electronic communication methods such as e-mail and the Internet with the support of peers or adults.

Therefore, in the first decade of the twenty-first century, the Internet and computers are present in primary grade classrooms across the United States (National Center for Educational Statistics, 1999). Standards are in place to support the use of computers in the early grades. Unfortunately, educators of young children are sometimes hard pressed to determine how to use the available computers wisely. For example, recent data indicate that only one out of five teachers feels well prepared to use computers for instruction in classrooms (Irwin, 2003).

Other challenges facing educators are the changing definition of literacy and changing approaches to literacy instruction that are inherent in new communicative technologies. In the past, traditional notions of literacy acquisition and development focused primarily on the ability to read and write in a print-based environment. Approaches to traditional literacy instruction in the early grades have also been primarily focused on helping children learn print-based literacy skills and strategies, such as phonics, sight word recognition, letter recognition, and comprehension of fictional and narrative text. It is clear that these print-based skills continue to provide the foundation for children's reading achievement and academic success. The introduction of computer technologies into the early grades, however, requires an understanding of the nature of the new forms of reading and writing that occur on computer screens. These new literacies are frequently referred to as digital literacy.

DIGITAL LITERACY

Gilster (1997) noted that "[d]igital literacy is the ability to understand and use information in multiple formats from a wide range of sources when

it is presented via computers” (p. 1). Digital literacy “encompasses the abilities required to use computer technologies to read, write, and interact with multimedia symbols on computer screens” (Flood & Lapp, 1995, p. 1). New literacies include traditional skills and strategies but also include other abilities, such as being able to compose and publish with word-processing and desktop-publishing programs, to exchange messages using e-mail and Web postings, to assemble knowledge from various multimedia resources, to understand visual components of literacy, to be able to read critically, to access hypertext and linked information on the Internet, and to express meaning in multimedia forms.

Digital literacies are becoming more important in an increasingly global workplace that requires employees to search the Internet for information, problem-solve with a team that may be distributed across many distant locations, publish reports online, create Web pages, and so forth. Not only must workers in the present and the future be able to gain the skill of using computer technologies to locate information, but they must also gain the skill of using this information in their lives (Gilster, 1997).

It is clear that parents, caregivers, and educators need to select software, Internet sites, and activities that introduce young children to digital literacy in ways that are appropriate for their ages and early literacy abilities. It is worth noting that the most effective use of computer technologies in the early grades involves social contexts for shared, interactive meaning making. The goal for effective use of computers is *not* to sit a child in isolation in front of a computer screen for extended amounts of time. The goal is to skillfully craft computer experiences that integrate the child’s ability levels with the curriculum and instructional goals.

GUIDELINES FOR SELECTING APPROPRIATE SOFTWARE AND INTERNET SITES

Given the above caveat, it still behooves educators to have guidelines for sorting through the growing profusion of available, commercially prepared software programs for young children. Not all commercial programs are effective in supporting young children’s literacy development. Early childhood software programs and Internet sites can support children’s development of both traditional and digital literacies if they include a core set of features that are developmentally appropriate. Effective early childhood literacy-related computer programs and sites include multimedia tools that allow children to interact with and learn the content presented without a great deal of adult supervision, because the children receive the scaffolding, or support, they need from the multimedia tools that appear on-screen to make the programs work. For example, if a child is not able to read print he may be able to click on an

on-screen button that allows him to hear the text read aloud. Another case in point occurs when a child is given a choice between a right or wrong response to a question posed by a program. If she selects the wrong answer, she will be prompted to try again.

This section briefly highlights the features that are most effective across various types of software programs and Internet sites. It bears repeating: educators must keep in mind that the most effective use of computers for literacy instruction in the early grades is not likely to consist of a child or even pairs of children simply sitting in front of a computer. The most effective computer activities will involve connections to the classroom culture and literacy curriculum. The following guidelines for evaluating the developmental appropriateness of on-screen programs take into account multimedia features that are likely to scaffold children's independent computer interactions. These guidelines are adapted from the suggestions of educators who are interested in computer technologies and include ease of use, child control, auditory/speech support, clear and appealing graphics, motivating and engaging activities, and feedback.

Ease of Use

Children should be able to use the software easily because the directions are clear and the way to interact with the program is intuitive. The way to navigate through different parts of the program should be clear and supported. For example, the skills necessary to run the program should be within the range of the child. Children should be able to work with the program independently after a brief introduction that uses audio narrative on demand. It should also be easy for a child to move in or out of an activity at any given time.

Child Control

Children are actively involved in learning. They are not passive recipients of knowledge or mere observers of on-screen activities. Interactions with on-screen activities should require children's decision making; effective sites or programs should provide feedback and offer new directions if children encounter difficulties. When children interact with the program, there should be a clear response to their actions.

Auditory/Speech Support

The program should provide guidance to children who are not yet able to read independently in the form of brief, easy-to-follow narrated directions or offers of pronunciation of unknown words on demand. As children listen to text as it is read aloud, they should receive narrated directions or they should be able to click on a word to hear it pronounced.

Clear and Appealing Graphics

Children should encounter graphics in the program that align with, complement, and support textual information. Artistic illustrations should not be so abstract that children cannot understand their meaning. The graphics should not distract from the program objectives or the content.

Motivating and Engaging Activities

Children should find the activities and multimedia features to be engaging and motivating. They should receive appropriate feedback on interactions that keep them wanting to continue. The program should be appropriately challenging and fun to use.

Feedback

The type of feedback children receive should be clear and should prompt ongoing exploration or rethinking of a task. Children who make errors or mistakes should not be left to keep practicing and reinforcing their wrong responses. Effective feedback should be corrective.

LEARNING FROM COMPUTERS VERSUS LEARNING WITH COMPUTERS

Goldberg and Sherwood (1983) identified five categories of computer use that are helpful in understanding the role of computer technologies in fostering both traditional and digital literacy. In particular, two categories of computer use, ranging in focus from traditional literacy to new literacy skills, are important in the early grades and include learning from computers and learning with computers. The following section describes each category.

Learning from computers is an approach that uses the computer as a type of drill instructor or electronic worksheet. The purpose of the program is to reinforce discrete, traditional literacy skills that have already been taught in the classroom. Software programs in this category may consist of a game-playing format with a behaviorist orientation to learning. Behaviorist learning theories are based on the notion that children learn through practice and immediate feedback on isolated skills practice. Some drill and practice programs require a child to sign in at the start of the session. In this way, the software program can keep track of and report each child's score on each literacy game he or she has played.

Even though the focus of skill and drill programs is to help children develop traditional literacy skills, some minimal digital or new literacy skills are required. For example, children need to be able to interact with the computer monitor by controlling the mouse, using a touch pad, using the keyboard, or

touching a touch-sensitive monitor screen. Children must also know how to drag and click a cursor, a pulsing arrow or line on screen that indicates locations for interactivity, across the screen to select a correct answer.

In most game-playing software formats, children are presented with a stimulus in the form of a task to complete or a question to answer. Each task or question has only one correct answer for children to select from among three to four possible answers. If a child answers correctly, most programs will offer some type of “bells and whistles” as a reward for the desired behavior. If a child answers incorrectly, some programs offer a prompt to try again. Other programs may provide the correct answer. Most programs, however, either ignore a wrong response or give an audio signal that the response was incorrect.

Many skill and drill programs have a branching feature. This feature tracks and follows the students’ progress through a limited number of attempts to master a particular skill. If the skill is not mastered at the end of a series of on-screen lessons, children will be rerouted to more practice on the same skill. If students show mastery of a skill, they will be routed to another series of skill lessons.

Bailey’s Book House (1996–2005) is representative of a type of software program that includes many different kinds of literacy activities. One game activity, “Letter Machine,” focuses on helping children learn the names of letters of the alphabet. The opening screen presents an image of a large computer. In the question and answer mode, a digitized voice asks a student to find a letter by clicking on a keyboard. For example, if the child successfully selects the letter d on the keyboard, the message “D” for “Dinosaurs’ Dance” appears on the screen along with an animation of dinosaurs dancing. Learning with computers requires children to interact in an open-ended way in the computer screen environment. Such an approach invites exploration, and trial and error. There is usually no *one* right answer or *one* right way to interact with the computer. Learning with computers in this type of open environment fosters diversity of thought and a disposition toward using the computer as a problem-solving and thinking tool.

Playing simulation games, models of events or situations, supports children’s abilities to make decisions and see the results of their decisions. For example, in the early grades, when children play in the simulated neighborhood of *Richard Scarry’s Busy Town* (1995), they have unique occasions to see the causes and effects of decisions. In one scenario, children use an on-screen delivery truck to pick up supplies and deliver them to the appropriate store. A delivery store manager orally states the name of the object and tells where it should be delivered. For example, bicycle tires need to go to the bicycle shop down the street. By controlling the mouse, a child navigates through a map that is a maze of streets and problem areas (e.g., construction work, a school zone, a fire hydrant). If a child accidentally runs into a construction area, she will be

met with a policeman on a siren-wailing motorcycle who offers a warning. Children who play in this open-ended environment learn the digital literacies required to navigate through the program. They can also click on words to hear them pronounced, an early skill that is related to learning how to access hyperlinks, links to additional information that are included in digital text and typically highlighted and underlined in blue.

Learning with a computer may also involve using on-screen tools found in word-processing programs (e.g., pencils, keyboard displays, stamp pads, electronic erasers, cutting and pasting functions) as devices for making meaning. Children may also learn with a computer when their interactions support their comprehension, as in the case of CD-ROM talking books.

SOFTWARE TYPES THAT SUPPORT CHILDREN'S DEVELOPMENT OF DIGITAL LITERACY WHEN LEARNING *WITH* A COMPUTER

Two types of computer software are especially supportive of young children's digital literacy development, multimedia talking books and multimedia authoring programs. The sections that follow describe the features of each type, briefly discuss their educational benefits, and provide examples of the technology in use.

Multimedia Talking Books

Commercially produced talking electronic books are interactive, digital versions of printed books that are pressed onto CD-ROMs or accessed via the Internet and then displayed on computer monitors. CD-ROMs are storage devices that hold a large amount of multimedia information. They also allow users to access information that is stored on any part of the disk.

Looking at most talking books is like looking at two pages of an open book being displayed. In on-screen versions, however, storybook characters can literally come to life through animation and multimedia effects. Most talking books come prepared with varying types of multimedia features that include an oral narration of the text, digital graphics, animations, music, and sound effects. Phrases of text are usually highlighted as they are read aloud. Children also have on-demand access to the digitized pronunciation of each word through the simple click of a mouse on the text. These features allow young students to control the learning and reading processes.

McKenna (1998) has noted the compensatory function of electronic talking books in supporting beginning readers' development of traditional literacy. Children who are unable to recognize printed words independently benefit from reading talking books that pronounce unknown words. The child is in control of the amount of support that is needed to "read" the story. Over time,

as children recognize more words automatically, their need to access unknown words lessens. The underlying assumption is that children's word recognition improves through multiple exposures to words.

Many CD-ROM talking books offer language options. Children who do not speak the language spoken at school may access talking book stories in their home language. Immigrant children learn new vocabulary words in a fairly short amount of time when they hear a story unfold simultaneously with animations that reflect the story's events (Verhallen, Bus, & de Jong, 2003). For example, the CD-ROM of *Little Monster at School* (1994) presents the adventures of Little Monster's school day (e.g., getting ready for school, riding a school bus, eating lunch, playing in the playground, studying a map, going home). Children who speak Spanish may simply press the #2 key on the keyboard to see and hear the story in Spanish. The CD-ROM of *Just Grandma and Me* (1992), the story of a day at the beach, allows children to select English, Japanese, or Spanish versions.

Some CD-ROM talking books present the story on the screen in a way that allows children to view animations while simultaneously listening to the story read aloud. The CD-ROM version of *The Ugly Duckling* (1993) displays the text and an illustration of a duck sitting on eggs. During the narration of the text, the illustration dramatizes the story content through animation. The mother duck appears to be upset when the ugly duckling emerges from his egg. Bus, de Jong, and Verhallen (in press) note that in these types of talking books, the combinations of multimedia effects are more cartoon-like than they are book-like.

Parents, caregivers, and teachers can help children use CD-ROM talking books in different ways to support literacy development at the following four levels: an initial interaction level, enjoying the story experience and appreciating the multimedia effects; a fluency and story comprehension level, reading along with the story narration, or echo reading (reading phrase by phrase); a word-interaction level, from looking for rhyming words to pointing to words known by sight; and a strategic interaction level, talking about how one screen page relates to another screen. These types of activities are likely to support students' ability to draw conclusions or make important story connections. Children who read talking books have opportunities to learn digital literacies related to accessing multimedia effects. Many talking books include "hot spots" related to illustrations. Clicking on a part of an illustration brings it to life through animation. Hot spot animations may relate to the central story line or may be incidental or even unrelated to the story line at all. Children require new digital literacy skills to comprehend talking books. They learn how music and sound effects help them interpret the mood or plot of a story. They learn how animations help them understand a character's emotional state. They learn to control how they navigate,

or move through, various multimedia resources in ways that support their story comprehension.

Multimedia Authoring

When children learn to write on paper with pencils, they learn that they can use a tool, the eraser, to make revisions. Multimedia authoring/applications software programs allow children to compose in a different way, which requires new digital literacy skills. For example, they learn to express and publish their ideas on screen by using various types of symbols. Children gain digital literacy skills as they learn to use different on-screen tools to create multimedia compositions when they use programs such as *Kid Pix Deluxe 4* (2003–2005). This program allows students to move easily among artistic tools (e.g., paintbrushes, drawing pencils, clip art icons, background designs), multimedia tools (e.g., animation, photographs, slide show production, sound effects, music, narration) and word-processing tools (e.g., keyboard typing, letter stamps, pencil writing, cutting, pasting, erasing) to create a message.

As children explore using a software program, they develop insights into new literacies. They learn that they can use the computer socially when they exchange notes with classmates. They learn that they can use the computer to publish stories. They also learn that they can use the computer to create works of art. Children also learn that they can use the computer as a storehouse for their work in progress.

When children use digital cameras to create photographs that are imported into multimedia composing software, they learn many new literacies. This instructional procedure, the digital language experience approach (D-LEA), allows youngsters to take a photograph of an experience, import and arrange the photographs in chronological order, record an audio message for each photograph, write descriptive sentences, and produce an electronic slide show.

Steps for conducting a D-LEA presentation include the following:

Day 1

Step 1. Teachers take digital photographs of an experience with a small group of children (no more than five). For example, going for a walk in the playground provides occasions for trying out playground equipment, noticing plant or insect life, and seeing other people.

Step 2. Teachers import digital photographs from the camera to the computer. Many digital cameras come with software that provides specific programs and directions for importing photographs.

Day 2

Step 3. Teachers and students view, discuss, and select a series of photographs that best capture the experience. Children determine the order of the photographs. For

example, a story about a walk through the school playground might be best told in chronological order. What happened first, second, and third? A digital photo essay about playing on the playground equipment could involve a focus on action words (verbs) or describing words (adjectives). The important component of this step is to elicit rich language as children describe what they see in the photographs.

Step 4. Teachers import the photographs into a presentation (e.g., *PowerPoint*) or creativity software (e.g., *Kidpix Deluxe*).

Day 3

Step 5. Children dictate, type, or stamp text to accompany each photograph. Editing and revising of the story is easy to accomplish at this stage with cutting and pasting software functions. Children may also record their voices narrating the story of each photograph.

Step 6. Teachers create a title page, include children's names as authors, and arrange the photographs into a slide show presentation. Children practice orally reading their parts of the D-LEA slide show.

Day 4

Step 7. Students present D-LEA stories/slide shows with other students or parents present. Teachers print out hard copies so students can take the stories home and extend the experience, and the opportunities to read aloud, with parents.

Day 5

Step 8. Children engage in follow-up activities that focus on word meanings, word recognition, and/or phonic elements of words. For example, print out on stock paper 5 to 10 words that have high utility (e.g., words that have similar meanings, word families, words with same onsets, words that rhyme, high-frequency words) so students can engage in word sorts. As indicated in the steps above, children learn many digital literacies that allow them to create multimedia presentations.

RESPONSE TO LITERATURE ACTIVITIES SUPPORTS YOUNG CHILDREN'S VOCABULARY DEVELOPMENT WHEN LEARNING *WITH* A COMPUTER

The most powerful use of computer technologies in the early grades occurs in learning environments that infuse programs and applications into the daily instructional routines of the classroom. Computer technologies should also be used to support the literacy development of children who sometimes struggle with oral language, vocabulary, and paper and pencil resources.

For example, recent research suggests that young children from low socioeconomic status (SES) backgrounds typically begin school with less vocabulary knowledge than their more affluent peers (Hart & Risley, 1992). This was the case in a predominately low SES school where I worked recently. Six primary grade teachers, the literacy coach, and I formed a research study group to design an instructional cycle to explore the potential of computer technologies to enhance 85 kindergarten through 2nd-grade children's vocabulary

development. Early in our discussions of observational data (e.g., field notes, transcripts of classroom talk), we determined that we wanted to use technology to initiate a flood of vocabulary words into the classroom; thus we coined the phrase “a vocabulary flood.” We also wanted to use children’s literature, the resource that is used daily in millions of classrooms across the United States, because storybooks provide rich vocabulary words that are suitable for response activities. Another goal was to use the power of computer technologies to enhance literacy learning within the context of a warm, inviting, and supportive learning environment.

The first step in the vocabulary flood process involved focusing the talk of teachers and students on dozens of vocabulary terms encountered during read alouds of books that were connected thematically. This was a dramatic departure from the teachers’ approaches to vocabulary instruction in the past. Prior to the project, teachers primarily mentioned a few important vocabulary words while in the context of reading a storybook aloud. During and after the project, the teachers stated that they were pleased with sharing the role of noticing vocabulary with their young students. They believed that if students generated the list of words they found the most interesting or the most important to understanding the story, they would more likely become invested in learning more about them.

The second step in the process involved highlighting, noticing, and using the words in children’s oral language and in their writing after books were read. This step was also a departure from teachers’ previous approaches to vocabulary instruction. For example, observational field notes suggested that the teachers were doing 90 percent of all of the talking about words during and after storybook reading sessions. The following transcript provides a brief scenario of a typical kindergarten teacher-student interaction during storybook reading before the vocabulary flood project.

- TEACHER:** (Reading a storybook aloud) “Mother turned her head.” (Addressing students) “Do it.... turn your head,” (Teacher turns her head to model the action.)
- STUDENTS:** (Turn their heads, mimicking the teacher’s movement)
- TEACHER:** (Reading text aloud) “Grandma sucked in her cheeks.” (Addressing students) “Show me how to suck in your cheeks.”
- STUDENTS:** (Suck in their cheeks, puckering their lips, and smiling afterwards) (Researcher note—the students appear to be actively engaged—an important component of successful teacher/student interactions; however, students are doing very little talking. Indeed, once they’ve heard the words in the story, they never seem to deal with them again on any consistent basis.)

In this scenario, the teacher appropriately involved students with engaging and motivating activities related to phrases and words in the storybook; however, the children rarely talked about or used the words independently.

The third step in a vocabulary flood process involved students in using a digital camera during digital language experience approach (D-LEA) work, in order to use the vocabulary in personally meaningful ways. For example, if students read a text about how to make something (e.g., involving a recipe), they photographed and wrote about a follow-up activity that involved making the recipe. In one classroom, the children read a story about how to make a strawberry shortcake. The next day, the teacher brought in the ingredients and photographed students making and eating their own version of the dessert. If students read a fictional story, they created a photo essay of the reenactment. For example, one class of 1st graders heard a story about a little girl who didn't get along with anyone in the playground during recess time until she met a new student who challenged her bullying ways. The teacher photographed the students role playing the story events. Later, the students wrote their own list of playground rules.

The use of the photographs generated opportunities for children to use a high percentage of the words that they had noticed during the read alouds of the storybooks in their dictation or keyboarding of sentences to accompany photos. An analysis of scores on vocabulary tests indicated that many of the students improved their vocabulary knowledge. For example, only 7 percent of the students scored above average for expressive vocabulary, the ability to orally provide a label for a picture, before the "vocabulary flood" began. After four months of the intervention, 50 percent scored above average on expressive vocabulary.

It is important to note the theoretical underpinnings of the study, because the two theoretical perspectives underscore the importance of creating a warm, inviting, and supportive learning environment. The two perspectives draw from sociocognitive (Vygotsky, 1962) and multiple literacies perspectives (New London Group, 2000). Sociocognitive theories focus on understanding the nature and type of talk that students engage in during read alouds and D-LEA activities. The notion behind sociocognitive perspectives is that children construct knowledge as they interact with others who support, challenge, or extend their thinking. The multiple literacies framework, which focuses on the role of multimedia as encountered on computer screens, was helpful in sorting out the nature and type of the audio and visual systems that students used in their D-LEA creations.

YOUNG CHILDREN BENEFIT FROM GUIDED INTERNET EXPLORATIONS

Children in the early grades also benefit from guided explorations of the Internet (Leu & Kinzer, 2003). Unfortunately, teachers of young children tend to be a bit skeptical of the appropriateness of the Internet for classroom activities.

There are many benefits of using the Internet in the classroom with early readers, however. The Internet provides quick communication with experts on topics of study, authors of wonderful works of children's literature (for example, see www.janbrett.com, www.eric-carle.com), other children in close or distant classrooms, and other teachers. The Internet provides possible collaborations with students around the world on projects of shared interest. For example, a 2nd-grade class in the United States exchanged stuffed animals with a class in Brisbane, Australia. Students in each country took turns taking the stuffed animals home and wrote about their adventures. Children were highly motivated to exchange e-mails and learn more about the similarities and differences between the two countries (Wepner, Valmont, & Thurlow, 2000).

Teachers can also find important electronic resources to use in lessons. Using the Internet in the early grades helps young children learn that the computer is an avenue of access to various types and forms of communication, such as rich graphics, video clips, animations, music, narrated passages, and interactive games that include instant, corrective feedback. Students learn they can assemble knowledge from various Internet and print-based resources as they attempt to answer questions related to topics of study.

Internet sites provide excellent resource materials for teachers of young children. Some Internet sites provide additional information about children's literature (see <http://www.ucalgary.ca/~dkbrown/rteacher.html>), or provide scripts to print out so children can practice fluency by reading plays aloud (see <http://www.aaronshp.com/rt/>). Teachers can also locate Internet locations for publishing students' creative compositions. Such sites include Global Children's Art (<http://www.naturalchild.com/gallery/>), Stone Soup (<http://www.stonesoup.com>; this requires a subscription; however, the site provides a free sample issue), or Giggle Poetry (<http://www.gigglepoetry.com/>).

Students in the intermediate and secondary grades frequently conduct individual or collaborative Internet projects called WebQuests.

A WebQuest is an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to use learners' time well, to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis, and evaluation (see <http://webquest.sdsu.edu/>).

Adult-guided WebQuest inquiries can also be an appropriate literacy learning activities in the early grades. The Internet offers a wealth of virtual experiences and access to information that can be enriching to the early literacy curriculum if a few guidelines are followed.

Teachers may read aloud and summarize Internet information related to answering a question that leads to an inquiry during whole-group instruction. An Internet inquiry WebQuest might focus, for example, on learning more about life in different neighborhoods across the United States. In fact,

ZuZu, an online magazine by and for children (see <http://www.zuzu.org>), has a link called “Neighborhood Reports,” which allows teachers to read aloud what children like or do not like about their hometowns. One child wrote the following report about life in California:

Where I live it is very quiet some people in my neighborhood have chickens, which is funny because I live in the suburbs. I like to go to the beach out hear it is fun. I like California because you can go to the beach an snow on the same day. (<http://www.zuzu.org/ncali.html>, retrieved September 20, 2006)

Teachers may guide children to write their own neighborhood reports to post online in the magazine Teachers will need to read the reports aloud and also guide children to draw, take photographs, and write about the things they like or don’t like in their own neighborhoods.

Teachers of young children should be extremely careful to provide safety for all children who have access to Internet resources. One primary way that teachers protect children from inadvertently accessing offensive or inappropriate material is to limit their interactions to previously bookmarked sites, selected by the teacher because they are developmentally appropriate and content specific. Many school districts provide filtering services (e.g., <http://www.netnanny.com>; <http://www.cyberpatrol.com>) that control access by blocking Internet resources that are meant for adults or mature audiences.

WHAT PRIMARY TEACHERS NEED TO KNOW ABOUT COMPUTER TECHNOLOGIES

It is imperative that primary teachers become knowledgeable about the National Educational Technology Standards for Teachers (International Society for Technology in Education, 2002)) that are appropriate for teachers at all grade levels. There are six key areas of focus that outline the relationship among instructional practices and computer technology strategies and skills:

1. Teachers should understand technology operations and concepts.
2. Teachers need to be able to plan and design learning environments and identify, evaluate, and manage technology resources.
3. Teachers must be able to address content standards and student technology standards to support student-centered strategies and to develop students’ higher-order thinking skills.
4. Teachers must be able to use various assessment techniques, communicate findings, and apply multiple forms of evaluation.
5. Teachers should engage in ongoing professional development.
6. Teachers must model and teach ethical practices, empower learners, affirm diversity, facilitate equitable access, and promote the healthy use of technology resources.

Young children's ability to learn traditional literacies can be fostered by introducing them to developmentally appropriate computer-related activities and materials. Talking books, available on CD-ROM and on Internet sites, help primary grades children learn new vocabulary, hear models of fluent reading, and better understand how print functions. As youngsters interact with multimedia tools in digital environments, they also learn about new literacies that include learning how to navigate through Internet links. They may also learn how to make meaning from various types of multimedia modes such as animation, music, audio narration, and print. Clearly, children will learn both traditional and new literacies with computers when caring adults provide support, encouragement and guidance.

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Chapter Sixteen

INTERACTION, SOUND, AND SENSE: RESOURCES FOR EARLY LITERACY DEVELOPMENT

Ruth Alice Jurey

Literacy is skill with language in its written form, skill that is built upon the child's existing language development. From birth, language grows through *interaction* with other people, so interaction with caring adults is the child's greatest resource for learning language and building literacy. No video, audio, or computer program can compare with an abundance of language provided through give-and-take interactions with important adults in a child's life.

Most children do not simply grow from listening and speaking into reading and writing. Rather, literacy skills must be specifically developed. Like the foundation for a house, the child's language development needs to be solid if the literacy skills built upon it are to be strong.

The critical elements of language for building literacy are *sound* and *sense*. The *sounds* of language are its rhythms and melodies, speech sounds and sequences, rhymes and memories. Well-developed auditory skills, or sound skills, prepare children to learn to read and write well. The *sense* of language is the meaning of words and sentences, the way language expresses experiences, and the way that experiences can be imagined from language. Well-developed vocabularies and the skills of listening and of expressing their ideas in words prepare children to comprehend what they read and to express themselves in writing. The following resources will assist in developing and enhancing children's *language interaction, sound* and *sense* along the path from language to literacy.

NURTURING LANGUAGE THROUGH INTERACTION

Apel, K., & Masterson, J. (2001). *Beyond baby talk: From sounds to sentences—A parent's complete guide to language development*. New York: Three Rivers Press.

The premise of this book is that parents teach language to their children, and they do not need special equipment or extraordinary activities to do it well. This engaging book explains the components of language, children's stages of learning it, and natural ways to help them get the most out of each stage. The sample parent-child dialogs reflect the authors' expertise in interacting with children in effective, language-expanding ways: the child-directed speech modeled here is simple rather than wordy, and genuine rather than self-consciously didactic. The authors describe four broad stages of language development from infancy to written language, discuss gender, birth order, child care, cultural influences, and media influences; and provide guidance for suspected language problems. Well-written and authoritative, this book will be enjoyed by parents, grandparents, and teachers of children from birth through five years old.

American Speech-Language-Hearing Association. (n.d.). *Language and literacy development*. Retrieved September 17, 2006, from http://www.asha.org/public/speech/development/lang_lit.htm.

This is a concise year-by-year summary of children's progress into language and literacy from birth through age five, provided by the national association of language-learning professionals. Born out of this specialized expertise, the suggestions here describe the pathways from language to literacy in ways effective for each age. This accessible guide will be valuable for parents and caregivers of children from birth through five years.

National Association for the Education of Young Children. (2004). *Early years are learning years: Singing as a teaching tool*. Retrieved September 17, 2006, from <http://www.naeyc.org/ece/2004/01.asp>.

Parents and teachers do not need special talent or training to give children the benefits of singing. This page explains the memory boost that music offers, and encourages caregivers to sing to, and with, young children. By singing familiar tunes, either with their original lyrics or made-up words, children can develop their auditory and language skills.

Schwartz, S. (2004). *The new language of toys: Teaching communication skills to children with special needs* (3rd ed.). Bethesda, MD: Woodbine House.

The premise of this book is that play is the young child's work. This volume contains descriptions of about ninety toys, both commercial and homemade, organized by their appropriateness for babies and young children through the age of five years. A sample toy dialog for each toy gives ideas for language an adult might use while playing with the child. Each year is summarized by providing lists of typical vocabulary items and concepts to talk about, and a list of dozens of age-appropriate books with brief descriptions. Written specifically for use with young children with special needs, this book will be useful for teachers, parents, and grandparents of all children from birth through five years.

McGuiness, D. (2004). *Growing a reader from birth: Your child's path from language to literacy*. New York, W. W. Norton.

"All the evidence shows that the major predictor of becoming a good reader is the development of good language skills during the early years of life" (McGuiness, 2004, p. 9). Cognitive psychologist Diane McGuiness explains in detail how literacy begins with language, and provides parents with fascinating information about how

children grow in language at each stage. Asserting that about half of children's language ability depends upon the richness of their language environment during the formative years, McGuinness provides a guide for expanding on what we are doing right, and avoiding what we may be doing wrong. Although McGuinness dismisses the need to enhance children's auditory skill in preparation for reading, and takes a wait-and-see approach to some speech and language problems that could be differentiated and should be treated early, this book is recommended for its clear illumination of the linguistic origin of reading ability.

READ ALOUD RESOURCES

Interaction, sound, and sense, the critical pathways from language to literacy, are all embodied in the read-aloud experience. Reading aloud to children is the single most valuable activity for helping them to become better and better readers. It should begin at birth and never stop.

The youngest listeners enjoy books with clear, uncomplicated pictures and very simple text. Books about baby's daily routines, or books that simply name the pictures, are examples. Wordless picture books encourage parents to tell the story, and books with flaps, holes, or things to feel encourage babies to participate. Baby's auditory skills are stimulated with rhyming books and Mother Goose poems, books with repetitive lines, and books with strong rhythm, such as "Stomp your feet! Clap your hands! Everybody ready for a Barnyard Dance!" Boynton, Sandra. (1998). *Barnyard dance*. New York: Workman Publishing Co.

Trelease, J. (2006). *The read-aloud handbook* (6th ed.). New York: Penguin Putnam.

In the first half of this outstanding resource for parents and teachers, Jim Trelease makes the case for spending a pleasurable 15 minutes a day reading to children. Trelease explains and documents how reading aloud improves children's reading, writing, speaking, and listening, concluding that reading aloud is more important than worksheets, drill, assessments, or homework. Here are both the prods and the inspiration to make reading aloud to children a priority. The second half of the book describes a "treasury" of recommended read alouds: wordless books, predictable books, reference books, picture books, short novels, full-length novels, poetry, anthologies, fairy tales, and folk tales. The books are well organized by suggested grade range, with descriptions. Trelease has a Web site with a useful sampling of the book's contents including some of the "treasury": *Trelease-on-reading.com*. (n.d.). Retrieved September 17, 2006, from <http://www.trelease-on-reading.com>.

New York Public Library. (n.d.). "*On-Lion*" for kids! *Recommended reading: Best books for children*. Retrieved September 17, 2006, from <http://kids.nypl.org/reading/recommended.cfm>.

This site has links to lists of wonderful books for children, with pictures of the covers and one-sentence descriptions. The visitor browses through lists of the 100 best children's books by year of publication, the 100 favorite children's books, the 100 picture books everyone should know, and more. This is an attractive resource that will appeal to children and adults alike, and encourage families to search their local library for their choices.

RESOURCES ON LEARNING TO READ

In today's world, literacy is not optional. Even children whose natural talents lie elsewhere need to learn to read and write. Fortunately, research points the way to literacy success for all children. One or more of the resources listed below should fit the needs of parents, caregivers, and teachers.

U.S. Department of Education. (2003). *Reading tips for parents (Consejos practicos para los padres sobre la lectura)*. Retrieved September 17, 2006, from www.ed.gov/parents/read/resources/readingtips/edlite-index.html.

A few minutes' quick and easy reading of bulleted points, these tips are also available in PDF format for printing, or in PowerPoint presentation. This resource begins with true/false questions about reading, followed by the answers with explanations. Tips include "What Every Parent Should Look For in a Good Early Reading Program"; "Homework Tips" for reading time; and "Five Essential Components of Reading." Available in English and Spanish, this is vital, concise information for parents, provided in various formats to assist professionals to share it with them.

U.S. Department of Education. (2003). *My child's academic success: Helping your child become a reader, with activities for children from infancy through age 6*. Retrieved September 17, 2006, from <http://www.ed.gov/parents/academic/help/reader/index.html>.

This booklet, available in English and Spanish, presents the basics of children and adults talking and reading together, choosing books, being a good role model, children's learning about print, and their early writing efforts. In an encouraging tone, the text assures parents who may not be confident of their own reading skills that they can nevertheless be positive models of literacy for their children. Parents of children whose first language is not English are encouraged to support the first language also, as the child works toward the special accomplishment of speaking two languages. There are tips for talking with babies and with older children; for introducing books and the alphabet; for enjoying predictable books, rhymes, sound play, and dramatic play; and for storytelling and writing. To demonstrate how important the child's books are, parents are encouraged to provide a special "home" for them and to include bookstore, gift, used, and homemade books in the child's library. Finally, parents are guided to take advantage of the public library's books, CDs and tapes, movies, computers, and other resources, as well as the librarian and library programs for children and families. The encouraging conversational style and sound advice in this work makes it an outstanding choice for explaining the vital contribution parents make at home, even before children begin formal instruction at school.

Lee Pesky Learning Center. (2004). *Every child ready to read: Literacy tips for parents*. New York: Random House.

This is a succinct and readable book from a highly regarded nonprofit learning center that combines introductory background, activities, and recommended books and musical resources in one handy package. Research-based, the book presents resources for infants to 18 months, toddlers to 36 months, and preschoolers aged three to four; resources for children with learning disabilities; and further resources for parents. The authors' expertise in working with real children is evident in the advice to help insure children's engagement and participation, such as following a baby's lead and expressing heightened enthusiasm. This resource is recommended as a guide that parents can keep on hand and refer to again and again.

Partnership for Reading, National Institute for Literacy, National Institute of Child Health and Human Development, U.S. Department of Education. (2003). *A child becomes*

a reader: Proven ideas from research for parents. Retrieved September 17, 2006, from http://www.nifl.gov/partnershipforreading/publications/html/parent_guides.

Based upon more than 460 studies, the Partnership for Reading has extracted the essential findings about what has been scientifically proven to work for children's literacy. Divided into two booklets, one for birth through preschool, and one for kindergarten through grade 3, this resource provides a short summary of what research says about how children learn to read and write, activities to do at each age to nurture that process, and a glossary of helpful terms. Suggested books to read and organizations to contact are provided for more information. The booklets are clearly written, thorough, accurate, and well designed; and they are highly recommended for parents, grandparents, and teachers. Printable PDF versions are available:

A child becomes a reader: Proven ideas from research for parents, birth through preschool.

Retrieved September 17, 2006. from http://www.nifl.gov/partnershipforreading/publications/pdf/low_res_child_reader_B-K.pdf.

A child becomes a reader: Proven ideas from research for parents, kindergarten through grade 3.

Retrieved September 17, 2006, from http://www.nifl.gov/partnershipforreading/publications/pdf/low_res_child_reader_K-3.pdf.

Copies can also be ordered from the National Institute for Literacy at EdPubs, P.O. Box 1398, Jessup, MD 20794; by calling 800 / 228-8813; or by sending an e-mail message to edpubs@inet.ed.gov.

National Association for the Education of Young Children. (2005). *Early years are learning years: Raising a reader.* Retrieved September 17, 2006, from <http://naeyc.org/ece/1998/19.asp>,

This Web page of practical information is valuable for its important guidance on motivating children to participate in literacy activities. There are tips on making time for reading, tolerance of children's preferences, appealing read-aloud styles, and more.

Paulu, N. (1993). *Helping your child get ready for school, with activities for children from birth through age 5.* Retrieved September 17, 2006, from <http://readyweb.crc.uiuc.edu/library/1992/getready/getready.html>,

This resource contains explanations of the foundations that help children prepare for kindergarten, and presents a concise developmental guide from birth to five years, with practical suggestions for easy activities and encouragement of the preschool child. This is a broad guide encompassing the child's physical, mental, social, and emotional preparation for the important learning tasks ahead. Clearly written, wise, and to the point, this book will assist parents and others in helping children to get ready for school.

National Association for the Education of Young Children. (2005). *Learning to read and write: Developmentally appropriate practices for young children.* Retrieved September 17, 2006, from <http://www.naeyc.org/about/positions/pdf/PSREAD98.PDF>,

This printable document is the joint position statement of the International Reading Association and the National Association for the Education of Young Children. Their position is endorsed by numerous other national organizations including the American Speech-Language-Hearing Association, the Association for Childhood Education International, the National Association of Elementary School Principals, the American Academy of Pediatrics, the National Head Start Association, and others. This readable 16-page report presents rationales and recommended teaching

practices for each stage of life, and provides guidance and support for teachers, parents, and others who want to insure that young children through age eight receive the instruction and support they need, whether individually or school- or district-wide.

Neuman, S. and Copple, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children*. Washington, DC: National Association for the Education of Young Children.

This book includes the joint position statement of the International Reading Association and the National Association for the Education of Young Children, and effective teaching practices and ways that teachers can turn their classrooms into environments that promote literacy. In addition, the authors answer frequently asked questions and provides a glossary of terms. Teachers can improve their understanding of what is expected at various levels, and can reflect on their own literacy practices with a self-inventory, "Taking stock of what you do to promote children's literacy." This book is recommended for teachers of preschool through the primary grades.

Burns, S., & Snow, C. (Eds.). (1999). *Starting out right: A guide to promoting children's reading success*. Washington, DC: The National Academies Press.

Based upon extensive research and focusing on the child from birth through the early school years, this book from the National Academy of Sciences is an authoritative guide for parents, caregivers, teachers, and policy makers. It helps to answer questions such as how to support children's growth from language to literacy; and what to look for in preschool, child care, kindergarten, and the early grades; and it includes questions to ask about whether children are making progress and how to determine whether they are doing so. Key aspects of language and literacy for birth through age four and kindergarten through grade 3 are presented and accompanied by suggestions and activities to enhance literacy development at those ages. A section on the prevention of reading difficulties details activities to equalize opportunities for children at risk, the participation of early childhood health care professionals, and early intervention opportunities. The narrative sections of this text provide snapshots of everyday literacy-promoting interactions. Especially recommended, with links to the pages' printable versions, are the following:

"Everyday literacy: One family home." Retrieved September 17, 2006, from http://newton.nap.edu/pdf/0309064104/pdf_image/17.pdf.

"Everyday narrative and dinner conversations." Retrieved September 17, 2006, from http://newton.nap.edu/pdf/0309064104/pdf_image/27.pdf.

"Connecting to books." Retrieved September 17, 2006, from http://newton.nap.edu/pdf/0309064104/pdf_image/75.pdf.

Parents and especially teachers will benefit from this resource, which contains principles and a wealth of activities for promoting literacy for all children. Single chapters or entire book can also be purchased in PDF format and are entirely viewable and searchable online, courtesy of the publisher at the link below:

Starting out right: A guide to promoting children's reading success. Retrieved September 17, 2006, from <http://darwin.nap.edu/books/0309064104/html>.

Jurey, R. (2005). *AdvanceAbility: The reading treehouse*. Retrieved September 17, 2006, from <http://www.aability.com>.

Based on detailed task analyses by a speech and language pathologist, and intended to convey the complex language-literacy continuum in concrete fashion, *The reading treehouse* illustrates the process of learning to read via examples and simulated experiences. This resource will be useful for teachers and parents who want to understand how the elements of literacy come together, find out what specific reading difficulties may occur, and learn some approaches to ameliorating those problems.

WETA Public Television Station, Washington, DC. (2006). *Reading rockets*. Retrieved August 11, 2006, from <http://www.readingrockets.org>.

“Reading Rockets is a national multimedia project offering information and resources on how young kids learn to read, why so many struggle, and how caring adults can help” (<http://www.readingrockets.org/about>). This resource provides an overview of and links to the extensive multimedia resources that the project makes available, which are funded by the U.S. Department of Education, Office of Special Education Programs. Included are links to PBS television programs, available on tape and DVD with some streamed online; professional development resources; information for teachers; and more. Of particular interest to teachers and policy makers working on research-based practices is the link to:

“Research & reports,” retrieved September 17, 2006, from <http://www.readingrockets.org/research>.

Reading Rockets is a recommended portal for parents, teachers, and others who want accessible, authoritative information about reading, and resources for both adults and children.

SPECIAL SKILL WITH SOUND: PHONEMIC AWARENESS

The special mental *sound* skills critical to fluent success in phonics are known as phonemic awareness, or PA. Distinct from phonics, these auditory skills are teachable within reasonable amounts of time and benefit students including those whom teachers may think of as visual learners only.

Jurey, R. (2005). *The reading treehouse: The floor*. Retrieved September 17, 2006, from <http://www.aability.com/papreface.htm>.

A speech and language pathologist explains in bullet points, examples, and simulated experiences the critical area of phonemic awareness. She gives a hierarchical list of the essential skills, and emphasizes that children need to learn to play with sound without the crutches of letters at first, relying only on the “mind’s ear” in order to develop the auditory power that leads to success in reading; she also provides a comprehensive selection of PA skill-building games. These include “Games to go,” which can be played in short segments of time during pauses in daily activities; and “Block challenges,” puzzles for the table or floor. Accompanying the games are lists of the easiest words for beginners to manipulate, task analyzed to maximize the child’s early success. This material is recommended for parents and teachers of children from preschool age through the early grades, and parents and teachers of older struggling readers.

Sound Reading Solutions. (2003). *Hop, skip and jump into reading* [software on CD]. Retrieved September 17, 2006, from http://www.soundreading.com/srs_new/product/cd-hsj-2.cfm.

This software, available for purchase on CD, is designed to help children ages four to seven to strengthen phonemic awareness and other connections between speech and print. The games are simple to learn, but children may need help from time to time with new learning tasks. A child can play these games with a parent alongside. As children learn to focus and work with sound, their parents will learn accurate pronunciation of the speech sounds for phonics, which are clearly modeled here. (Older children and parents can use the primary grade CD.) These games are recommended for young children to develop auditory phonemic awareness power at home or at school.

Adams, M., Foorman, B., Lundberg, I., & Beeler, T. (1998). *Phonemic awareness in young children: A classroom curriculum*. Baltimore, MD: Paul H. Brookes Publishing Co.

This resource includes listening games and activities to develop skills of phonemic awareness for preschool, kindergarten, and 1st grade children. Specifically designed for classroom use for 15 or 20 minutes a day, this authoritative book includes teaching objectives and lesson plans, as well as a discussion of the nature and importance of phonemic awareness, why this kind of learning can be tricky for children, and information from research.

FUN FOR KIDS

Kids learn most easily when they are having fun, and they love the special attention of the adults in their lives. The following resources are useful for this purpose:

Hauser, J. (2000). *Wow! I'm reading! Fun activities to make reading happen*. Charlotte, VT: Williamson Publishing Co.

This is an accessible book of crafts, games, and activities for fun and learning. Grouped according to language comprehension and expression, auditory skill, print and alphabet familiarity, phonics, early writing, and working with stories, each of 48 themes has several activities. This easy-to-browse resource will be valued by parents and teachers, and make the learning personal and memorable for children from preschool through kindergarten.

Schiller, P. (2001). *Creating readers: Over 1000 games, activities, tongue twisters, fingerplays, songs and stories to get children excited about reading*. Beltsville, MD: Gryphon House.

Beginning with a brief introduction to children's development from language to literacy, Pam Schiller then presents a wealth of excellent, engaging activities for children's growth in listening, auditory skill, in-depth experience with stories, and more. A large section of phonological awareness activities details songs, poems, fingerplays, and more, organized by speech sounds through the alphabet (omitting the "sh," "ch," and "th" speech sounds). Reproducible pages at the back of the book provide materials for the activities, wordless picture stories, and phonemic awareness card games. This is an inclusive resource that will be appreciated by teachers of preschool to early-grade students.

West, S., & Cox, A. (2004). *Literacy play: Over 300 dramatic play activities that teach pre-reading skills*. Beltsville, MD: Gryphon House.

This resource for early childhood education exploits children's love of dramatic play to extend the language skills basic to reading. The authors offer 40 interesting dramatic play areas with materials, props, and directions for setup, songs, poems

and fingerplays, book-making ideas, and related resources for follow-up. The book specifically highlights vocabulary and literacy objectives. An organized resource to simplify the planning of imaginative learning centers, this book is recommended for teachers of young children.

Wordwindow LLC. (2005). *Word window*. Retrieved September 17, 2006, from <http://www.wordwindow.com>.

This resource is a unique, colorful, audiovisual alphabet for purchase on DVD or video. A letter appears stroke by stroke, each stroke accompanied by silly vocal sounds, then the name of the letter is given, followed by its associated speech sound. The speech-sound quality is well exaggerated, assisting auditory discrimination. After some variations on this sequence, the segment ends with an example syllable and example word, each beginning with the relevant letter-sound, and finally a video clip illustrating the example word. Think-time between the speech stimuli is enlivened by more silly nonverbal sounds in synchronization with equally nonmeaningful animated elements. The strangely captivating presentation can be sampled at the Word Window web site, for which see above. Word Window will be useful for young children who need a boost for engaging with the alphabet, or extra rehearsal to learn it.

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LITERACY FOR THE NEW MILLENNIUM

Volume 2

Childhood Literacy

Edited by Barbara J. Guzzetti

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SET PREFACE

This set of four volumes—*Literacy for the New Millennium: Early Literacy*; *Literacy for the New Millennium: Childhood Literacy*; *Literacy for the New Millennium: Adolescent Literacy*; and *Literacy for the New Millennium: Adult Literacy*—presents a current and comprehensive overview of literacy assessment, instruction, practice, and issues across the life span. Each volume presents contemporary issues and trends, as well as classic topics associated with the ages and stages of literacy development and practice represented in that text. The chapters in each volume provide the reader with insights into policies and issues that influence literacy development and practice. Together, these volumes represent an informative and timely discussion of the broad field of literacy.

The definition of literacy on which each of these volumes is grounded is a current and expanded one. Literacy is defined in this set in a broad way by encompassing both traditional notions of literacy, such as reading, writing, listening, and speaking, and the consumption and production of nonprint texts, such as media and computer texts. Chapters on technology and popular culture in particular reflect this expanded definition of literacy to literacies that represents current trends in the field. This emphasis sets this set apart from other more traditional texts on literacy.

The authors who contributed to this set represent a combination of well-known researchers and educators in literacy, as well as those relatively new to the profession of literacy education and scholarship. Contributors to the set represent university professors, senior scientists at research institutions,

practitioners or consultants in the field, teacher educators, and researchers in literacy. Although the authors are experts in the field of literacy, they have written their chapters to be reader friendly, by defining and explaining any professional jargon and by writing in an unpretentious and comprehensible style.

Each of the four volumes shaped by these authors has common features. Each of the texts is divided into three parts, with the first part devoted to recent trends and issues affecting the field of literacy for that age range. The second part addresses issues in assessment and instruction. The final part presents issues beyond the classroom that affect literacy development and practice at that level. Each of the texts concludes with a chapter on literacy resources appropriate for the age group that the volume addresses. These include resources and materials from professional organizations, and a brief bibliography for further reading.

Each of the volumes has common topics, as well as a common structure. All the volumes address issues of federal legislation, funding, and policies that affect literacy assessment instruction and practice. Each volume addresses assessment issues in literacy for each age range represented in that text. As a result of the growing importance of technology for instruction, recreation, information acquisition, communication, and participation in a global economy, each book addresses some aspect of literacy in the digital age. Because of the importance of motivating students in literacy and bridging the gap between students' in-school literacy instruction and their out-of-school literacy practices, each text that address literacy for school-age children discusses the influence and incorporation of youth and popular culture in literacy instruction.

In short, these volumes are crafted to address the salient issues, policies, practices, and procedures in literacy that affect literacy development and practice. These texts provide a succinct yet inclusive overview of the field of literacy in a way that is easily accessible to readers with little or no prior knowledge of the field. Preservice teachers, educators, teacher trainers, librarians, policy makers, researchers, and the public will find a useful resource and reference guide in this set.

In conclusion, I would like to acknowledge the many people who have contributed to the creation of this set. First, I recognize the outstanding contributions of the authors. Their writings not only reflect the most informative current trends and classic topics in the field but also present their subjects in ways that take bold stances. In doing so, they provide exciting future directions for the field.

Second, I acknowledge the contributions to the production of this set by staff at Arizona State University in the College of Education. My appreciation

goes to Don Hutchins, director of computer support, for his organizational skills and assistance in the electronic production of this set. In addition, I extend my appreciation to my research assistant, Thomas Leyba, for his help in organizing the clerical aspects of the project.

Finally, I would like to thank the staff and editors at Praeger Publishers, who have provided guidance and support throughout the process of producing this set. In particular, I would like to thank Marie Ellen Larcada who has since left the project but shared the conception of the set with me and supported me through the initial stages of production. My appreciation also goes to Elizabeth Potenza, who has guided this set into its final production, and without whose support this set would not have been possible. My kudos extend to you all.

Barbara J. Guzzetti

PREFACE

LITERACY FOR THE NEW MILLENNIUM: CHILDHOOD LITERACY

This book, the second in a series of four, addresses the literacy needs, interests, development, and practices of and for children in the intermediate grades of elementary school. Most often this includes students in grades 4 and 5, with some overlap to grade 6. A chapter in the text on adolescent literacy addresses specific areas of interest for middle school and junior high school students in the upper grades.

Children in the intermediate grades not only differ physically from their peers in the primary grades, but they also have different literacy interests and practices as well. They also have their own childhood culture and changing interests in popular culture. Their needs and interests set them apart from early readers as they grow more sophisticated in their understandings and acquisitions of reading and writing processes. Yet they are not ready for the experiences and interests of adolescents. Hence, this is a unique age group that requires appropriate support and recognition.

This text is crafted to address the unique topics and issues related to childhood literacy. To that end, this book is divided into three main parts. These parts range from two to seven chapters and provide an overview of topics related to childhood literacy. The topics were chosen to reflect and address the concerns of a variety of stakeholders, including those considering a career in education, graduate students in literacy, teachers, researchers, librarians, policy makers, and members of the interested public.

The first part, “Recent Issues in Childhood Literacy,” presents current trends and issues that affect instruction and assessment in childhood literacy. It begins with a chapter by James Hoffman and Misty Sailors who emphasize that teachers are crucial to the support of students as they learn to read, and that all children deserve effective teachers. The authors provide readers with a summarization of effective teaching and effective teacher preparation in literacy and offer a set of “lessons learned” that can be used to describe effective teachers and teacher preparation. They conclude by identifying propositions to guide reading instruction for teacher education.

The second chapter in this part by Terry Salinger and Barbara Kapinus provides background on the National Assessment of Educational Progress (NAEP) in reading, an achievement survey done every four years to measure students’ progress in reading. These authors trace the changes that have occurred in the design of the NAEP reading measure and provide information on the results of special studies carried out as part of the NAEP administrations. They conclude their chapter by describing the content of the NAEP assessments that will be used beginning in 2009.

The last chapter in this part by Randy Bomer discusses high-stakes tests of reading and writing. Bomer describes the nature and effects of standardized tests used to make important educational decisions. He discusses the probable motives of the politicians who decide to use such tests and accountability systems as a concern for those students whom the school does not serve well—the poor, African Americans, and those whose first language is not English. Bomer points out that, ironically, there is evidence that many of the very students that the accountability systems are supposed to help are the ones most harmed by constant testing. Bomer also describes the perspective of many teachers on such policies—that the tests force them into unprofessional practices that they know to be against the interests of their students’ learning. This chapter also describes the ways that educators are coping with the difficulties imposed by these political policies.

The second part of this text, “Assessment and Instruction in Childhood Literacy,” addresses a range of topics related to elementary literacy instruction and assessment. These topics begin with a chapter by James Baumann and T. Lee Williams on popular approaches and methods in reading instruction used by teachers in grades 3 to 6. The authors discuss eight different methods for reading instruction that are considered to be either skills-based methods (i.e., basal reading programs and direct instruction reading programs), holistic methods (i.e., the language experience approach, reading-writing workshop, and literature-based reading programs), or balanced methods (i.e., guided reading instruction and the four blocks approach).

The next chapter in this part describes and explains the various kinds of formal and informal assessments used to measure reading ability. Jerry Johns

and Janet Pariza begin with a discussion of standardized reading tests and issues of reliability and validity of these tests and introduce the reader to the technical language associated with standardized measures. After they describe achievement, diagnostic, and criterion-referenced tests, they explain the limitations of formal measures. They then describe various informal methods, including commercially produced informal reading inventories and other methods, concluding with advice on the best use of reading assessments.

In the third chapter in this part, Robert Calfee and Kim Norman review research, textbooks, writing assessments, and state and national standards to describe writing development for the intermediate grades. The authors describe the nature of writing tasks in regard to content, genre, organization, and complexity. They make the point that writing is the means by which students demonstrate their acquisition of content. They conclude the chapter with a discussion on instruction and assessment and by suggesting practices that support the development of writing across disciplines.

The fourth chapter in this part, written by Kathy Short, explains the potential of children's books to transform children's lives through connecting their hearts and minds. Because readers construct their own understanding and interpretations as they engage with books, children's literature must be examined not only for itself, but also for the ways in which children engage with these books as readers. Short provides an overview of literary and aesthetic considerations, multicultural and international issues, the selection of fiction and nonfiction; she concludes with a brief list of recommended literature.

In the next chapter in this part, Shane Templeton and Bob Ives characterize spelling or orthographic knowledge as more than a skill for writing, but as an underpinning for word recognition, as well. These authors posit that the spelling system of American English is more regular than often believed and that this regularity is evident by considering the three principles that govern the spelling system—alphabet, conceptual pattern, and meaning. Spelling instruction supports vocabulary and vice versa. Templeton and Ives offer general tenets for instruction that develops students' spelling abilities.

The sixth chapter in this part by Rachel Washington, John Bishop, Emma Bailey, and JoBeth Allen present a fictionalized narrative of a 3rd-grade teacher's attempts to meet the needs of her culturally and linguistically diverse students. This vignette focuses on two aspects of teaching for social justice—educational equity or ensuring that all students have equal opportunity to learn and succeed, and involving students in issues that affect their lives. The chapter includes issues such as learning the academic and cultural expectations of parents and children, building on students' strengths and interests, and language diversity. Resources for multicultural children's literature, as well as teaching for social justice and educational equity, are included.

The last chapter in this part by David Reinking and Amy Carter describes shifts in reading print to digital texts, the digital revolution, and digital literacies. These authors summarize how literacy educators and researchers have responded to increasing digital literacies and identify the factors that have limited those responses. They provide references to other perspectives, particularly to studies on digital writing.

The third and final part is “Childhood Literacy Beyond the Classroom.” This section addresses topics that relate to literacy outside the school and represent recent trends and resources in consideration of childhood literacy. The first chapter by Thomas Newkirk describes the intersections of childhood culture and popular culture. This chapter draws on research documenting the media exposure of children and young adults, and presents the concerns of groups who claim that engagement in popular culture contributes to youth violence and other social pathologies. These views are balanced by opposing positions of scholars who take a less alarmist stance by arguing that involvement in popular culture has cognitive and social benefits. Newkirk concludes the chapter by exploring the permeable curriculum, a concept posited by scholar Anne Dyson who claims that these affiliations to visually mediated popular culture can provide scaffolding for literacy learning.

The second and final chapter in this part by Denise Morgan and Wendy Kasten provides an overview of the literacy resources available for the reading development of students of elementary school age. Morgan and Kasten pose questions to serve as a guide to assist adults in selecting appropriate print materials and online resources and Web sites. The authors describe such resources and journals provided by professional organizations. They offer books, periodicals, and online resources in reading, writing, and language arts.

Part One

RECENT ISSUES IN CHILDHOOD LITERACY

Chapter One

EFFECTIVE TEACHING AND TEACHER PREPARATION IN READING: LESSONS THAT MATTER

James V. Hoffman and Misty Sailors

We believe that teachers are crucial in supporting children as they learn to read. We believe in the power of quality teacher education programs to prepare professionals who can serve effectively in this role. These are assertions that reflect our passion as teacher educators and our experiences as classroom teachers. These are also assertions grounded in a growing body of research on teachers, teaching, and teacher education. To be clear, these are not claims toward the status quo. We firmly believe that teacher educators can and must do better. Our claims are set in a vision of the high quality that exists in some particular cases today, and what should become the reality for all children in the near future. All children deserve effective teachers, and all of those who aspire to become teachers deserve to be prepared well.

Who would take issue with these statements? Surprisingly, there are many. As literacy educators, we surround ourselves in the discourse of “teachers matter” in the lives of the students whom they serve. National polls tell us that teachers are among the most trusted professionals. The fact is, however, that we live within institutions that treat teachers as if they cannot be trusted with instructional decisions. Teachers are valued insofar as they preserve and protect what exists. They are devalued when they question or teach their students to question the status quo. We do not believe, on most days, that this protectionism is a conscious conspiracy of the “haves” against the “have-nots.” Rather, we believe there are institutional realities that constrain decision making in ways that too often determine the answers (and outcomes) of education. This underbelly of control and manipulation has been revealed more clearly

as the metaphors of “accountability” and “outcomes” have become dominant in schools. Productivity and not democracy is the stuff of schools today. For the underserved, reading has become a set of skills to be mastered. The “democratic” creation and interpretation of texts in schools are rare in this community (Hoffman, 2000).

The recent attacks on teacher preparation programs suggest that teacher educators are even less trusted than teachers—portrayed as the “culprits” in a system that is failing (National Council on Teacher Quality, 2006). Some would argue that teacher education is being systematically dismantled. Alternative programs of preparation and “instant” certification programs are replacing university-based programs of preparation. The case for these programs is made on the basis of “need” for fully certified teachers in classrooms. The “No Child Left Behind Act” requires that all teachers be instructed with fully certified teachers. What easier path to reach this objective than providing a quick path to certification for anyone and everyone? Where do these fast-track teachers enter the profession? They enter through the classrooms that serve economically disadvantaged communities. Policy makers find it convenient to ignore research showing that these teachers are far less effective than the teachers who have been certified through university-based programs. Rather, they focus on the development of programs that are scripted and teacher proof.

We believe that the case for what counts as effective teaching and effective teacher preparation has not been made in nearly as public a manner as is needed. These issues have become mired in debates that don’t really matter. There are camps created around fires that offer no light or warmth. We write this chapter to summarize what we have learned about effective teaching and effective teacher preparation through personal experience and research. We offer a set of “lessons learned” that can be used to describe a consensus around effective teachers and teacher preparation.

We offer these “lessons learned” as a source of support for beginning teachers as they develop a personal “vision” of learning and teaching. A vision, according to Duffy (2002), is a teacher’s “moral compass.” That is, a vision helps a teacher make instructional decisions for the children with whom she or he works. What a teacher believes to be real and true about teaching and learning is a personal perspective and is guided by what that teacher wants children to become long after they have left the classroom. A teacher’s vision is influenced by who he or she is personally and politically and is shaped by personal history. Visions of teachers can and do change over time and are influenced by ever-growing professional and personal development.

In this chapter, we write directly to those who are considering or planning, or who have already started preparation to enter teaching. We offer a set of propositions that are specific to teaching and teacher preparation in reading instruction, although we suspect that the model could easily be generalized to

most teaching contexts. We have organized this presentation around 10 “lessons learned” and one grand lesson.

EFFECTIVE TEACHERS: LESSONS THAT MATTER

1. Effective Teachers Understand Reading

Effective teachers understand the reading process and reading development (situated within a broader understanding of language processes) and that reading is a means to a larger end—that of learning. The literature on reading instruction is filled with the great debates in reading, forever replaying the differences in various approaches to teaching reading. Some argue that the best way to begin reading instruction is to teach children to learn to read by first learning to sound words out (commonly referred to as “phonics”); others argue that the best way to begin reading instruction is through the teaching of reading as part of a system of language (commonly referred to as “whole language”). These debates are not helpful to teachers who must meet the needs of their students. There must be careful representations of the consensus on the reading process and development that draw on multiple methods of research.

We do not envision this representation taking the form of a “checklist” of facts to be learned or skills to be mastered. Rather, we envision a complex representation of the development of strategic reading that is explained clearly to children, especially those who struggle with reading. We believe that reading is not a set of skills that are to be taught in isolation from learning, and so instruction must be purposeful and meaningful to students. Assertions that are *not* widely supported by research (e.g., context is not important in word recognition) should be addressed and challenged, as well as incomplete representations of the process as those included in the National Reading Panel Report (Allington, 2002). At the same time, however, a consensus must be reached that can guide instruction. There will always be enough uncertainty within our models to drive further inquiry.

2. Effective Teachers Use Informal Assignments

Effective teachers are in touch with the ever-changing interests, strategies, skills, and instructional needs of their students through the application of a variety of informal assessment tools. Early on in Donald Graves’s (1994) *A Fresh Look at Writing*, Graves asks readers to write down everything they know about their students. Our undergraduates almost always comment on how much the classroom teachers they work with know about their students—deep knowledge that reaches across domains of skills, interests, family history, aspirations, frustrations, and on and on. This is true of most outstanding teachers. In an early study of portfolio assessment (Hoffman et al., 1998),

we asked teachers to rank order the students in their classrooms in terms of how well they would score on a standardized reading test at the end of first grade before the students took the test. We then correlated the teachers' rankings with the rankings of the students in the class after they had taken the test. The correlation was extremely high. This is, of course, a crude demonstration of teachers' knowledge of students. It is much more important to look specifically at what they know, value, and act on in their teaching. Effective teachers do not need a test, in particular a standardized test, to guide them. They know their students.

They know their students through the application of systematic assessment strategies that include careful observations, interviews (conversations), focus assessments (such as those used during reading instruction that document the strengths of readers), and the analysis of classroom work/artifacts (portfolios). They document carefully. They are able to use multiple sources to capture and see the strategies used by their readers across reading opportunities. They are in a constant state of dynamic assessment during instruction. In fact, the lines between what is "instruction" and what is "assessment" are often blurred so much that the observer—even the teacher—may not know when one ends and the other begins. Assessment (not testing) drives their teaching.

3. Effective teachers teach to strengths.

Before the "accountability" movement of the 1980s took control of education, there were decades of "clinical"/deficit models of teaching reading (that persist as undercurrents to this day). The diagnostic-prescriptive model set teachers on the path of "find the needs" (usually through some kind of testing) and teach what the student doesn't know to mastery. Those who cannot recall the skills-based management systems of the 1980s are fortunate—unless this means they are doomed to relive it.

Today, we have come to believe in the power of assessment to guide instruction as it reveals what the student "needs" (i.e., in the sense of motivation to learn, to reach out for, to experiment with). Good assessment leads to identification of what the learner knows and is exploring and then helps the teacher make instructional decisions to move the learner toward greater control over what is being learned. We have seen this as expert teachers of writing "notice" learners experimenting with a particular "form" of written language (such as quotation marks). These teachers recognize that this is the moment for the mini-lesson that extends and refines the writer's control over that convention. The assessment is based on careful kid watching (Goodman, 1985), not on the application of some scope and sequence that is tested then taught. This is more than just a matter of perspective (the glass half full; the glass half empty). This is a case of looking for something entirely different to guide instruction.

4. Effective teachers have high expectations for themselves and for the students they teach.

The notion of “high expectations” as part of effective teaching is rooted in both the mythology of teaching (How many movies can you name in which the teacher believed in students where no one else did and made a difference?) and in empirical data. Good (1987), for example, describes a “can do attitude” as a hallmark of effective teaching (i.e., teachers associated with high gains for students on achievement test. Here is the understanding that is almost always lost in the “posters” and “testimonies.” Anyone can espouse a “high expectation” philosophy, but can it be enacted? Research that has explored the relationship between teachers’ high expectations for students’ success and their students’ growth typically shows a low relationship when the measures of teachers’ expectation are in the abstract. It is only when the “expectations” of teachers are assessed in relation to the children that they work with and are responsible for—in particular students who struggle within the academic curriculum—that the relationship between teachers’ expectation and students’ achievement grows.

It is not simply the expectations for students that make a difference. It is the expectation that the teacher can and will that makes a difference in students’ learning. Failure on the part of students is viewed as a failure on the part of their teachers—and these teachers will not stick to the same plan. These are classrooms without “labels” and without excuses. These teachers will change and they will make a difference.

5. Effective teachers plan, organize, and instruct within a variety of classroom routines and activity structures.

The principal walks into a classroom to conduct an unannounced observation. The teacher is reading aloud to the children. The school principal shuffles back out the door whispering, “It’s ok. I’ll come back later when you’re teaching.” We have not made this up. We have observed it. One of the tremendous shortcomings of the “process-product” effective teaching literature is the extreme focus on direct instruction (Hoffman, 1986). Direct instruction is important, but it is only one of several models of teaching that effective teachers use. Joyce and Showers (1994) describe “models” of teaching ranging from “Information Processing” to “Social” to “Personal” and the many representations of these models within a classroom. Information processing models (e.g., a “Madelyn Hunter” seven-step lesson) emphasizes the transfer of specific information (knowledge) and skills with the teacher in control. Social models (e.g., cooperative learning, book clubs) emphasize the importance of social interaction and language in building inferences and insights. Personal

models (e.g., workshops, inquiry) emphasize the role of the learner in making significant choices in the curriculum.

It is unfortunate, from many perspectives, that the literature positions these models of teaching as antithetical to one another and incompatible within a teaching philosophy. Effective teachers do not see instruction in such black-and-white terms. At one point, Joyce's model was seen as a kind of "choice" list arrayed along a continuum that the effective teacher selected from based on learning goals. More recently, the model has been viewed not along the lines of a continuum of a circle. Apparent contradictions become complementary. In pragmatic terms it is the "mini-lesson" (an information processing/direct instruction model) that takes on its power within a "writers workshop" (a personal/indirect model). Effective teachers create spaces where instruction supports learners seeking to fulfill needs.

6. Effective teachers use individual and collective reflection as processes that support the creation of professional knowledge.

Effective teachers learn from their students. John Dewey (1938) described it long ago: experience plus reflection are the key ingredients in learning for children and adults. David Shon (1987) and others have taken this notion to an empirical level. Professionals, educators included, use reflection on experience to shape their learning and their actions. The reflection is not just personal but social as well. The discourse community within a profession creates language and theories that lift us above the daily experience (Schon's "swamp") to discover principles and patterns that guide us to greater effectiveness.

We do not underestimate the role that language plays in this learning. The crucial interplay of language and thought and social discourse is enormous (Wertsch, 1991). We have found Peter Johnston's (2004) book, *Choice Words*, is inspiring in this regard. Teachers who examine carefully the words that they use as they interact with children have a tremendous resource for change. Where does professional language come from? What does it represent at a deep level? How can teachers become better in saying what they mean? Effective teachers recognize the wealth of learning that can come through reflection.

7. Effective teachers enjoy learning with their students.

We have read a few too many essays on "Why I want to become a teacher" where the dominant theme is "I love to be around children." We find this motivation of "love to be around children" as weak in sustaining effective teaching. We recently attended a ceremony honoring a group of outstanding teachers. Teacher after teacher talked about their love for children. The last teacher honored began by saying that she felt guilty around the other teachers

who were so expressive of their love for children. She “confessed” that her love of teaching was largely selfish. She described herself as “addicted” to learning, and that teaching was the only way to satisfy her habit. That expression of addiction rang true to us as an explanation for the rewards of teaching.

Moving out of the process-product movement, research on teaching shifted to focus on “teacher knowledge” (Shulman, 1986) but not nearly enough on “teacher learning.” Measuring knowledge is a priority among those who strive to develop “tests” to certify teachers. The flaw here is similar to the flaw in tests designed to measure “intelligence” with a focus on knowledge accrued. Vygotsky (1978) argued that “intelligence” is revealed through the inspection of “learning” much better than through the examination of fossilized learning. The same is true of excellence and effective teachers. It’s not what is known as much as it is the willingness and inclination to learn and to find joy in doing that with students.

8. Effective teachers struggle.

There is a “flow” to good teaching (Csikszentmihalyi, 1996). It looks so easy. This apparent ease leads to all sorts of misconceptions (e.g., anyone can do it, good teachers are born to teach, teaching is an easy job). These are far from the truth of teaching. Teachers are learners. They are learning about their students, about their craft, and about the content they teach. They are learning to “cope” with institutional barriers and hurdles (e.g., high-stakes tests, summer “vacations,” labeling of children, grouping and scheduling practices). The life of a teacher is filled with struggles that frustrate and may even drive teachers out of their chosen profession.

Effective teachers survive by adapting and negotiating. They become, as Ayers (2001) describes, “creatively compliant.” Ayers offered an example from his own teaching to illustrate this point. He was bothered constantly by the interruption of announcements from the office into his classroom. Complaining about this would do no good, he reasoned. So he climbed up and pulled the wire from the back of the speaker. He submitted a request to have the speaker repaired knowing this would take forever. Problem solved. Duffy uses the metaphor of a cross-country skier attacking a difficult hill to get over. The fool attacks directly and typically fails. The expert learns to traverse and be patient. In the end, the one who traverses is the one who prevails. We have seen this play out in teaching again and again—in particular in these times of severe policy pressure.

9. Effective teachers tend to see the whole child and the whole curriculum.

We all make mistakes. In the first author’s (Jim’s) teaching experience, he devised and implemented a “Joplin plan” system for an elementary school that

divided students, based on their instructional level, into classrooms for two hours of reading instruction each day. He trained teachers in how to administer and interpret an informal reading inventory. He sorted children across grade levels. He saw excellent teachers frustrated by a system that limited their opportunities to integrate instruction, to stay flexible in their teaching, and to be responsive to their students. Jim saw the teachers who were less excellent compliment him on how great this system was and how their teaching was so much easier now. He saw the effects of labeling on children's self-concept and motivations. Jim lost focus on the child and on the teacher. He placed the curriculum in the foreground. It's one of those experiences that he is constantly apologizing for as he reflects on his career. Confession is good for the soul, but he looks forward to the time that he can improve without compromising the learning of others.

Whole language swept the country in the 1990s, in part, as a reaction to the severe fractioning of the curriculum, the overlabeling of children, and the overemphasis on standardized testing (Goodman, 1986). Whole language offered an alternative that was child-centered, a curriculum focused on processes, with huge attention to responsive teaching. Whole language has lost its momentum in recent years, but the message is no less valid today than it was a decade ago. The movement will in time reappear, perhaps under a new label or perhaps even an old one. It will reappear because it frames teachers and teacher education in a way that reflects research in teaching.

10. Effective teachers serve.

Teaching is a service profession. Teachers serve the students in our classrooms and their families. Teachers do not work for principals. They do not even work for school districts. Teachers are professionals contracted to teach. Teachers are focused on their students, which can become difficult with the pressures of testing the "closing the gap" rhetoric. Too many educators have become more focused on the scores and the "percent" of kids passing than on the children. Too many schools have come to accept the "triage" model for schooling. Students who will pass the tests are left on their own. Students who will not pass the test, regardless of instruction, are also left on their own. Students who might pass the test if offered intense instruction are given the bulk of the attention. This ethic may be defended in the case of medical emergencies, but not in education. The scores, the schools, the districts, and the system become the focus. We have failed.

One other benefit of the service ethic is the influence it has on the individual to learn about and learn to appreciate students from backgrounds different from the teacher's. The intense, personal commitment of service leads

to significant contact that helps the teacher step outside his or her own life and move into another (Eyler & Giles, 1999). These connections provide the teachers with a base to begin to build from the known to the new.

EFFECTIVE TEACHER EDUCATION

For every person who believes the best teachers are those who move on to become teacher educators there is another who subscribes to the view that: "Those who can't teach, teach teachers." Neither of these claims is true. Teacher educators are no more or no less smarter, harder working, higher paid, or valued than other teachers. The qualities that mark effective teacher educators are no different from those I have used to describe effective teachers. Their students are sometimes taller and older. Their institutions are no less challenging to effective practice than public schools (e.g., course structures). It is all the same and always a challenge. We have recently completed a study of teacher preparation in reading education that followed teachers through their first years of teaching. We recently reported on the qualities of effective programs and the impact of effective preparation on the transition into teaching. Teacher educators inside quality programs make a difference (International Reading Association, 2005).

We teach in teacher preparation programs that are nontraditional. We take students into our programs in cohorts. We teach most of their courses and we organize the experiences that our students have in classrooms working with teachers and children while they take our courses. We have a classroom in the elementary school where we tutor and work with teachers. We follow the schedule of the public schools and not the university. We try to blur the lines between courses, much to the concern of students at times. We make contact with the parents of our students (or their children in some cases). We work to create a real learning community that is like the ones they will create in their own professional lives as teachers. The qualities and impact of our program have been demonstrated and informed by numerous studies. A quality teacher preparation is more than a set of courses that the student completes in order to graduate.

The only differences we can detect between effective teaching and effective teacher education are the institutional barriers we have to accommodate. At the university, we struggle with course descriptions, course schedules, programs of work, academic calendars, certification standards/tests, accreditation agencies, and admission criteria to programs. Classroom teachers have their own set of institutional struggles that are both similar and different. In the end, however, we both serve learners, and all of the other principles we have described apply as much to teacher educators as to teachers.

THE GRAND LESSON

The need to value teachers and teacher educators

If quality teachers and teacher educators are not valued and supported, they may leave the profession. Teachers and teacher educators have never received the financial support they deserve. Teachers' salaries are considerably lower than other professions that require similar levels of preparation and effort. Teacher educator salaries are typically the lowest within colleges and universities. Sadly, this reality is not likely to change in the short term. The good news is that salaries have never been one of the factors that support teachers and teacher educators in their choice of a professional career or in sustaining their engagement over time. The bad news is that conditions of teaching are changing rapidly, and many of these changes are driving the best teachers out of the profession. Mandated curricula, standard course syllabi, high-stakes testing, and other forms of "accountability" are part of an effort to de-professionalize teaching.

Significant responsibilities for professional decision making are being replaced by scripted and standardized programs for teachers in reading instruction. These changes remove the professional obligation to be strategic and responsive to individual differences. This is particularly the case in working in schools of poverty and programs that prepare teachers to work in these schools. The best teachers are leaving because they can no longer teach in the ways that they know best.

Who will replace them? If the trends toward standardization continue, we envision the next generation of teachers as technocrats who will easily step in and out of slots. The "fast food" nation will become the "fast schooling" nation, with commercial programs that are targeted to create a standardized product that everyone recognizes. Unfortunately, this standardized product approach will underestimate the potential of learners to achieve and will only perpetuate inequities that exist within our society.

This is not just a projection about the future. It is a reality in many schools today. Teachers are dropping out of the profession at alarming rates (Quality Counts, 2003). The track into teaching has become faster and easier. Preparation has become less professional and more technical. Inner-city teaching has become the testing ground to see whether these fast-track teachers can survive. If not, they drop out. If they continue, they move on into the suburbs. Teacher shortages in inner-city schools are not due to a lack of teachers; they are the result of teachers not being supported to teach in these settings (Darling-Hammond, 2003).

No single group can reverse this trend. It will take a conscious effort of teachers, parents, researchers, and policy makers working together to redirect teaching and teacher education back on the track of professionalism that has been the focus over a century in this country. Not that long ago, most elementary school

teachers were high schools graduates (or less), elementary schools were the terminal degree for the majority of learners, and the expectation for schools was to prepare individuals to function effectively in the same setting and the same roles as their parents (Hoffman & Pearson, 2000). The American dream for public education as the great liberator and equalizer is “at risk.” The dream has been hijacked by a public agenda for accountability and standardization. The “Nation at Risk” that warned us of the threat of peril from within has become strangely and sadly prophetic. It is time to take what we have learned through research that matters on effective teaching and teacher preparation to reenvision a future for public education in America and for literacy for all.

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Chapter Two

THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS IN READING

Terry Salinger and Barbara Kapinus

The National Assessment of Educational Progress (NAEP) is a federally funded, nationally representative assessment of what American students know and can do in numerous content areas, including reading. NAEP is administered at three points along the kindergarten to grade 12 span (grades 4, 8, and 12) to provide information about students in elementary, middle, and high schools. NAEP assessments have been part of the education landscape since 1969, as data have been used to report on students' achievement in numerous subjects, including reading, and to contrast achievement according to various demographic groups. Perhaps its most important role has been to report the upward and downward trends in achievement, which are often used as a measure of the success of educational reform efforts.

This chapter begins with a general overview of the NAEP, with particular attention to the reading assessment. It continues by discussing how NAEP is developed, what it measures, and how data are reported. The chapter ends with a contrast of the 1992 form of the assessment and the changes that will be made as a new framework is implemented for the 2009 assessment.

OVERVIEW OF THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

The original impetus for NAEP was the 1963 congressional mandate that established the U.S. Office of Education. Representatives of the Office of Education, the Carnegie Foundation, and the Center for Advanced Studies

in the Behavioral Sciences were tasked with devising a mechanism to provide data on the condition and progress of education across the country. Their challenge was to devise an assessment system that would differ from the norm-referenced cognitive testing approach that was prevalent at the time and has continued on into the present. Assessments would be developed to measure achievement in reading, writing, mathematics, science, literature, social studies, art, music, citizenship, and career/occupational development, using mostly open-ended, constructed-response items (Jones, 1996). The assessments stay independent of particular curricular approaches, and resulting data were intended to provide information for policy makers, educators, and parents. As discussed later, until fairly recently, the original plan for open-ended items was abandoned in favor of the less expensive multiple-choice items, and item format continues to be a point of tension as NAEP specifications are periodically revised. Over time, reading and mathematics have been the most frequently tested subjects of all the NAEP subjects.

Although independent of curricular approaches, NAEP in many ways is the closest representation there is to national standards or a national curriculum in the United States. Frameworks that guide assessment development for each NAEP subject area and the achievement levels that shape reporting have been agreed on by nationally representative committees and seek to affect national policy. NAEP reports, often referred to as “The Nation’s Report Cards,” are widely cited, primarily because the data they provide document both trends in student achievement and differentials in achievement of students from different demographic groups.

Since 1990, the nonpartisan, presidentially appointed National Assessment Governing Board (NAGB) has had oversight for NAEP’s design, administration, and reporting. NAGB’s 25 members include governors, state legislators, educators at the state and local level, curriculum and measurement experts, and representatives of the business community and of the general public. The National Center for Educational Statistics administers the assessment program, which is developed and carried out by several testing companies.

NAEP seeks to be a rigorous assessment. Its reporting mechanism, referred to as achievement levels and described later, sets high standards for proficiency. Some critics have said that the standards set by the achievement levels are too high (Shepard, 1993). Many states have adopted the proficiency level labels—basic, proficient, and advanced—for use in their own test score reporting, probably because these terms seem to be more easily understood than grade level equivalents. Studies of ways in which states set standards to determine what the levels mean on their state tests, however, suggest that NAEP’s rigorous standards are not always adopted along with the labels (National Research Council, 1999b).

Since 1990, NAEP has provided state-level data for comparative purposes. NAEP also administers assessments to samples of students in large urban districts so that cities like Washington, DC or Los Angeles have their own data for analysis and comparative purposes. With passage of the No Child Left Behind Act (NCLB) of 2000, NAEP has taken on even more importance. NCLB stipulates that NAEP assess reading in grades 4 and 8 every two years and reading in grade 12 every four years. NCLB further states that state participation in NAEP is prerequisite for Title I funding, and districts selected for inclusion in the NAEP sample must also participate or forfeit Title I funds. Because by law, NAEP scores cannot be reported for individual students, schools, or districts (other than the participants in the Trial Urban Assessment), data for individual schools in the NAEP sample do not contribute to determining their progress toward Adequate Yearly Progress goals. Nonetheless, state results on NAEP are considered important indicators of upward or downward achievement “trends” and often provide a sobering contrast to inflated state reading test scores.

DIFFERENT FORMS OF NAEP

Many of the people who use NAEP data do not realize that there are actually two independent forms of the assessment, both serving different goals. One goal for NAEP is to report students’ achievement in a subject such as reading at a specific point in time and trends in achievement over relatively brief periods. This is often referred to as “main” NAEP. Thus, since 1992, students have taken the NAEP reading assessments developed to align to the 1992 framework. Beginning in 2009, students will take a newly designed NAEP that is aligned to a new framework.

Data from each administration of “main” NAEP assessment can be compared to provide information on students’ achievement over the period for which a framework is in use. For example, scores for 4th graders have shown no dramatic upward or downward trends on NAEP reading assessments administered from 1992 to 2005 (Perie, Grigg, & Donahue, 2005). Graphic representations of the scores on administrations during this period would show a relatively flat line. To make an even shorter term comparison, the average national score for 4th graders taking the 2005 NAEP reading assessment was only one point higher than the national average in 2003; this change was statistically insignificant and could not really be heralded as improvement. Eighth- and 12th-grade trends show similar patterns with minimal movement. In fact, short-term results found a modest decline in reading achievement from 2003 to 2005.

The second goal for NAEP is to report trends over longer periods, in fact, to document changes in achievement back to the first NAEP administrations. Accomplishing this goal requires administering a different form of NAEP to a smaller sample of students. This is referred to as “long-term trend” NAEP. These NAEP forms consist of items that have been carried forward unchanged from the original administration of the assessment. Thus students in 2006 who took the NAEP reading assessment designed to measure the long-term trend responded to the same items that were administered to the first cohort of comparable-age students and to every other cohort of students who participated in the long-term assessment. Administration of this original NAEP form allows for statements about whether students’ reading scores have improved, declined, or remained “flat” from administration to administration over long periods. Such data can be especially interesting when compared against current curricular trends or policies, such as the current focus on scientifically based early reading instruction and extended periods of instruction as required by the Reading First guidance.

HOW NAEP IS PLANNED AND DEVELOPED

Two documents are developed for each subject that will be assessed: an assessment framework and test specifications. The frameworks and specifications are reviewed periodically, and major revisions occur every 10 to 12 years. For example, even though the 1992 NAEP reading framework was “revisited” and somewhat revised to respond to criticisms about the labels of the “aspects of reading,” committees were assembled in 2002 to begin the process of deciding whether the existing framework should go forward or a new framework should be developed for the assessment to be administered in 2009 (see Salinger, Kamil, Kapinus, & Afflerbach, 2005, for a discussion of this process). There are several purposes for the NAEP frameworks and specifications, not the least of which is to explain in plain language the aspects of each subject area that will be assessed along with the format of the assessments, the anticipated difficulty level of assessments, and the procedures for scoring and reporting test results.

As was the case for the 1992 and the proposed 2009 reading frameworks, nationally representative advisory committees were convened to review the existing framework and make recommendations for the two documents. The committees include experts in the specific content areas, measurement experts, teachers and school administrators, and policy makers who will eventually use NAEP data to make recommendations for the assessments.

The frameworks present an organization of the domain agreed on by the committee members and make public the nature of the tasks that will appear on a test. For example, NAEP reading frameworks present the aspects of

reading that will undergird the assessment. A continuing tension has existed about whether NAEP should include aspects of basic reading such as word attack skills on the assessment, but framework developers have consistently chosen to measure only comprehension. The specifications describe the characteristics of the tests more fully by giving detailed information to test developers. In reading, such information includes the length, characteristics, and sources of passages students will read.

The frameworks for NAEP assessments are subjected to wide public review to ensure that they are comprehensible and acceptable to educators and policy makers. They are also presented to the National Assessment Governing Board, which must approve them before they can be used for test development. The NAEP frameworks are readily available, along with NAEP reports, on the NAEP Web site, www.naep.org

The actual process of moving from framework and specification documents to actual test items, test booklets, and data is long and complicated. Once a framework and specifications have been reviewed and approved by the NAGB, commercial testing firms develop items, which again are thoroughly reviewed. Items are pilot tested before they are included on test forms. Commercial testing firms conduct the NAEP administrations nationwide and score the tests to create the databases from which reports are developed and made available electronically for secondary and specialized analyses. The National Center for Education Statistics and NAGB provide oversight of the entire process.

WHAT NAEP MEASURES

The NAEP assessments for all subjects attempt to sample the entire content area or domain that is being measured as thoroughly as possible. For reading, the domain includes the various strategies for comprehending literary and informational continuous text, poetry, and some documents. At the same time, NAEP seeks to exert a minimum of burden on students who take the assessment and on their teachers. The challenge of being able to sample the huge domain of reading in a short amount of time—less than one hour for the entire assessment process—is met through a process called matrix sampling. Thus a large assessment is developed that consists of approximately 10 “blocks” of items each of which takes about 25 minutes to complete on the current NAEP reading assessment. Through matrix sampling, each student actually receives about one-tenth of the entire assessment; that is, the blocks are intermingled so that there are many different “forms” of the assessment to administer. Aggregate data from all students who take the assessment at each grade contribute to total NAEP results.

In addition to the so-called cognitive items that assess a particular subject area, students respond to background surveys that gather information about

their perceptions of topics such as instructional approaches used in their classes, the amount of homework they are assigned, the support they receive at home, their television viewing or computer use, or other topics of interest to researchers and policy makers. By linking responses to the cognitive items and the background surveys, researchers can make interesting generalizations about the student population as a whole and about different demographic subgroups. For example, comparison of responses to background questions about quantity of reading and students' reading scores on NAEP showed a positive relationship between the amount of reading completed inside and outside of school and achievement in reading at the 4th-, 8th-, and 12th-grade levels (Donahue, Voelke, Campbell, & Mazzeo, 1999).

HOW NAEP DATA ARE REPORTED

NAEP results are reported in many different forms and for many different audiences. The aggregate results—for the nation as a whole—constitute the primary “message” reported after each NAEP administration, but data are also disaggregated by several groupings, such as region of the country; urban, rural, or suburban locations; or students' race/ethnicity, socioeconomic status, or gender.

The actual results—how students perform on the assessments—are reported as average scores and percentiles on 500-point, subject-specific scales. Specific points along the scale differentiate the achievement levels at each grade level. Students' scores are divided according to three main bands, the NAEP achievement levels. These are labeled basic, proficient, and advanced. NAGB has adopted generic descriptors for achievement levels across all NAEP assessments, and these are elaborated for the individual subject areas (Perie et al., 2005). The generic descriptor for advanced is “superior performance;” for basic it is “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work.” The middle band, proficient achievement, is the most comprehensive of the generic achievement level descriptors. It is shown in Table 2.1 along with the current descriptors of proficient reading at grades 4, 8, and 12.

The statistical procedures for setting the achievement levels have been strongly criticized (National Research Council, 1999a). Recommendations from a National Academy of Education study of the achievement levels suggested that any reporting of student achievement in terms of the NAEP achievement levels be accompanied by “clear and strong warnings that the results should be interpreted as suggestive rather than definitive because they are based on a methodology that has been repeatedly questioned in terms of its accuracy and validity” (National Research Council, 1999a, p. 167). Yet use of the achievement levels is common on state and commercially developed

Table 2.1
Generic and Reading-Specific Descriptors of the NAEP Proficient Achievement Level

Generic Descriptor of Proficient Reading	Grade 4 Descriptor of Proficient Reading
<p>This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to each subject matter.</p>	<p>Fourth-grade students performing at the <i>proficient</i> level should be able to demonstrate an overall understanding of the text, providing inferential, as well as literal information. When reading text appropriate to 4th grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connection between the text and what the reader infers should be clear. For example, when reading literary text, <i>proficient</i> level students should be able to summarize the story, draw conclusions about the characters or plot, and recognize relationships such as cause and effect. When reading informational text, <i>proficient</i> level students should be able to summarize the information and identify the author's intent or purpose. They should be able to draw reasonable conclusions from the text, recognize relationships such as cause and effect or similarities and differences, and identify the meaning of the selection's key concepts.</p>

tests, perhaps because the terms seem to imply more certainty about students' actual achievement than they actually do.

Another frequent criticism of the NAEP achievement levels, especially as applied to reading, is that there is no comprehensive description of what students who score "below basic" actually can do. The media and the general public have often misinterpreted reports about the percentage of students whose NAEP scores are below the scale score cut off for basic, assuming incorrectly that students who read at the "below basic" level cannot read at all. Although some students in any cohort of "below basic" readers may have severe reading deficits, most students scoring in this band do have some fundamental, although low level, skills.

Some indication of what these low level, "below basic" skills can do is actually shown on another NAEP reporting device, the item maps that are developed for each assessment. Item maps lay out a full range of score points for each grade that is assessed; they show where the cut points are for the achievement levels; and they give short summary statements about the multiple choice and constructed

response items at various points along the “map” (Perie et al., 2005). For example, the cut point for “basic” for the grade 4 NAEP is 208, and students scoring below this point are considered to be “below basic” readers. Table 2.2 shows the brief summary statements for items below the 208 cut point, that is, items that students scoring below basic could answer about informational and literary text. That some of the items are constructed response is important because it shows that they were able to construct some meaning from text and not merely make lucky guesses from among the options following a multiple choice item.

SPECIAL STUDIES

NAEP administrations provide an excellent opportunity to conduct special studies of smaller samples of students, and these are reported as in-depth analyses of relevant issues. Although researchers are encouraged to conduct postadministration secondary analyses of NAEP data, the special studies are planned before the assessment is given. They may or may not involve collecting additional data from students who take the actual assessment, but data can never be tracked back to specific individuals or schools.

One of the most ambitious studies, the Integrated Reading Performance Record, was conducted after the 1992 NAEP reading was administered. Interviews were conducted with more than 1,300 grade 4 students who had recently taken the NAEP reading assessment. They were asked about their reading habits, preferences, in- and out-of-school reading experiences, and their perceptions of their reading instruction. Also, “portfolios” of students’ products from their reading work were collected, and students were recorded as they read orally one of the passages from the NAEP reading.

Two published reports detailed the results of this investigation: *Listening to Children Read Aloud* (Pinnell et al., 1995) and *Interviewing Children about Their Literacy Experiences* (Campbell et al., 1995). A rubric was developed to measure students’ reading fluency (Pinnell et al., 1995), and analysis of the

Table 2.2
“Below Basic” Entries in a Grade 4 NAEP Reading Item Map

Score Point	Item Type	Task
207	Multiple choice	Identify a trait describing a main character
202	Constructed response	Provide story detail to support an opinion
201	Multiple choice	Recognize the main idea of an article
200	Constructed response	Provide text-based explanation of characters’ importance to story
193	Constructed response	Retrieve and provide a text-related fact
172	Constructed response	Recognize the central problem faced by story character

recordings of oral reading for 4th graders' overall oral reading fluency, but not necessarily accuracy, was related to comprehension: students who comprehend well read with expression and good intonation, but their word-for-word accuracy was not perfect. The interview data showed that students who had been exposed to more diverse types of reading materials had higher reading achievement than students whose reading experiences were more limited (Campbell, Kapinus, & Beatty, 1995), and information about participating students suggested that "reading outside of school for enjoyment and reading self-selected books in school may be related to reading fluency" (Pinnell et al., 1995, p. 59). The oral reading fluency study was repeated in 2002, with the same reading passage and rubric but with more sensitive recording instruments. Results have not yet been released.

HOW NAEP HAS CHANGED OVER TIME

Some things about NAEP assessments have remained the same since their first administration, but other aspects have evolved to reflect changes in thinking about instruction and assessment (Jones, 1996; Salinger & Campbell, 1998). This is true for all the major subjects that NAEP assesses, and the changes in the reading assessment are especially illustrative of the process. The changes in many ways mirror the pedagogical and policy milieus in which four NAEP reading assessment frameworks were created. What has not changed over time is that scores still cannot be tracked back to individual schools, teachers, or students.

Another notable consistency across all administrations has been that NAEP is a low-stakes test; that is, there are no consequences for students, their teachers, or the schools that participate in the assessment. The stakes attached to NAEP changed somewhat when state NAEP was introduced and state-by-state comparisons became possible. Since then, the Trial Urban Assessment that tests students in large city schools has made another set of comparisons inevitable. Even though some states and districts will always come out "at the bottom" on NAEP, comparisons of this sort can be positive if they leverage local discussion about the need for educational reform.

In spite of the numerous changes that have shaped NAEP reading, reading comprehension has remained the primary outcome that is measured; however, the ways in which comprehension is conceptualized and measured and the ways in which results are reported have varied over the years. The introduction of large numbers of constructed response items into NAEP reading represented one significant change. Although the original architects of the NAEP system had envisioned the inclusion of many constructed response items (Jones, 1996), it was not until 1992 that NAEP reading really acknowledged the power of this item type. The most frequently cited drawback to

constructed response items is the time required to develop and refine scoring rubrics and to train scorers, and then for scorers to read and evaluate written answers. The advantage of these items is that they can be designed to measure aspects of students' comprehension that most multiple-choice items cannot.

Beginning in 1992, students had to spend up to 50 percent of their time (for grade twelve) responding to items that asked them to write anywhere from a short sentence or two to extended paragraphs about what they had read. In adopting the proposed framework for the 2009 NAEP reading, the NAGB unanimously affirmed continuation of the use of constructed response items on NAEP. It is interesting to note that the other subject areas have adopted use of constructed response items as well.

Even more important than the shift in item formats have been the changes in how the NAEP frameworks have conceptualized reading comprehension and operationalized it through test development. The best way to illustrate the changes over time is to compare how the domain of reading has been delineated in a succession of NAEP reading frameworks. Table 2.3 contrasts the primary headings used to describe the aspects of reading that students have been asked to demonstrate on assessments developed from the three frameworks that have shaped NAEP so far (Council of Chief State School Officers [CCSSO], 1992; National Assessment of Educational Progress, 1970, 1981) and on the framework proposed for introduction in 2009 (American Institutes for Research, 2004).

The table is arranged to show reading behaviors that seem to be of a similar nature, but it is misleading in that there are no equivalent cells for "uses what is read" or "applies study skills in reading." The 1992 framework recommended that some of the materials included on the assessment be documents such as schedules or tables or other "practical" material that would lend themselves to questions measuring how well students could "read to perform a task." The proposed 2009 framework discusses how students "understand" text and how they "use" text, and it, too, includes procedural texts and documents, including the kinds of graphic material that students encounter in text books.

The contrast across these four sets of NAEP reading objectives reflects 40 years of changes in reading research and practice. The relatively straightforward sets of objectives published for the 1970–1971 and 1979–1980 assessments align with the management-by-objective or criterion-referenced reading programs that were prevalent in the period. The Wisconsin Design is a good example of such a program. The 1979–1980 assessment measured reading and literature, hence the background items assessing the value students place on reading and literature.

As Table 2.3 indicates, development of the 1992 framework represented a major shift in thinking about reading to reflect the ways in which thinking about reading instruction and assessment was changing (Langer,

Table 2.3
Primary Headings of Categories of Reading on Four NAEP Reading Frameworks

1970–71 Framework	1979–80 Framework	1992/ 2003 Framework Aspects of Reading	2009 Framework Cognitive Targets
Comprehend what is read	Comprehends written words	Forming an initial understanding/ Forming a general understanding	<ul style="list-style-type: none"> • Locate/recall • Integrate/infer
<ul style="list-style-type: none"> • Analyze what is read • Reason logically from what is read • Make judgments concerning what is read 	Responds to written works in interpretative and evaluative ways	<ul style="list-style-type: none"> • Developing an interpretation • Demonstrating a critical stance (to text)/Examining content and structure 	<ul style="list-style-type: none"> • Analyze/apply • Critique/evaluate
Use what is read	Applies study skills in reading	Personal reflection and response (toward text)/Making reader/text connections	
Have attitudes about and an interest in reading	Values reading and literature	Stances: <ul style="list-style-type: none"> • Reading for a Literary Experience • Reading for Information • Reading to Perform a Task 	

Campbell, Neuman, Mullis, Persley, & Donahue, 1995). Reading researchers, teacher educators, and many classroom teachers thought that the criterion-reference reading programs and standardized multiple choice reading tests had reduced the construct of reading comprehension to a set of discrete skills. Many were concerned that the teaching and measurement of reading seemed to deal more with the mechanics of getting meaning from text rather than with the individual meaning, relevance, or growth. A constructivist interpretation of reading—termed *reader response*—was coming to be accepted (Langer, 1995), and developers of state reading assessments were exploring new ways to measure reading (Wixson, Peters, Weber, & Roeber, 1987).

The developers of the 1992 NAEP reading framework sought to operationalize reader response and to take advantage of some of the ideas being used in innovative state assessments. They defined reading as “a dynamic, complex interaction among three elements: the reader, the text, and the context [of the reading act]” (CCSSO, 1992, p. 10). Concern about the context of the reading act was addressed through the division of types of reading into classifications that combined purpose and genre; thus readers were assumed to read certain kinds of texts for different purposes, and the choice of stimulus material was guided by these considerations.

The developers of the 1992 framework discussed “reading literacy” to expand the sense of reading beyond functional behaviors to “a broader sense of reading, including knowing when to read, how to read, and how to reflect on what has been read” (CCSSO, 1992, p. 6). They recommended that the best way to assess this broader sense of reading would be through the use of lengthy, authentic texts that are similar to what students at the three grade levels would actually encounter in their in- and out-of-school reading. They also recommended that the assessment include constructed response items, as the original NAEP design had intended. Students in 12th grade were estimated to spend approximately half their assessment time writing in response to open-ended prompts. Using a large number of constructed response items on an assessment with the magnitude of NAEP was a major challenge and required creating a new set of technical guidelines.

The 1992 NAEP Reading Framework had a powerful effect on state and commercial reading assessments and was praised because it so clearly aligned with the constructivist and literacy-based approaches to literacy instruction that were widely used. It had declared at a national level what the gold standards of reading tests should be during the 1990s: extensive use of constructed response items; long and diverse passages from literature, informational texts, and even documents, especially for the “reading to perform a task” stance; and items that reflected a reader-response perspective on reading.

Nevertheless, there were many criticisms. The underlying perspective on reading was difficult to translate into measurement items. According to the framework, items were to be classified according to “aspects of reading” to reflect a theoretical perspective that reading involves a process of moving in and out of text to gain meaning and then standing back to evaluate and analyze not just the meaning per se but also the way in which authors have crafted text (Langer, 1995). Although from a theoretical and perhaps even pedagogical perspective, this interpretation of how one reads is indeed elegant, reviewers trained on the meaning of the framework found it almost impossible to classify items reliably according to the stance to which item writers had assigned

them (Pearson & DeStefano, 1994). As shown in Table 2.3, the labels were changed in the “revisited” framework, but the underlying constructs represented by the stances remained the same.

CHANGES PROPOSED FOR THE 2009 NAEP READING ASSESSMENT

When committees were convened in 2002 to develop the new framework and specifications for the 2009 NAEP Reading Assessment, they faced one important question: Should the taxonomy for item development and definition of reading embodied in 1992 NAEP be continued? Dramatic movement away from the existing framework would mean that the “trend line” of data from 1992 would be “broken” because even if many of the characteristics of the existing assessment were maintained, the item types included on assessments administered in 2009 and beyond would be different enough that student scores could not be compared. So-called “bridging studies” could be conducted to determine how the assessment results compared, and the regular “long-term trend” NAEP would be administered as usual, but in many ways a new conceptualization of the framework always means a new assessment.

As was the case with the 1992 NAEP reading assessment, developers of the 2009 framework were aware that the political climate in which they would do their work was fraught with strong opinions about why students seemed to be graduating from high school with reading skills that did not serve them well in postsecondary education or the workplace. Debates about what constituted “scientific evidence” for the effectiveness of approaches to reading instructional were also rampant. The passage of the *No Child Left Behind* legislation, introduction of the Reading First program, and general acceptance of the National Reading Panel’s (National Institute for Child Health and Human Development, 2000) definition of reading as phonemic awareness, phonics, fluency, vocabulary, and comprehension all contributed to the political landscape in which the framework was developed. Further, policy makers at all levels were clamoring for more data more quickly than ever before, and NAEP’s inclusion of constructed response items requiring human scoring was viewed as one obstacle to speedy test scoring and reporting.

Developers of the 2009 framework rejected the 1992 taxonomy in favor of one that is grounded in cognitive science rather than literary theory. For the new framework, reading would be defined as “an active and complex process that involves: understanding written text, developing and interpreting meaning, and using meaning as appropriate to type of text, purpose, and situation” (American Institutes for Research [AIR], 2004, p. 2). This definition views reading as involving the reader, texts, and purposes for reading,

much as the 1992 framework had done, but it recommends changes in the way this interaction is assessed.

The broad reading categories are referred to as “cognitive targets” to ground them firmly in the cognitive science research on what readers do when they read. The terms used as labels of the cognitive targets—*locate/recall, integrate/infer, analyze/apply, and critique/evaluate*—are deceptively simple. Developers of the framework worked hard to delineate the specific kinds of reading that could be classified under the broad headings and have further recommended that the reading behaviors be distinguished in three ways: those common across all text types, those specific to literary texts, and those elicited specifically by informational texts. Table 2.4 shows the extensiveness of the behaviors subsumed under the general category of “integrate and interpret” for both literary and informational texts at the 4th-grade level.

The 2009 framework has recommended the continued use of both multiple choice and constructed response items, with students in grade 4 spending approximately half the assessment time responding to multiple-choice items and half the time responding to constructed-response items; students in grades 8 and 12 spending even more time responding to constructed-response items. Texts will continue to be long, authentic representations of the literary and informational texts student frequently encounter. Literary texts may be fiction, literary nonfiction (such as essays), or poetry; informational texts include exposition, argumentation and persuasive texts, and procedural texts and documents.

Changes in the taxonomy of reading behaviors would alone have been enough to necessitate that a new trend line be established when the new NAEP is administered in 2009, but they were not the only major change

Table 2.4
2009 NAEP Reading Grade 4 Cognitive Targets for Integrate and Infer by Text Type

Cognitive Targets for Integrate and Interpret at Grade 4	
Literary texts	Informational texts
Form a general idea	Form a general idea
Identify theme	Identify purpose
Describe a character	Identify problem and solution
Identify a character's motivation	Predict events
Predict events	Identify causation
Connect ideas within or across text	Identify various levels of text
Relate setting to development of theme or characters	
Describe relationships between and among characters	
Interpret character's motivation	
Provide paraphrases	
Identify symbols or symbolic language in literary text	

to the assessment. Past assessments have allowed for, but not required, some items that asked about vocabulary. The committees designing the 2009 framework recommended that items be developed to assess vocabulary on every NAEP passage. As the framework makes clear, the focus of vocabulary items on NAEP will be to measure students' "meaning vocabulary," that is, the ways in which students apply their understanding of word meanings in comprehending what they read (AIR, 2004; Beck, McKeown, & Omanson 1987). The words within NAEP passages that will be assessed must be central to passage meaning; not knowing or being able to approximate the meaning of these words will disrupt students' full comprehension of what they mean. The proposed framework and specifications give clear guidelines for selecting words to assess and for developing items.

The introduction of vocabulary assessment to NAEP reading is an important innovation because it emphasizes the essential role vocabulary knowledge plays in comprehension. Merely learning definitions or use of context clues is not enough to produce strong readers. Students must also learn strategies for figuring out word meaning as part of their entire set of comprehension skills.

CONCLUSION

The National Assessment of Educational Progress in reading has changed dramatically over the years, just as reading research and instruction have changed. NAEP short- and long-term trend data were always available for use, but it was probably not until the introduction of state NAEP testing in reading that policy makers and educators really wanted to know more details about the actual assessment instruments. The introduction of the 1992 framework provided this information, and many state and commercial tests followed its model. It remains to be seen whether introduction of the 2009 framework, with its definition of reading as a cognitive process and its assessment of vocabulary, will be equally as powerful. NAEP reading data, however, will continue to play an important role in educational decision making.

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Chapter Three

HIGH-STAKES TESTING OF READING AND WRITING AT THE ELEMENTARY LEVEL

Randy Bomer

The other chapters in this book discuss elements of literacy instruction that the education profession has developed thoughtfully and carefully across years of research, theory, and expertly crafted teaching. This chapter is different. It is about a practice that has been developed by people who are not educators, with no research about how it will affect young people. The subject of this chapter, however, has exerted a stronger impact on literacy instruction than any one of the others, especially in recent years. Nothing at present conditions the nature of literacy in school as much as so-called *high-stakes testing*.

The term is easy enough to define: it refers to the use of standardized tests to make significant decisions in an education system. A high-stakes test, then, is not a particular kind of test; the term is about the *use* to which a test is put. If a child's promotion from 3rd to 4th grade is determined by a test, then that is a high-stakes test—whether that test is a multiple choice test, a writing test, or a spelling test. Such consequences are not determined by the makers of the test or by educators. They are determined by elected officials or appointees—often through law and sometimes through administrative regulations and policies. Attaching stakes to a test, therefore, is a political decision.

The consequences of a particular test can be directed at the student or at the teacher, principal, school, district, or state. Stakes for educators and systems have included advancement in or loss of either pay or employment, the labeling of schools as good or bad, the requirement that schools provide additional services or options to transfer, or simply the publication of scores in newspapers. Whether a particular consequence should be considered *high stakes* is in the eye of the beholder.

In this chapter, I explain what high-stakes testing is, where it comes from, and the impact it has on teachers, students, and what goes on in schools. I begin with a consideration of what makes a test a high-stakes test and describe the range of things that can be called one. I then discuss the tangle of issues around high-stakes testing including social promotion, accountability, motivation of teachers and students, and political calculations. Next I review some research about the attitudes of teachers toward high-stakes testing and the reasons for those attitudes, and I describe some of what we know so far about the effects that these testing programs are having on teachers, students, and the sort of things that go on in schools. Finally, I describe some of the things teachers and other educators seem to be doing to respond to the policy realities.

In literacy and its learning, there is nothing more important than assessment: it is part of everything we do. But assessment does not always mean testing; it does not always mean someone outside the classroom does it; and it does not even mean the teacher instead of the student always does it. When students are learning to write, they must learn to assess the quality of what they have written so far in a piece of writing, so that they can know what and how to revise. For a writer, assessment is the activity that provides a map of the process. When reading, a person must monitor her or his own thinking to ensure that she or he is understanding the text and thinking in ways appropriate to the context for reading. When a reader assesses that he or she is on the wrong track or has made a mistake about the meaning, it is essential that the reader be able to self-correct. There is no way to learn to be a better reader or writer without assessing all along the way.

Teachers of literacy, too, must continually assess. Because literacy is thinking, its nature differs from one student to another, and the particular elements are learned in intricately individual ways. Consequently, a teacher must monitor each student's habits and progress, noting gains and planning what to do next. A classroom depends on a continual exchange of information—flowing from students to teacher as much as from teacher to students—as education unfolds in dialogue. Although assessment is essential to the teaching of reading and writing across all ages, it is never more crucial than in elementary education, where children are first establishing the meaning of literacy, developing habits and identities, and covering greater distances as learners than they ever will again in their literate lives.

Because assessment is so important to literacy and its teaching, it is especially significant that forces outside the classroom demand particular forms of assessment of teachers and children. If people who support increased testing are right, then such intensification might promote more learning, as students become more concerned about the quality of their reading and writing, and as teachers become more informed and supported by formal assessment systems that are backed up by the power of the state. On the other hand, if

those opposing intensified testing are correct, then the imposition of high-stakes tests as a way of assessing diverse students and classrooms could actually impede the flow of accurate information and judgments within classrooms. This would occur because tests, written and determined by people far away from the classroom, move decision making to a place distant from the interactions that matter most.

FEDERAL LAW AND THE NEW PERVASIVENESS OF HIGH-STAKES TESTING

High-stakes tests are not particularly new. Even in the nineteenth century, teachers in some cities and towns in the United States lost their jobs over their students' scores on standardized tests (U.S. Congress, 1992). Certain states, such as New York, have had tests with serious consequences in high school for much of the twentieth century, including a competency test that students had to pass to graduate. When the National Council of Teachers of English asked me to chair a task force in 1999 to think about high-stakes testing and recommend responses to it, there were high-stakes tests in about 28 states. Now there are high-stakes tests in 50 states, because the federal government requires them of all states receiving federal education funds. Whereas in the past, high-stakes tests were mainly confined to high school students, they are now universally applied to elementary schools.

Since the passage of the No Child Left Behind Act in 2002, America's children are subject to high-stakes tests of literacy as soon as they move out of the primary grades in school. All 3rd graders are tested in reading, according to the provisions of No Child Left Behind, as are all 4th, 5th, 6th, 7th, and 8th graders. The main event of grades 3 to 5 in education policy is that at this age, the induction into the testing culture and its high stakes begins. Current federal law requires that schools make steady progress every year until 2014 when all students must have achieved a score designated as "proficient" in reading and math, as measured on the state's chosen tests. In addition, schools must show this "adequate yearly progress" with subgroups that include these social categories of children, among others: low-income, English language learners, Latinos/as, African Americans, American Indian, and special education. (By the time many readers encounter these words, this law will have changed substantially.) For now, let us just say that these requirements are difficult for schools, and they create a good deal of stress about the testing performance of students. The adults in the building respond to the *consequences* of the tests, and that is what makes them high stakes. These adults' responses are what create the environment for the children in their care. It is an environment characterized mostly by anxiety and fear. People often teach what and how they do because they are afraid of consequences, not because they believe

their curriculum tells the truth, or because they have thought through what is important, or because it creates the most meaningful, thoughtful, democratic, or beautiful forms of life possible for their students.

High-stakes testing also creates authoritarian social relations. Because funding or status is at stake, people in positions of power manage in a more authoritarian way, so they introduce more and more prescriptive procedures for curriculum, teaching, and assessment; and they introduce more surveillance to ensure their control mechanisms are working. When stakes of one test are high, districts impose more test benchmarks to manage the risk that something unexpected will occur on the test that carries drastic consequences. My home district requires monthly benchmark testing of students in grades that have high-stakes tests, and some individual schools schedule even more frequent tests so that they will not be surprised by the outcomes of the benchmark tests that must be reported to the district. This level of information flow, of surveillance and control, dominates teachers' thinking; it takes over what they can imagine, consider, plan, or even notice. The position of managing information about students' levels of strength or weakness also positions students as providers of information about themselves. Their quality is always in question, and their competence is always under scrutiny.

Of course, the clearest examples of high stakes are those in which students' promotion to the next grade or graduation from high school is determined. For a 3rd, 4th, or 5th grader, 8 to 11 years old, not being promoted with one's friends to the next school grade is more than just a matter of educational policy: it can mean loss of friends, loss of status with siblings, or being prevented from progressing through life—arrested in the process of growing up. There may be consequences for identity—one's sense of self as competent and strong—and for social and emotional health. These are high stakes indeed. These uses of tests, of course, create stress for educators, too, especially teachers who know the children and want the best for their students.

Technically, the term *high-stakes testing* refers to the attachment of significant consequences to test scores. It seems a relatively straightforward concept, but it isn't. In fact, the term *high-stakes testing* in conversations about education in the United States carries with it an amalgam of conceptual assumptions, attitudes, histories, policies, technologies, and practices. An insistence on educational equity and impatience with the gap in achievement and opportunity among different social groups, especially races, are compressed inside the term, as is a faith in the technology of testing. These ideas share space, too, with beliefs about the motivations of teachers and students, and with others about promotion and retention of students. The term stands in for ideas about the accountability of public employees to the public and to powerful political entities and about the public's need, in a democracy, for information and involvement about the future being composed in the minds of its children. Technical

dimensions of assessment are also contested in this term, including questions of whether every student must be tested in order to assess the system's progress, and whether a one-shot direct assessment of reading or writing can possibly produce a valid picture of what a learner can do. In other words, much of American history, politics, and culture is jammed into this single element of education policy or assessment practice.

EQUITY: THE PUTATIVE REASON FOR HIGH-STAKES TESTS

A public education system is answerable to the public, and elected representatives have a responsibility to make sure the schools are serving public purposes. This was evident in the nineteenth-century origins of the common schools; it was the expressed project of the progressive movement in the United States; and it was the reason that the schools were (and still are) a site of struggle for civil rights. The story of progress in education has often been about access for all—women, African Americans, those who speak first languages other than English, and people with disabilities.

Evidence persists, however, that the system does not serve all social groups equally well, or even close to it. African Americans, Latino(a)s, and students from economically disadvantaged families, on a statistical average, score lower on tests, drop out more, and are less likely to attend college. Scholars and researchers do not agree about why this is so, but politicians have bypassed explanation, seizing on the achievement gap itself as not a product of many other social inequities, but an enemy that can be defeated with sufficient political will. The programmatic shape given to that political will has most often been accountability, along with experimental research as proof of program effectiveness and phonics as the only trusted approach to reading. In his 2000 presidential debates with Al Gore, George W. Bush said:

[R]eading is the new civil right. . . . [T]o make sure our society is as hopeful as it possibly can be, every single child in America must be educated. I mean every child. It starts with making sure every child learns to read. K-2 diagnostic testing so we know whether or not there's a deficiency. Curriculum that works and phonics needs to be an integral part of our reading curriculum. Intensive reading laboratories, teacher retraining. I mean, there needs to be a wholesale effort against racial profiling, which is illiterate children. We can do better in our public schools. We can close an achievement gap, and it starts with making sure we have strong accountability, Jim. One of the cornerstones of reform, and good reform, is to measure. Because when you measure you can ask the question, do they know? Is anybody being profiled? Is anybody being discriminated against? It becomes a tool, a corrective tool. And I believe the federal government must say that if you receive any money, any money from the federal government for disadvantaged children, for example, you must show us whether or not the children are learning. And if they are, fine. And if they're not, there has to be a consequence. And so to make sure we end up getting rid of basic structural prejudice is education. There is nothing more prejudiced than not educating a child. (Commission on Presidential Debates, 2000)

Although this was a debate in a famously contentious election, there was no difference between the candidates in their attitude toward educational testing and accountability. Al Gore said:

I agree with Governor Bush that we should have new accountability, testing of students. I think that we should require states to test all students, test schools and school districts, and I think that we should go further and require teacher testing for new teachers also. (Commission on Presidential Debates, 2000)

There was no debate over whether accountability was necessary or desirable, or whether testing would be the most appropriate mechanism for accountability. When “testing” and “accountability” appear together in language, we have to assume that we are talking about “high-stakes testing,” because “accountability” would not be very meaningful without at least publication of scores, and probably more serious consequences, being attached to tests. It would not seem to be an accountability system if the main use of tests was simply to inform instruction. In other words, a particular way of thinking about education and accountability has developed among policy makers.

The Democratic legislators who later helped turn Bush’s program into the No Child Left Behind law saw it the same way. Democrat Edward Kennedy was the chair of the Senate committee that worked on the law. His Web site states: “The bipartisan No Child Left Behind Act created a national commitment to public education—a commitment to improve America’s schools through accountability for results.” He goes on to criticize the lack of funding that the programs have received, but he presents the accountability theme in much the way Bush would. George Miller, the ranking Democrat on the House Committee on Education and the Workforce is passionate in his defense of the law:

No Child Left Behind’s philosophical roots go back to the Supreme Court’s 1954 *Brown vs. Board of Education* decision. The reason we needed No Child Left Behind in the first place was that, five decades after *Brown*, our country still fails to offer poor and minority children the same educational opportunities as their peers.

Poor and minority children are still much more often assigned to less-challenging classes and less-qualified teachers than are higher-income and white students.

This opportunity gap or lack of access to an equal education affects academic achievement: seventy-four percent of white fourth graders read well—nearly twice the rate of black fourth graders. Latino and Native American fourth graders fare only slightly better.

More than half a century after this nation committed itself to educational equality, fewer than half of all minority children can read proficiently. It was this two-class education system that No Child Left Behind was intended to put an end to, once and for all. (Miller, 2006)

In discussions of the reauthorization of the law, congressional members from both parties have insisted that any revisions cannot compromise on reducing

the achievement gap by holding schools accountable for students' test scores. In other words, absent some political sea change that is hard to imagine at this moment, high-stakes testing will remain a requirement for all states receiving money from the U.S. Department of Education. For now, those states number 50. And even if the federal government reduced its emphasis on high-stakes testing, the policy originated in states to begin with and would be likely to continue there as long as it remained politically advantageous for politicians to appear tough on education.

There are a number of assumptions in this approach to the problem of equity. It assumes that students have not been scoring as high as they might because either they or their schools were not trying hard enough. It also assumes that fear of humiliation will motivate the educators in schools, and the students they teach, to score better on tests. It assumes that existing tests accurately measure students' reading in ways that matter.

DO HIGH-STAKES TESTS PROMOTE EQUITY?

If the motive for introducing high-stakes tests is that they will improve the quality of learning for poor, minority, and vulnerable students, then we should attend to whether that is the case. Are high-stakes tests advancing civil rights? What are the consequences of high-stakes tests for African American, Latino(a), and children from low-income homes? These are empirical questions, and we may look to research for answers, although, as with most research questions, we will not find a single, uniform answer.

Several researchers have examined the question of whether high-stakes tests work to raise the level of student achievement overall. Comparing the results of high-stakes tests to other assessments, Amrein and Berliner (2002) found that although scores on high-stakes tests have risen in many states, those gains have not been reflected in other kinds of assessments taken by the same cohorts of students. Findings like these suggest that various patterns of behavior might be influencing the reported scores on the high-stakes tests: from variations in the level of difficulty in the test itself, to teaching directly to the kinds of questions on the high-stakes test, to outright cheating and deception on the part of school officials afraid of losing their jobs. Green, Winters, and Forster (2004) critiqued these findings and argued that high-stakes tests are reliable indicators of students' growth, but even they found only a moderate level of confidence in the Florida tests' reliability. That high-stakes tests may not be reliably measuring student growth is an important point, as the promise of the policy is that disadvantaged students will get a higher quality education, not simply that their scores can be made to climb on a particular test.

Some researchers have found that high-stakes testing is doing some good for schools with large minority populations. Skrla and Scheurich (2004) found

that some school and district administrators believed the Texas accountability system had helped raise teachers' expectations for students. According to these principals and district personnel, schools' test scores rose as a result of changes in the attitudes and intentions of school faculties. They also said that the requirement that schools report the scores of various ethnic groups and poor students, as well as the knowledge that there would be consequences for those scores, brought issues of race, equity, and access to education into the foreground of the schools' work. The authors concluded that testing and accountability (which is another word for consequences being attached to tests) were a useful part of a system designed to bring more equity to education.

Their respondents and critics, admirably included in the same volume (Skrla & Scheurich, 2004), posit that the effects of high-stakes testing cannot be determined only by looking at scores and talking to principals. They believe that other measures must be examined, such as dropout rates and other assessments of learning. If the dropout rate is increasing, as Valencia (2002), Valenzuela (2004), Haney (2000), and others say it is, then it may be that the tests have added pressures and obstructions to students' lives in ways that actually result in their receiving less education. Moreover, if other means of assessing students' learning, including other tests, do not show the kinds of improvement that the high-stakes test seems to show, then it may be the case that the students are being taught to pass a test without really being taught to read and write in a variety of situations. These effects are most pronounced in the very schools that the policy was supposed to help—those with poor and minority students—because those are the schools most frequently under threat of the consequences of the test.

Another glimpse into how testing affects poor and minority students is provided by several studies of the impact of high-stakes testing in Chicago. Roderick and Nagaoka (2005) found that African American students were retained much more frequently than other ethnic groups. Furthermore, they found that retaining students, giving them a "second dose" of what they had struggled with before, did not make them learn more; sometimes resulted in lowered achievement; and made it more likely that they would drop out later or that the school would place them in special education. Furthermore, the testing policy lowered the achievement rates in reading of moderate and high-achieving African American children, although it did raise the lowest scores (Roderick, Jacob, & Bryk, 2002). The lower scores of the stronger readers could be a result of a curriculum narrowed toward test demands.

Diamond and Spillane (2004) found that high-stakes accountability in Chicago had a much greater impact on the lives and work of administrators, teachers, and students in low-performing elementary schools than those in high-performing schools. The latter, with a few exceptions, went about their business in the usual way. Low-performing schools, however, focused their

efforts on whatever superficial adjustments they needed to make to get “off probation” or to avoid mid-level bureaucratic sanctions. They did worry, as they were expected to do, but they did not necessarily worry more about the learning of their students. Consequently, the accountability system, perhaps designed with the intention to improve the educations of minority and low-income students, actually ended up distracting their teachers toward the system itself.

In her research, Booher-Jennings (2005) reported that schools in Texas perform “educational triage” by analyzing data to figure out exactly which students will get them the most return for their efforts at raising scores. Generally, those closest to, but below, the cut score—“the bubble kids”—get more attention, and the most struggling students are written off. Once again, poor and minority students are disproportionately represented among the lowest-achieving students, and the radical redistributive intentions of accountability are thwarted. Because policy makers are not putting more money into education as they increase accountability, resources in the form of teacher time and effort are rationed to do more with less. This is just one of the ways of “gaming” the accountability system that Booher-Jennings points out. Others include reclassifying students as special education so that they will not have to take the test and retaining low-performing students so they cannot advance to the grade where a high-stakes test is given.

Zip codes predict test scores. Neighborhoods with expensive houses will have high test scores, and neighborhoods with housing projects will have low ones. If we believe the rhetoric of the politicians who design testing policy, this inequity is what high-stakes testing is intended to address, but it may turn out that the consequences of high-stakes testing only add to the vulnerability of the poor and further disadvantage them.

TEACHERS' PERSPECTIVES

Seven women, three men, and I gather close to listen to Perla, an eight-year-old girl, talk about what she has written in her writer's notebook. We see her as the little girl she is. We are trying to drop the roles assigned to us by the institution of school and be people together—*so that* we can arrive with her at a place of confidence and expertise, where meaning for her is thick and dense and so writing is easier, especially quick, ample, fluent writing. She has crystalline blue eyes and black hair, very fair skin, and, visible only close up, a constellation of pale freckles scattered across the bridge of her nose. There is a little gap between her front teeth through which her tongue flickers in and out as she speaks. Everyone in the room adores her.

She has been writing in her notebook in both English and Spanish. Most of her entries are memories of when she was very little, many, in fact, not so

much her own direct memories as accounts given to her by her mother, aunt, and grandmother. Most of the entries are about her life in Mexico, told to her in Spanish, and so it seems natural and intelligent that she writes them in the most fitting language for her. We ask about some of the themes we think we see in her notebook, and whether they might remind Perla of still other memories. She moves easily between the concrete particulars of her memories—how her *abuela's* (grandmother's) face looked that day she was so surprised—and more abstract ideas—feeling close to people in her family, feeling like she was growing up.

It is in connection with this latter theme—growing up, getting bigger and stronger—that she relates the memory about the remedial reading class. In second grade, because she hadn't made a high enough score on the district's test and so was deemed at risk of failing the high-stakes third-grade state reading test, Perla was placed in a special class where she practiced answering questions about stories they read together and received a system of points with candy rewards when she got enough questions right. She looked a little embarrassed to be admitting to her difficulties in front of these teachers who thought she was so smart, but she reported that she had gotten lots of candy because she got the questions right. She had been scared of failing the test and failing the grade, but she had gotten through it.

She finished this story, and the women and men in the room continued to gaze softly, thanked her for talking with us, and whispered our wishes that she have a nice day. Then, as the door closed, the room erupted. Through clenched teeth, people exclaimed how angry they were at a system that could be so stupid as to miss Perla's brilliance and put that child in a remedial environment just for the sake of the test. Outraged that the system would aggress in that way on this specific child, threatening her sense of herself as strong and competent and embarrassing her in front of her friends, family, and teacher by identifying her as in need of treatment, the teachers felt protective of Perla. They believed that her multilingualism, which most of the world would view as a deep strength, caused her to be placed in a diminished intellectual environment, subjected to behaviorist tricks to earn candy. It was insulting, to her, to her teachers, and to the work we believed we as educators should be engaged in.

As teachers, we know children as particular people; we recognize their bodies, the colors of their eyes, the texture of their hair. We hug them in the mornings and predict the moments of their days. If we are any good at all, we recognize what they love, what they are good at, what excites them—we recognize them as exactly the people they are. Teachers tend to be skeptical of distant, formal, mechanized forms of coming to know what children can do. The ways we view our students places many teachers on a collision course with education policies that favor high-stakes tests.

These perceptions have been supported in some of the recent research on teachers' attitudes toward testing. Jones and Egley (2004) found that most teachers in a survey of more than 700 educators in Florida believed that high-stakes testing was taking schools in the wrong direction, and that the scores were not an accurate assessment of what their students knew and could do. They reported that the test was having negative effects on the curriculum, on teaching and learning, and on their own motivation, as well as on that of their students. The teachers made clear that they did think accountability was necessary, and that teachers should be held accountable. The principle of accountability, from the respondents in this study, was not under attack; the teachers simply had professional and technical objections to the tests and their uses. Similarly, Mathison and Freeman (2003), in a set of interviews conducted in New York schools, found that teachers favored accountability in principle but thought that the high-stakes tests frequently forced them to act in ways they considered unprofessional and not in the best interests of their students. They reported teaching in ways that they did not think resulted in high-quality learning but did result in higher test scores, which represented a lowering of their educational standards. They often felt themselves to be in a dilemma, choosing between providing a quality education and doing what the state education system required of them. In previous research, surveys of teachers working under the Texas accountability system revealed teachers' morale to be very low, for many reasons similar to those cited in the previous studies (Gordon & Reese, 1997; Hoffman, Assaf, & Paris, 2001). Observational and interview studies of literacy teachers have shown them to experience serious conflicts between their professionally valued practices in the teaching of writing and reading against the demands of a testing system (Ketter & Pool, 2001; Larson & Gatto, 2004; Rex & Nelson, 2004). Teachers' attitudes toward accountability systems are complex, but there can be no doubt that the quality of the system, particularly when it contains high-stakes tests, can create conflict, stress, and difficulty for many teachers.

VALIDITY PROBLEMS

If literacy tests are simply finding out how well students can read or write, why would teachers experience conflict if they do the best job they can at teaching reading and writing? What could be wrong with saying that 6th graders should prove on a test that they can read at a 6th-grade level? Why would that level of literacy be too hard for anyone to achieve after so many years in the school system? These kinds of questions force us to ask what it is, really, that tests can do. Because if a test is not really revealing a simple and pure essence of *reading* or *writing*, then it is important to understand what it is doing.

As most people grow up and go through school, they get used to the idea that some of their friends are smart and knowledgeable, but just not good at tests, whereas others are great at scoring high on tests, but not especially thoughtful or well informed. People are good at different things, and it's possible just to be a good test-taker. If that is so, then a test is not a transparent instrument that can find out about another ability called, say, "reading."

A person could be just fine with reading but not be so fine with test situations for a number of reasons. Some people, for instance, don't respond well to being asked direct questions; it makes their minds shut down. Similarly, some people get unusually nervous in testlike situations. Other people do not respond positively to the experience of being compared to other people, exactly what tests are designed to do. (This problem with being compared against others, so that others' stereotypes become threats to how one can anticipate being perceived socially, has been suggested as one factor in the test performance of different genders and races [see the work of Claude Steele, 1997].) For these and lots of other reasons, some people underperform on tests; that is, they seem to be worse readers or writers than they really are because of problems with the way their abilities are being measured.

Literacy research over the past few decades has shown that "reading" and "writing" are not simple abilities that an individual learns once and for all like riding a bike. The nature of each of these language practices depends on the context in which it is being done. Reading is different when a person is reading a medicine bottle to decide if it's safe for a child than it is when that person is reading a novel on an airplane to pass the time (Gee, 1996). Reading is different when people feel oppressed than when they feel free and powerful. Writing, likewise, is a completely different activity when a person leaves a note to a partner about what's for dinner and when that person writes to prove to an authority that required reading has been done. Because literacy is different for its users at different times, it makes sense that literacy on a test would be a special form of literacy—not a dipstick that can reveal a generalized "level."

In social science research and in testing, there is a concept known as *validity* that concerns the degree to which the phenomenon under investigation can really be understood using those particular methods. There are many issues in regard to validity in high-stakes testing, but I focus here on one crucial issue. Many people in literacy education, even many people who work in the field of educational measurement, have grave doubts about the validity of standardized tests when it comes to finding out the most important things about children's reading and writing. That makes a huge difference in results. If the tests aren't really determining whether students can read or write well, if high-stakes decisions are being made on that basis, and if teachers are teaching how to take tests rather than reading and writing, then the current policies are

doing immeasurable harm to the education of children and to the habits and values of teachers. In that case, we have a big problem.

CURRICULAR CONSEQUENCES

If tests do not align well with other forms of reading and writing, but the tests are what count in the system, then most forms of reading and writing stand to suffer at the hands of high-stakes tests. People in life outside of school read and write for a host of reasons: social, emotional, artistic, spiritual, informational, practical, civic, career-oriented, and many others. If education is preparation for life, then children ought to have opportunities to read and write for all of these purposes in school. If intense consequences are being attached to a few, limited kinds of reading and writing, what are the chances that these more expansive and ultimately more important forms of literacy will find a place in the curriculum?

The curriculum is *the course to be run* in education, and it is made up of all the things that teachers and children do together. We often use the term to refer to plans for instruction and their reasons, but in the end, the curriculum is what happened—what the teacher and the students did with their minutes. Quite a bit of research, consisting of careful observation of what goes on in classrooms, has shown us that high-stakes testing constricts the range of activities teachers take up with their students (e.g., McNeil, 2000; Smith, Edelsky, Draper, Rottenberg, & Cherland, 1991). Just as art, music, and, in places where it isn't tested, even science are dropped out of the school day, so are varied forms of literacy that are not on the test. Traditional pursuits, like the reading of poetry and novels, begin to seem like frills. Perhaps even more costly, this narrowing squeezes out cutting-edge practices, such as writing and reading for social and political action, forms of reading and writing that are only beginning to be developed through new technologies and the Internet, and an expanded understanding of literacy as combining words with pictures, sounds, and moving images. Teachers, already harried by the demands of reporting test scores and preparing for the next round of testing, hardly have the attention, time, or energy to learn about whole new ways of doing reading and writing. High stakes, in effect, freeze innovation and progress in place, causing the academic literacy in the memories of politicians educated in the 1950s to limit the ambitions teachers can entertain for twenty-first-century children.

HOW TEACHERS COPE AND HOPE

Despite the contradictions in high-stakes testing policies, teachers can and do make a difference in the ways that they approach the dilemmas of their teaching. Some teachers and schools see the test as requiring that they do

nothing but drill students on a narrow range of reading and writing tasks. These are the responses that amplify the harmful effects of a high-stakes testing policy, not only depriving students of a quality education, but also weakening them as readers and writers and consequently producing lower test scores (Roderick & Engel, 2001). There is a temptation to panic, to run as fast as possible in exactly the wrong direction, to hurl energies senselessly against the test format, rather than to concentrate on making students strong and effective users of literacy.

Effective school leaders have been able to turn the challenge of improving students' achievement into opportunities for professional development and for bringing teachers together around the shared project of making students into powerful readers and writers. In most cases, that kind of project, one of real curriculum development, allows students to become more engaged and thoughtful, and even allows them the space to develop the skills, knowledge, and confidence that will make them perform better on the tests (Langer, 2004). Some research indicates that students who have been given a quality curriculum are able to develop real strength in the use of literacy, despite the mismatch between the forms of literacy they study and the tests (e.g., Reyes, Scribner, & Scribner, 1999).

Furthermore, some approaches to work on the tests themselves offer more promise than does a curriculum reduced to practice for the test. Some teachers have found success getting students to study tests as a form of writing, to try writing test questions to come to a better understanding of what they are being asked when they encounter something confusing on a test, and to practice tests with a degree of sophistication that comes from trying to understand what the makers of the test are *doing* and how they, the test-takers, are supposed to respond (Calkins, Montgomery, Santman, & Falk, 1998). Teachers have also helped children draw on the content of writing that they have done previously in class to write a more developed composition on a test. By learning to use their own memories, about which they have already written several times in journals and literary works, as the kernel for a writing test response, students with deeper writing experience from a rich curriculum can use the resources their past work has given them (Bomer, 2005). These approaches are embedded in a curriculum rich with varied opportunities to write and read in a wide range of forms and for diverse, authentic purposes—a course of study designed to make students strong in real life, rather than merely for a test.

Even as teachers make these promising compromises with an unfortunate reality, many of them work actively to inform policy makers in order to create better policy. By working through professional organizations like the National Council of Teachers of English (www.ncte.org), the International Reading Associations (www.reading.org), and their state and local affiliates, teachers come together to attempt to inform politicians and their appointees about the

consequences of high-stakes testing and the impact that it sometimes has on children and schooling. They ask for accountability to be based on multiple measures rather than a single test. They ask that consequences for individual students be mitigated, such as retention for scoring beneath a particular number on the test. They ask that specific conditions of their school context, like massive international transmigration or special risks of dropping out, be taken into account when a school is being judged. In conversations with policy makers, they keep their ambitions modest and try to practice what the German statesman Bismarck called “the art of the possible.”

In other conversations among themselves, and in the visions of a better world they hold secretly in mind, teachers imagine an education policy that is committed to making sure no child under five goes hungry on a consistent basis, as no other single thing we could do would raise educational achievement more than that. They hope, too, for a different kind of accountability, one in which adults in a country hold themselves accountable for the quality of life of each child growing up there. They imagine that someday, the word *accountability* will invoke in their fellow citizens’ minds not punishing an eight-year-old for the score on a reading test, but responding with resources when it is clear that a school building is falling apart, with information and education to curious and bewildered teachers, and with caring support for children who want nothing more than to learn, do well, and be happy. What would it look like if a society realized that the stakes are very high indeed for helping children find joy?

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Part Two

ASSESSMENT AND INSTRUCTION IN CHILDHOOD LITERACY

Chapter Four

METHODS FOR READING INSTRUCTION IN GRADES 3–6

James F. Baumann and T. Lee Williams

No single method or single combination of methods can successfully teach children to read. Instead, each child must be helped to develop the skills and understandings he or she needs to become a reader. . . . Because children learn differently, teachers must be familiar with a wide range of proven methods . . . They also must have thorough knowledge of the children they teach, so they can provide the appropriate balance of methods needed for each child.

The purpose of this chapter is to provide an overview of methods available for teaching reading to children in the elementary school years. As noted in the preceding statement, it is generally accepted that there is no single method that ensures success in reading for all children. Instead, methods must be carefully selected to match children's needs. We believe that the most critical factor in successful reading instruction is the informed, artful teacher behind the methods and materials. That said, we do not suggest that reading methods are irrelevant. Rather, decisions must be made thoughtfully, considering both the students and methods simultaneously, by a knowledgeable reading professional.

We begin by presenting an overview of reading methods. Next, we describe various methods for teaching reading to children in grades 3–6. We conclude by briefly discussing the importance of teacher decision making when selecting reading methods.

METHODS OF READING INSTRUCTION

Sadoski (2004) organizes reading instruction according to three perspectives: skills-based, balanced, and holistic. We use this structure to describe

methods of reading instruction in the following sections. Skills-based methods assume that reading is composed of a set of skills that can be taught in a sequenced, explicit manner. Skills-based methods emphasize phonics instruction, fluent oral reading, and comprehension skills. Skills are taught directly by the teacher, often in a highly structured and sometimes scripted manner. Skills-based methods are usually found in elaborate published programs that suggest that they provide all the materials and instructional guidance teachers need to effectively teach children to read.

Like skills-based methods, balanced methods provide instruction in reading skills, but they also provide students with many opportunities to read quality children's literature and many opportunities to write in response to what they read (Pressley, 2006). Reading and writing skills are taught explicitly, but through authentic literacy tasks that focus on meaning. Balanced methods use different types of instructional materials, including children's books, collections of children's literature, graded readers ("little books") designed especially for reading instruction, and various electronic texts.

Holistic methods provide children many opportunities to read, write, and talk about texts. The primary emphasis in holistic methods is on seeking meaning and responding to literature, with students assuming a great deal of responsibility over what they read and write. Reading and writing strategies are taught through mini-lessons or teachable moments when the teacher determines that students will benefit from lessons connected to what they are reading or writing. Reading materials include children's books and stories the students have written themselves.

Eight reading methods are described in this review, organized by Sadoski's (2004) skills-based↔balanced↔holistic framework. There are many reading methods available to teachers in grades three through six. Because of space limitations, we discuss selected classic and contemporary methods that are representative of the various positions on the framework. Thus this is not a comprehensive presentation of all methods of reading instruction. Finally, particular methods may not fit precisely under a given category, and they may be placed in adjacent categories depending on the manner in which reading professionals implement them.

SKILLS-BASED METHODS

Basal Reading Programs

A basal reading program is a commercially produced "collection of student texts and workbooks, teachers' manuals, and supplemental materials for developmental reading." Basal readers are published in levels of increasing difficulty according to readability formulas. Basals are usually published for students in kindergarten through grade 8.

Most basal textbooks are collections of complete or excerpted selections (sometimes adapted) from published children's books. Selections in the beginning readers may be written especially for inclusion in the basal program. Beginning-level selections are often predictable in nature, feature repetitions of high-frequency words, and include words that are "decodable" when students apply corresponding phonics instruction.

Basal reading programs usually include supplemental children's books that connect to thematic units in the anthologies. Little books that have controlled vocabulary or decodable text are usually included at the early basal levels to provide additional reading practice. Basal programs also include workbooks or reproducible worksheets to provide opportunities for students to practice reading skills. Interactive CD/DVD and other technology, elaborate teacher manuals to guide instruction, and assessment materials for students' placement in a program and their evaluation are also components of most basal reading programs.

Basal instruction includes teaching reading skills, strategies, and content that, depending on the basal level, may include phonemic awareness; high-frequency words; phonics; structural and contextual analysis; meaning vocabulary; literal, inferential, and critical reading comprehension; and content reading strategies. Most basal reading programs use some variation of the directed reading activity (DRA), which usually consists of five steps: (1) preparation for reading, (2) guided silent reading, (3) skill development, (4) oral rereading of the selection, and (5) follow-up extension activities.

As a basal DRA example, consider one lesson from a 3rd-grade level of a basal reading program called *Trophies*. This lesson is built around the children's book *Nate the Great, San Francisco Detective*, which is included in the 3rd-grade basal textbook. Activities that prepare students for reading include developing knowledge about detectives and mysteries and teaching key vocabulary included in the story. The teacher guides students' reading by asking comprehension questions, followed by lessons on several phonics skills and comprehension strategies. For oral rereading, the teacher's manual suggests having pairs of students reread the story as a radio play. Finally, the teacher's manual provides follow-up writing, grammar, and spelling lessons, and it suggests that students read accompanying children's books that connect to the Nate the Great story.

Direct Instruction Reading Programs

Direct instruction (DI) involves sequenced, teacher-directed lessons that emphasize decoding skills and comprehension strategies. DI comes in two forms. In the first form, the teacher provides explanation, modeling, guided application, and independent practice in reading skills. DI lessons of this type are structured but not scripted. For example, Duke and Pearson described a

lesson on predicting in which the teacher defines predicting and then demonstrates it with a reading selection. Next, the teacher and students make predictions together as they read on in the selection, after which the students try the strategy on their own with teacher support. Finally, students practice the prediction strategy independently.

In the second form of DI, teachers provide sequenced, scripted lessons in reading skills to small groups of children (Kame'enui et al., 1997). The teacher reads from a lesson that provides exact wording. Students often respond in unison, and the teacher provides corrective feedback. DI of this type is often provided to children with reading disabilities.

Strengths and Limitations

There are strengths and limitations to skills-based methods. Generally, skills-based methods provide a great deal of guidance and resources for teachers, but such highly structured approaches may leave little room for the teacher to exercise flexibility and professional judgment. As with any method of reading instruction, common sense suggests that skills-based approaches should be used only when they are consistent with educational goals, the nature of the learners, and teachers' preferences and expertise.

BALANCED METHODS

Guided Reading Instruction

Guided reading is an instructional approach that engages students of similar reading abilities in small groups. The purpose of guided reading is to teach specific decoding and comprehension strategies. Although originally designed for the primary grades, this method was modified for use in the upper elementary grades as well.

In guided reading, groups of four to six students are formed based on students' reading levels. These groups change frequently throughout the school year. In guided reading instruction, the teacher works with one group at a time, usually around a kidney-shaped or circular table. There is a general structure for each guided reading lesson. Before the lesson begins, the teacher selects a leveled book that challenges students slightly, but does not frustrate them. Next, the teacher previews the book to engage the readers. Each student then reads the book silently. After all of the students have finished reading, the group discusses the book. Next, the teacher presents one skill or strategy that is needed by group members and is relevant to the particular book just read (e.g., teaching plot, characters, and setting for a narrative selection). The lesson may conclude with an extension activity such as personal reflections or artistic responses.

As an example, consider a guided reading lesson for a group of five students reading the book *Flossie and the Fox*. The teacher previews the story, explains

the author's use of African American dialect of the rural South, and discusses the portrayal of the fox as a trickster. Students then read the book silently under the teacher's supervision, after which there is a group discussion. Next, students and teacher create a map or diagram of the story documenting how Flossie outsmarted the fox. Although this would conclude the day's lesson, students might reread this text on subsequent days, focusing on fluency or other aspects of the story, such as the author's use of descriptive language.

Four Blocks Literacy Model

The four blocks literacy model is a structure for reading instruction designed to meet the complex needs of all children in a classroom. There are two related premises of this approach: literacy instruction must occur in heterogeneous ability groups, and instruction must include activities on multiple levels to accommodate students of differing reading abilities. The four blocks model was designed for reading instruction in the primary grades, but its success has prompted adaptation for use in the upper elementary grades. Reading and language arts instruction is divided into four daily segments, or blocks, each lasting between 30 and 40 minutes.

1. Self-selected reading. First students engage in independent reading of self-selected books and other materials that pique their individual interests. As a result, the classroom is filled with a variety of materials and genres on multiple reading levels. Students share and respond to the materials they read in a variety of ways, such as discussing their reading with the teacher or constructing a written or artistic response to a book.
2. Guided reading. In this block, the teacher provides direct instruction in comprehension strategies by using an assortment of reading materials (e.g., basal readers, magazine articles, children's books, science textbooks). Typically, students work in small groups with a particular text for several days, analyzing the text to make meaning and rereading the text to promote fluency. Guided reading was previously discussed as a stand-alone method, but in the four blocks approach, guided reading is just one component.
3. Working with words. In the third block, the teacher focuses on word identification, usually through the use of Word Walls and Making Words activities. The Word Wall is a large, alphabetized collection of high-frequency words displayed on a classroom wall. Each week, new words are introduced and become the primary focus for phonics, spelling, and sight-word instruction. Making Words is an activity in which students create increasingly more complex words by arranging letter tiles. For example, given the letters *c, e, p, i, l, n, s*, students could create the words *is, in, pen, nip, sip, snip, pale, pine, clip clips, spine*, eventually solving for the "mystery word" *pencils*.
4. Writing. In the final component, students produce original pieces of writing on topics of their choice, publish their compositions, and share them with classmates. The teacher writes with the students, modeling composition by thinking aloud as she writes on an overhead projector or white board. Based on observations and individual conferences, the teacher leads a mini-lesson on a composition strategy needed by the class, such as character development, use of interesting adjectives, or punctuation.

Basal-Trade Book Reading Approaches

Another type of balanced reading instruction involves combining skills instruction with more meaning-centered activities by relying on both basal readers and children's books. Consider, for example, a 4th-grade teacher who has initiated a unit on ecology by working from a basal reader textbook titled *Nature Guides*. Before reading the first basal selection, an excerpt from Jean Craighead George's *The Moon of the Alligators*, students make predictions based on what they already know about alligators. After reading, the students engage in a teacher-guided discussion, and they refer to the selection to check their predictions.

Next, the teacher conducts two skill lessons. First, the teacher models how to chunk words into meaningful phrases, after which pairs of students reread aloud *The Moon of the Alligators*, practicing this fluency strategy. Second, the teacher teaches prefixes by drawing example words from the story (e.g., semi in semitropical; sub in submerged).

The teacher has secured multiple copies of several books on ecology suggested in the basal. Students select one of the books for independent reading, and they keep a reading-response journal in which they record what they are learning about nature and ecology. As a culminating activity, students use the Internet site The WebQuest Page to complete a project in which groups of students explore and report on different ecosystems.

Strengths and Limitations

Strengths of balanced methods include the amount of choice of reading materials that students have and the use of small groups that promote individualized instruction. Limitations include the substantial cost of the large number of books required. Balanced methods also have been criticized for failing to capture the complexity of effective literacy instruction.

HOLISTIC METHODS

Language Experience Approach

The language experience approach (LEA) is an instructional method in which children's oral language is transcribed to print and used as texts for reading instruction. LEA integrates students' writing, speaking, and listening with reading instruction; and it builds on students' knowledge of language and the world around them to generate familiar, readable texts. Allen states the rationale for LEA as follows:

- What I can think about, I can talk about.
- What I can say, I can write (or someone can write for me).
- What I can write, I can read.
- I can read what others write for me to read. (p. 1)

The LEA often includes the following six activities:

1. Initiating experience: A teacher engages students in some experience to initiate an LEA lesson. For example, a class might visit a children's zoo on a morning field trip.
2. Discussion and dictation: The teacher and children discuss their experience and compose a group story about it. Individual children offer sentences, which the teacher writes on a chart or white board. For instance, the children might compose a story titled "Our Trip to the Zoo."
3. Rereading for meaning: The group rereads the story aloud, with the teacher using a pointer to track print and promote fluency.
4. Working with words: Words from the story are used for instruction. For example, specific phonic elements may be taught (e.g., the consonant digraph *sh* in sheep). Words from the story could be added to a classroom Word Wall, for example, high-frequency words (e.g., look, fun) or interesting content words (e.g., monkey, zebra).
5. Individual stories: Students write individual stories (e.g., "The Monkeys Were Funny"), often with assistance from the teacher or a classroom helper.
6. Extension activities: Extension activities involve more reading, writing, speaking, and listening. For example, the teacher might read aloud children's books related to zoo animals, or the children could research specific zoo animals.

LEA is usually considered as a beginning-reading instructional method, but it can be used effectively for teaching older, struggling readers. LEA is often recommended for students of all ages whose first language is not English. LEA has been adapted to accommodate new technologies. For example, Labbo, Eakle, and Montero (2002) described "digital language experience," in which teachers and children use tools such as digital cameras, computers, the Internet, and electronic whiteboards to capture images and to record print and audio texts.

Reading and Writing Workshop

Artwell (1989) was one of the first to promote a workshop approach, which provides students' considerable voice and choice in literacy instruction. Using a large block of time (1 1/2 to 2 hours), students select, read, and write about books of interest to them. Students also confer with one another and the teacher about their reading and writing. A workshop approach usually integrates reading and writing; however, because some teachers choose to use just one or the other, we discuss them separately.

Reading workshop. There are three general components to a reading workshop. First, students read by themselves in books at their independent reading levels. To expose students to a wide variety of texts and authors, the teacher previews books or reads aloud excerpts from them. Second, students respond to books, often through a dialogue journal, in which teachers and students correspond with one another about books. Responses might also be artistic or dramatic, or simply involve group discussion. Third, the teacher conducts mini-lessons in reading skills and strategies based on observations of students' needs.

Writing workshop. There are three components to the writing workshop. First, based on students' needs, the teacher conducts a mini-lesson on a writing skill, such as proper punctuation, paragraph formation, or use of figurative language. Second, students write independently on self-selected topics, progressing through the writing process, which involves prewriting, drafting, revising, editing, and publishing. Students receive feedback in conferences with the teacher or with peers. Finally, students share their writing with classmates informally or through published works.

Literature Circles and Book Clubs

A new perspective on reading instruction became popular in the early 1990s in which students read quality children's literature and engaged in student-centered literature discussions. This perspective was implemented in two different formats: literature circles and book clubs.

Literature circles. In literature circles (Daniels, 2002), students are presented with three or four books by the same author (e.g., books by Katherine Paterson) or around a similar theme (e.g., titles related to the American Revolution), and students join a group or circle based on what they would like to read. Because the groups are formed according to students' choices, they include students of differing reading abilities. Group members, rather than the teacher, determine how much each member will read before the next regularly scheduled meeting of the circle. Group members also assume responsibility for the discussion by taking on specific roles—such as a discussion director, a word master, or an illustrator (Daniels, 2002)—that rotate among the members. The roles encourage personal responsibility and help to provide a structure for discussion, although the roles may be dropped after students get accustomed to the circle routine. After the circle completes a book, new groups are formed around different books, and the process is repeated.

Book clubs. Like literature circles, students in book clubs choose from three to four titles selected by the teacher to support a theme or author study. Unlike in literature circles, however, the teacher, not the students, assigns the amount of daily reading to be completed in book clubs. Students use a reading log to write about their books, and they are encouraged to make personal connections to the text, use graphic organizers to promote comprehension, and list words of interest. The teacher takes on a more active instructional role, teaching comprehension, fluency, and vocabulary in connection with the book. The teacher models how to engage in discussions to promote thoughtful dialogue.

Strengths and Limitations

Holistic methods have the advantage of promoting students' motivation, engagement, and interest, which can enhance reading development and independence in

literacy learning. A great deal of individualized planning is needed to implement holistic approaches, however, and familiarity with a varied collection of books is essential. In addition, parents and administrators may need to be convinced of the benefits of student-centered, holistic methods. Nevertheless, holistic methods provide teachers a useful, viable alternative to skills-based or balanced methods.

CONCLUSION

As we have shown, methods for reading instruction in grades 3–6 vary in multiple ways. As a result, the methodological choices for educators are many, including the eight we that have discussed, various combinations of those methods, and even others not discussed because of space constraints. Given the methodological options available, how do school district superintendents, principals, or classroom teachers decide which method (or methods) to use for reading instruction?

We argued at the beginning of this chapter that although reading methods do matter, the more important factor for successful reading instruction is the knowledge, competence, and experience of the teacher (International Reading Association, 2000). In an article titled “In Pursuit of an Illusion: The Flawed Search for a Perfect Method,” Duffy and Hoffman concur, stating that “there is no perfect method” (p. 10). Instead, they argue, “the answer is not the method; it is in the teacher. It has been repeatedly established that the best instruction results when combinations of methods are orchestrated by a teacher who decides what to do in light of children’s needs” (p. 11).

In other words, quality teaching and learning occur when teachers identify, select, and combine instructional methods based on their knowledge of effective reading instruction and their assessment of the unique needs of the students they are teaching. Thus we hope that educational administrators and policy makers encourage and support teachers to exercise their professional responsibility to construct and assemble reading methods suited for the particular students they teach.

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Chapter Five

INFORMAL AND FORMAL ASSESSMENT IN LITERACY

Jerry L. Johns and Janet L. Pariza

With the advent of Reading First, a federal program established as part of the No Child Left Behind (NCLB) Act of 2000, reading assessment has gained more widespread attention than ever before. The primary goal of NCLB is to ensure that students learn to read well by the end of 3rd grade. Systematic monitoring of progress is an important part of NCLB, and students' performance on reading tests has never had such serious consequences for the school or the individual student as it does today. Sound academic assessment depends on multiple measures because no single test can wholly measure the complex text-based cognitive activity called reading. Valid reading assessment involves the dynamic interaction among tests, classroom literacy experiences, teachers, and students.

In this chapter, we explain various kinds of assessments used to measure reading ability. We first turn our attention to standardized or formal measures of reading assessment because this is the area of reading assessment that garners much media attention. Then we look at criterion-referenced tests. Finally, we address informal reading assessment. We explain the basic concepts associated with, as well as the uses and misuses of, both formal and informal reading assessment.

STANDARDIZED READING TESTS

Standardized reading tests are part of the broad range of commercially produced tests that represent formal assessment. Most students encounter standardized tests regularly from kindergarten through 12th grade. Today, in

our culture of academic accountability, some students are tested multiple times each year with standardized, norm-referenced tests. We want this chapter to help develop or increase the wise and appropriate use of these types of tests.

The primary purpose of standardized or norm-referenced reading tests is to compare the reading ability of a group of students to that of the large sample population that was used to standardize the test. Test manufacturers create large comparison groups that include students from various parts of the country, from both urban and rural schools, from different races and ethnic groups, and of different socioeconomic status. Students in the comparison group are carefully chosen so that they share similar characteristics with the students who will eventually be given the test. From this large sample, norms are established that represent average performance of the students in different grades. Scores are interpreted in comparison to the norming group. For example, the reading performance of the 3rd-grade students may be said to be above the norm if their average scores on the test are higher than those of the 3rd-grade students in the norming sample.

To ensure that comparisons are valid, test manufacturers attempt to control for as many variables as possible. Therefore the test instructions require that each administration of the test is consistent, with the same oral instructions given to the students and the same time constraints honored. "Testing that maintains a high degree of control attempts to approach the measure of student achievement in a scientific manner" (Criswell, 2006, p. 118). Just as with scientific investigation, there are concerns of reliability and validity in standardized testing. Of the two terms, reliability is the easier to understand, but validity is of greater importance. *Reliability* tells us how consistently a test measures whatever it measures. For example, if students in a class were retested on the same reading test, we would expect that their performance would be similar to that of the first testing. Of course, we would expect that students had remembered some of the questions and had perhaps "learned" from the testing situation, but we would expect that those students who performed well the first time would have done well the second time, and that those students who performed poorly the first time would have done so on the second testing. We would not expect that students who performed well the first time would perform poorly the second time. That their scores remained relatively consistent is a measure of reliability.

Validity, generally considered the single most important characteristic or attribute of a good test, refers to whether a test measures what it claims to measure. Four kinds of validity can be considered:

1. Deciding whether the test is appropriate for the age or grade for which it is intended calls for making a judgment about *face validity*. For example, if several passages on a reading test deal with pastoral and agricultural issues, you may question the face validity of this test when it is administered to students in an inner-city school.

2. Questioning whether the items on the test are consistent with specific curriculum, objectives, textbooks, or course of study involves making a judgment about *content validity*. Does the content of the test match the content of the instruction?
3. Questioning whether the test scores might be used to predict a student's later scholastic achievement involves making a judgment about *criterion-related validity*. For example, college entrance exams are used to predict academic success in college programs.
4. Questioning the underlying concepts of reading that are evident in the test construction involves making a judgment about *construct validity*. For example, some tests treat reading as a compilation of discrete subskills. Some experts question the validity of such tests because reading is a holistic process that is greater than the sum of individual subskills.

Students' performance on standardized tests is often reported in multiple ways. The number of items to which a student responded correctly is his or her *raw score*. A student's raw score can be compared with those of students in the norming or standardization group. These scores, referred to as *norms*, represent an average. By using the norms section of the test manual, raw scores can be converted to various derived scores that make it possible to understand and interpret test results. Derived scores are based on a standard score scale and are representative of continuous ranking along a normal distribution curve. Common derived scores include stanines and percentiles.

Stanines are derived scores that report student performance using a nine-point scale. The word *stanine* comes from the term *standard nines*. Stanines 1, 2, and 3 are considered below average; stanines 4, 5, and 6 are considered average; and stanines 7, 8, and 9 are considered above average. Stanines for an individual can be compared within the same level of a test, but not within different levels of a test or with different tests. For example, Jeff, a 4th-grade student, achieved a stanine of 6 in vocabulary, showing that his vocabulary knowledge as measured by the test is in the high-average range when compared to the norming group; however, he achieved a stanine of only 4 on the comprehension subtest. Because both scores were achieved on the same level of the test, they can be compared. A difference of two or more stanines is considered statistically significant. Because comprehension is the goal of reading, Jeff's teacher may want to further investigate his needs in that area.

Percentiles are also derived scores. A percentile rank tells the percentage of students in the comparison group that scored at or below a certain raw score. A percentile rank is not the same as the percentage of correct items; rather, percentiles allow for rank comparisons between a student and those in the norming group. For example, a student in the 4th grade with a percentile rank of 75 scored as high or higher than 75 percent of all 4th-grade students in the

norming group. It is also true that this student's raw score was lower than 25 percent of all 4th-grade students in the norming group.

Percentiles can be used to identify the relative standing of the students in a class. Students who score in the lower percentile ranks may need further assessment to determine their specific areas of instructional need. Students who score in the upper percentiles may be considered for enrichment programs or instructional adjustments to further challenge them.

Some tests also report students' performance in terms of *grade equivalents*. Of all derived scores, grade equivalents are perhaps the most widely misinterpreted, misunderstood, and abused. Grade-equivalent scores describe reading performance in terms of a particular grade and month. Grade-equivalent scores are mathematical extrapolations of a student's raw score and do not represent the level at which the student is reading.

Grade equivalent scores can be quite misleading. Let's look at two different students to gain a better understanding of these scores. Lisa, a student in 3rd grade, achieved a grade-equivalent score of 7.3 on a 3rd-grade reading test. Because she was administered a level of the test designed for 3rd graders, there were most likely no passages on the test at the 7th-grade level. Lisa probably could not handle 7th-grade reading material and should not be instructed with material written for 7th grade. The score, however, does indicate that Lisa is reading well above her peers and should be given materials at a level that will promote her continued reading development. On the other hand, Marcus, an 8th-grade student, achieved the same grade equivalent score of 7.3 on a reading test. For Marcus, the score is more meaningful because it is within one year of his grade placement and some of the passages on the 8th-grade level of the test were appropriate for 7th graders. His score indicates that he is reading below his peers, but his percentile rank or stanine would be more useful for determining his reading progress in relation to others of his grade level. Unlike percentiles and stanines, grade equivalent scores do not represent equal units. They are not scaled scores. Grade equivalents are easily misunderstood and should be used with caution.

In addition to the methods of standardizing tests and the ways scores are reported, norm-referenced tests share other common characteristics. The tests are usually presented in different forms for different grade levels or for a range of levels. Occasionally, two or more forms for testing and retesting are provided. Standardized tests have manuals that contain explicit instructions for administration, tables for translating raw scores into derived scores, information on the norming process, and explanations of the reliability and validity of the test. Many test companies offer provisions for scoring the tests and for the production of various reports, including those on individuals, classes, and larger groups. Two kinds of standardized tests are commonly used to measure reading ability: achievement tests and diagnostic tests.

Achievement Tests

Achievement tests are norm-referenced batteries that assess the depth of students' knowledge in a variety of subject areas. They are sometimes referred to as survey tests and are most commonly administered to groups of students. Sometimes, all students in a school district are tested during the same week. These kinds of tests typically measure mathematics, science, social studies, and language usage in addition to reading ability and vocabulary. The *Iowa Tests of Basic Skills*, the *California Achievement Test*, and the *Stanford Achievement Test* are examples of comprehensive academic achievement tests.

Other achievement tests focus specifically on reading and include only reading-related subtests. The *Gates-MacGinitie Reading Tests*, with test forms for 1st through 12th grades, have subtests in vocabulary and reading comprehension; there are also assessments for use in kindergarten. The *Nelson-Denny Reading Test*, with test forms for high school and college, has subtests in vocabulary knowledge and reading comprehension with an added provision to measure reading rate. Raw scores on these achievement tests can be converted to grade equivalents, stanines, and/or percentiles.

Achievement tests are almost always group tests that are used to evaluate groups of students rather than individuals; for this reason, they have limited potential as diagnostic instruments. These tests should be carefully evaluated for content validity. The test will yield little useful information if the content of the test does not match school curricula or instructional materials. Achievement tests are designed to measure reading development by assessing what the student has already mastered, and, for this reason, they are most useful when administered near the end of the school year.

Diagnostic Reading Tests

Diagnostic reading tests are designed to assess areas in need of further instruction and are most useful when administered near the beginning of the school year. Subsequent instruction can then focus on assessed needs. Like achievement tests, diagnostic reading tests are norm referenced and standardized. Unlike reading achievement tests, diagnostic tests have numerous subtests, each designed to measure a specific aspect of reading development. Also, unlike achievement tests, diagnostic reading tests are commonly individually administered, generally only to those students who are struggling with delayed progress in reading. There are, however, some diagnostic tests that can be given to groups. The underlying goal of diagnostic testing is similar to that of medical diagnosis: to determine the problem and remediate it. These tests are designed to identify the reading strengths and needs of the student being tested.

An example of a diagnostic test designed for individual administration is the *Diagnostic Assessment of Reading* (DAR). This test has subtests that assess word recognition, word analysis, oral reading, silent reading comprehension, spelling, and word meanings. The multilevel format allows for testing beginning readers through high school students. Another individually administered diagnostic test is the *Gates-McKillop-Horowitz Reading Diagnostic Test*. With forms for grades 1 through 6, this test assesses skill areas including auditory discrimination, letter knowledge, blending, decoding, word recognition, spelling, oral reading, and comprehension.

The *Stanford Diagnostic Reading Test* (SDRT) is an example of a group diagnostic test. The SDRT has four levels appropriate for students in 1st grade through the first year of college. Subtests include auditory discrimination, word recognition, phonetic and structural analysis, auditory vocabulary, and literal and inferential comprehension. Test levels for older students also include comprehension of textual, functional, and recreational reading materials; word parts; reading rate; and skimming and scanning. The tests can be hand scored or machine scored, and raw scores can be converted to stanines, percentiles, and grade equivalents.

Student performance on a diagnostic test can be compared to that of the norm population, but comparison is not the primary purpose of diagnostic tests. They are designed to assess key areas of reading development in greater depth than can survey or achievement tests to identify specific areas of strength or need. When reading is divided into discrete subskills for purposes of diagnostic assessment, however, questions of construct validity arise. It is important with diagnostic assessments to further validate the results of the test with other assessment measures. When areas of instructional need are determined, the teacher can develop a plan for reading instruction that meets the assessed needs of the student.

Limitations of Standardized Tests

Standardized reading tests are constructed with care, and the norming process may include thousands of students; yet formal reading assessments have a number of limitations. They can measure only those aspects of reading performance that can be quantified. Standardized tests “can’t measure initiative, creativity, imagination, conceptual thinking, curiosity, effort, irony, judgment, commitment, nuance, good will, [or] ethical reflection” (Ayers, 1993, p. 116). Standardized reading tests measure the product of reading rather than the processes students use to construct meaning from written text. The multiple-choice items require the student to “select rather than create responses” (Gunning, 2006, p. 69).

Another concern often voiced by educators is that standardized reading tests do not reflect current teaching methodology, and the test scores do not

reflect what students do in authentic literacy experiences. Because they measure product rather than process, there is no way to determine what strategies students are using to make meaning of the text and no way to adequately quantify the higher-order thinking skills often required in the process of reading. A final limitation of standardized tests is that they may represent an outdated view of reading. Standardized tests divide reading into a series of discrete skills that are often tested in isolation. They do not reflect a current view of reading as a complex interaction between reader and text as the reader seeks to construct meaning.

Most significantly, standardized tests are not effective measures of an individual student's progress in reading development and should not be used in such high-stakes decisions as grade promotion. A student's score on a standardized reading test represents only his or her performance on the specific tasks required of the test on the day of testing. Many conditions contribute to that performance (Gillet, Temple, & Crawford, 2004). Factors within the reader, such as physical condition (including levels of fatigue, hunger, and test anxiety), motivation, prior experience in test-taking, interest and background knowledge in the topic of the passage, and, of course, reading ability, all influence the outcome of the test. In addition to factors within the reader, factors within the reading passages also contribute to the reader's score. Factors such as subject matter, text structure, writing style, vocabulary, grammatical complexity, the amount of information presented, and the size and type of font can all influence the student's score. Added to all these are factors within the testing situation: the lighting in the room, the temperature, the comfort level of the desk, the number of interruptions or other distractions that occur during testing, and the time of day during which the test is given. One or more of these factors can affect the student's score.

Despite their shortcomings, standardized reading tests are generally a part of a school's regular assessment program. Test results can be used effectively by both school administrators and teachers. Administrators use standardized test results as one way to compare classes, schools, school districts, and curriculum effectiveness. For example, if a district wants to determine the effectiveness of the reading program it uses, a standardized test can dependably demonstrate how the reading performance of students in that district compares to that of the norming population. Standardized tests results are presented in numerical reports that are fairly easy to interpret and use for comparisons of this nature.

Standardized tests, which are more cost effective and less time consuming than many informal reading assessments, can be used as screening measures for specialized reading programs and services. Because these tests are designed to test large groups of students, the entire school population can be tested. Test results can be screened to determine those students whose performance falls far enough below average to warrant either additional diagnostic testing or specialized reading services.

For teachers, the results of group tests provide a profile of class achievement. This profile may be helpful in planning the general focus of instruction for the entire class. For example, if the class as a whole performed better in vocabulary than in comprehension, the teacher may conclude that greater attention to comprehension would be an appropriate focus for instruction. The teacher can also use the test results to identify individual students who may not be making satisfactory progress in reading. A student's score in comprehension in the lower stanines, especially in stanines 1 and 2, may indicate that adequate progress is not being made. If the test score is also confirmed by observation and daily performance in the classroom, the student may be a candidate for more in-depth diagnosis and instruction. Standardized, norm-referenced tests are formal assessment measures that can be used in the complex process of assessing reading ability, but the wise teacher and administrator supplement their use with multiple other indicators of reading development.

CRITERION-REFERENCED TESTS

Criterion-referenced tests allow teachers to compare a student's performance to a preset criterion or performance level. Criterion-referenced tests are quite common in education. Spelling tests and math skill mastery tests are examples of criterion-referenced tests. The teacher or the school district determines the level of proficiency that a student must demonstrate to achieve a particular grade. Criterion-referenced tests have potential as diagnostic instruments because they allow the teacher to identify those students whose performance falls below the criterion.

With the current focus on standards-based reading instruction, criterion-referenced testing is becoming more common. Most states have established standards or curricular goals for reading development at each grade level. Although there is some variation in these standards, most are quite similar. Textbook publishers develop their reading programs to meet the state standards. The reading assessments that accompany many reading programs, as well as the state tests that assess a student's progress on those standards, are criterion-referenced tests.

Gillet et al. (2004) describe a three-tiered process for the development of criterion-referenced tests. First, the overall instructional learning goals are determined. These goals are broad, general statements of student proficiencies that are frequently developed at the state level. Examples of state reading program goals might include the ability to recognize high-frequency words in isolation or to read various materials with comprehension and fluency. These goals are known as state learning standards and are often presented as a continuum with benchmarks determined for each grade level.

From the state learning standards, specific program objectives are developed, usually at the district or school level. Program objectives more narrowly define the outcomes of instruction. Examples might include statements like the following:

- Students will demonstrate effective decoding of single-syllable words.
- Students will effectively retell events in sequential order.

Although program objectives are narrower than learning standards, they do not specify the level of proficiency necessary to meet the goal. The third tier of the process accomplishes these tasks. Instructional objectives, sometimes referred to as behavioral objectives, state the specific behaviors the student is to demonstrate after a period of instruction. Good instructional objectives also identify the criterion level of mastery desired for each outcome. For example:

- Given a list of 25 high-frequency words, the 1st-grade student will be able to identify 23 words at sight.
- After the reading of a passage from a 3rd-grade basal reader, the student will be able to list the events in the story with 90 percent accuracy.

Such instructional objectives are sometimes referred to as *benchmarks*. Benchmarks are descriptions of specific tasks students are expected to perform or behaviors students are expected to demonstrate at specific points along the continuum of their educational progress. For example, a benchmark for a student finishing kindergarten may be the ability to identify both upper- and lower-case letters of the alphabet. Benchmarks are behavioral or performance standards.

Rubrics, another term often heard in conjunction with criterion-referenced testing, are instruments designed to assist in the evaluation of behavioral or performance standards. Rubrics feature a rating scale that allows the teacher to determine the level of competency of a specified behavior or performance. For example, some rubrics include such descriptors as outstanding, acceptable, unacceptable or exceeds target, meets target, fails to meet target. Other rubrics include numerical scales of proficiency where, for example, 5 represents outstanding performance and 1 represents little evidence of ability.

Criterion-referenced tests are developed from instructional objectives. Quality criterion-referenced tests have items that are closely aligned with instructional objectives. Test items that “match the learning outcomes and conditions specified in the instructional objectives . . . insure validity” (Gillet et al., 2004, p. 198). Tests that are not closely matched with instructional objectives are of questionable validity. For example, when instructional objectives are developed locally, but a commercially produced test is used, there may be a mismatch. Mismatches can also occur when a school or teacher develops

instructional objectives that are not closely aligned to the state standards or when the state standards are not appropriately represented on the state test. Just as with norm-referenced tests, the wise teacher and administrator consider other evidence of students' performance to further validate the scores achieved on a criterion-referenced test. Various kinds of informal assessment serve this purpose.

INFORMAL READING ASSESSMENT

In a position statement, the International Reading Association (2000) notes that students "deserve assessments that map a path toward their continued literacy growth" (p. 7). Informal reading assessments can best provide the kinds of data that help teachers identify an individual student's strengths and needs and that can be used to plan reading instruction that best meets the needs of the students grouped together in a particular classroom. Informal assessments, guided by the expertise of the classroom teacher and characterized by authentic literacy tasks, are more useful for these outcomes. Although there are many types of informal assessment, in this section we discuss only three: the informal reading inventory, running records, and anecdotal notes.

Informal Reading Inventory

An informal reading inventory (IRI) is an individually administered reading test that is considered "one of the best tools for observing and analyzing reading performance and for gathering information about how a student uses a wide range of reading strategies" (Jennings, Caldwell, & Lerner, 2006, p. 83). It is a criterion-referenced assessment that is composed of graded word lists and graded passages that increase in difficulty. The *Basic Reading Inventory* (Johns, 2005), for example, contains words lists and passages that range from pre-primer (beginning reading) through 12th grade. From an IRI, a teacher or reading specialist can learn about the "strengths and weaknesses the student shows during word recognition, oral and silent reading performance, comprehension strengths, and difficulties shown while reading at the independent reading level, instructional reading level, frustration reading level, and listening level" (Norton, 2006, p. 143). Determining a student's three levels is a major function of IRIs and is of great importance to teachers, as knowledge of a student's instructional level allows the teacher to select texts at a level most helpful to advancing reading development through differentiated instruction.

At any time during a student's reading development, there are materials written at levels that are easy, just right, and too hard. Easy materials are at the student's independent level. The student can read materials at this level fluently, with near-perfect word recognition, and without teacher assistance. At

the independent level, a student is able to read passages with 99 percent word recognition accuracy and 90 percent comprehension. Materials at this level are useful for pleasure reading; furthermore, any assigned reading that the student is expected to complete on his or her own should be at the independent level.

Materials that are just right for students' instruction are at their instructional level. Texts at this level are challenging for the student but still within his or her comfort zone. A student is able to read passages at the instructional level with 95 percent word recognition accuracy and 75–89 percent comprehension. Students can theoretically make maximum progress in reading when instructional level texts are used in the classroom. Reading materials selected for reading instruction, guided reading, and all content area instruction should be at the student's instructional level.

Materials that are too hard are at the student's frustration level. Texts at this level have no instructional value beyond limited diagnostic purposes. When a student's passage reading demonstrates poor word recognition (at or below 90% accuracy) and poor comprehension (at or below 50% accuracy), the student has reached the frustration level. A serious problem in many classrooms is that a large number of students are asked to read books at their frustration levels. When students are given materials at their frustration levels, they often exhibit behavioral characteristics indicative of the difficulty they are experiencing. Some students simply refuse to read the textbook. Others may exhibit lack of expression in oral reading, lip movement during silent reading, difficulty pronouncing words, word-by-word reading, and/or finger pointing (Johns, 2005). Also, students often become more dependent on the teacher to explain the reading because they are unable to comprehend the text without assistance.

During the administration of the IRI, students initially read words in isolation from the graded word lists and continue by reading graded passages both orally and silently, beginning with levels that are at their independent reading level and continuing until a frustration level has been reached. During the oral reading, the test administrator times the reading and notes all miscues such as mispronunciations, omissions, insertions, repetitions, and substitutions. After the reading of passages, the student is asked to retell what was read and/or to respond to comprehension questions on the reading. When a frustration level has been reached in both oral and silent passages, the test administrator can read additional passages to the student to gain a listening level.

Careful analysis of a student's performance on the various tasks of the IRI yields a great deal of information about the student's reading abilities. From the graded word lists where the student's task is to read words presented in isolation, the test administrator can determine whether the student's word recognition ability can be classified as above, at, or below grade level; can assess the extent of the student's sight vocabulary, including high-frequency words;

can determine some of the student's word identification strategies, such as phonics and structural analysis; and can determine the approximate level at which the student should begin reading graded passages.

Although some initial insights can be gained by analyzing the student's performance on the word lists, much more can be determined from a thorough analysis of the student's performance on the oral and silent reading passages. Successful reading is dependent on two major areas: word recognition and comprehension. The good reader is able to identify words automatically and to construct meaning from the words in the passage. By closely examining the student's performance in both areas, the teacher or test administrator can identify both strengths and needs.

By analyzing the student's oral reading errors or miscues on the graded passages, the administrator can gain greater insight into the student's word identification strategies. Miscue analysis is based on the work of K. Goodman (1967) who believes that reading errors provide insights into the whole reading process. "Such insights reveal not only weaknesses, but strengths as well, because the miscues are not simple errors but the results of the reading process having miscarried in some minor or major ways" (p. 12). There are three basic kinds of miscues: semantic, syntactic, and graphophonic. Semantic miscues make sense in the context in which they are read. The reader is using meaning cues such as illustrations, context clues, or other information from the passage to substitute a word that makes sense in place of an unknown word in the passage. Syntactic miscues make use of the grammatical structure of the language. For example, the student may substitute one noun for another or one adjective for another. In such instances, the student is demonstrating that he or she has internalized the grammatical rules of the language and is using that knowledge in an attempt to recognize unknown words. Graphophonic miscues look similar to the word in the text. For example, if a student reads *sand* for *send*, he or she may be relying on the visual image of the word rather than on the meaning of the context. Much can be learned about the student's reading by a miscue analysis.

Counting the student's total miscues provides a quantitative measure of oral reading that can be used, at least in part, to determine the student's reading level. An in-depth analysis of all significant graphophonemic miscues made during the oral reading will reveal areas of instructional need in decoding. For example, when multiple miscues involve mispronunciation of vowel sounds in consonant-vowel-consonant patterns, the teacher can hypothesize that additional work on vowel sounds is probably needed. Moreover, if the same analysis shows that the student's miscues generally begin with the same sound as the target word, the teacher can determine that the student can successfully decode initial consonants. An analysis of the semantic and syntactic miscues made during oral reading will reveal other strengths and weaknesses in the student's word recognition.

In addition, the student's oral reading can be analyzed for fluency. The student's rate of reading can be compared to norms for his or her grade level, and other components of fluency can be observed and noted by the teacher or test administrator. Fluent readers translate written language into spoken language with automaticity, accuracy, and appropriate expression.

A thorough analysis of all word recognition components will yield much useful information about the student's current level of word knowledge and approaches to unfamiliar words, but word recognition is only one part of the reading process. The IRI is also designed to yield much information about a student's ability to comprehend written text. By analyzing the student's retelling of the passage or the student's responses to comprehension questions, the test administrator can gain useful insights into areas of comprehension that may need additional attention. For example, if a student is able to relate literal information from the passage, but demonstrates a pattern of inappropriate responses to inferential questions, the teacher may hypothesize, based on the evidence provided by the IRI, that the student would benefit from an instructional focus on higher-order comprehension skills such as inferring and drawing conclusions.

Although administration can be time consuming, the IRI is an invaluable assessment instrument for comprehensive diagnosis of student's reading. After the data gathered from the IRI have been carefully analyzed, an instructional plan based on diagnosed needs in reading can be developed. In this way, the information yielded by the IRI informs the subsequent instruction, fulfilling one of the major goals of effective reading assessment.

Running Records

Running records, somewhat similar to the oral reading analysis of the IRI, allow the teacher to closely observe and analyze a student's oral reading. Based on three-quarters of a century of research in reading assessment, including the work of such noted specialists as Donald Durrell (1940), Emmett A. Betts (1946), and Yetta Goodman (1967), Marie Clay (1972) developed running records, a method of assessing oral reading errors or miscues. Conducting running records is "an informal assessment procedure with high reliability . . . that can inform teachers regarding a student's decoding development" (Reutzel & Cooter, 2007, p. 29).

To conduct a running record, the teacher selects a passage that is 100–200 words long. For younger students, shorter passages are acceptable. The reading selection can be from the basal reader or the student's self-selected reading materials. The teacher either stands behind the reader or sits beside the reader and carefully records any miscues made during the reading with a marking code that indicates repetitions, self-corrections, omissions, insertions, and any attempts to pronounce unfamiliar words. Later, the teacher analyzes the

miscues to determine the level of the text read and the particular strengths and needs in the student's oral reading.

The percentage of words read correctly indicates the student's reading level on that text. Clay established criteria for oral reading similar to that used in IRIs. According to her criteria, text read with 95–100 percent word recognition accuracy is at the independent level, text read with 90–94 percent word recognition accuracy is at the instructional level, and text read with less than 89 percent accuracy is at the frustration level. Clay's protocol for analyzing the miscues made during the oral reading, very similar to that used in an IRI, is also based on the work of Kenneth Goodman (1967) and allows the teacher to identify three kinds of miscues determined by the cuing system the child was most likely accessing when the miscue was made: meaning, syntactic, and visual. Meaning miscues (semantic) make sense in the context in which they are read. Syntactic miscues make use of the grammatical structure of the language. Visual miscues (graphophonic) look similar to the word in the text. Just as with the IRI, much can be learned about the student's reading by a thorough miscue analysis.

One advantage of running records is that the procedure can be accomplished using classroom materials. In addition, the procedure is not difficult and requires little training. Classroom teachers can easily do initial reading assessments of their students using running records and often find the process efficient because no special materials are required (Strickland & Strickland, 2000). A limitation of running records is that they examine only word recognition.

Anecdotal Records

Anecdotal records, another informal reading assessment, require little training and can be accomplished using classroom materials to assess both word recognition and comprehension. Such records are documentations of student reading behaviors viewed through the classroom teacher's experienced eye. The data gathered "explicitly depends upon the human expert" (Johnston & Rogers, 2002, p. 381), the "connoisseur" (Eisner, 1998, p. 17) of reading behaviors, and the teacher who has spent hours in the classroom, observing students in daily interactions with texts. Anecdotal records are referred to as authentic assessment because the data are gathered in the context of authentic reading tasks. The assessment is ongoing and based on actual literacy experiences that take place within the classroom.

In the simplest form, anecdotal records are documentations of the teacher's observations of students' reading. The teacher creates notes shortly after the observation was made, recording the student's name, the specific reading behavior observed, and the date the observation was made. These observations can include both strengths and needs. For example, the teacher might record

a previously taught reading strategy that the student used independently or a reminder to offer the student additional instruction or practice on a specific skill or area of reading that has not yet been mastered.

Successful creation of anecdotal records includes initial planning and preparation. It is important to plan to observe each student. Some students naturally draw more attention from the teacher than others, but to be used as an effective assessment, anecdotal notes must include observations of every student. These observations can be scheduled using a rotation plan. For example, a teacher with 25 students may choose to observe 5 students each day for a minimum of one recorded observation per pupil per week. Intermediate and high school teachers who meet daily with large numbers of students may plan for less frequent observations, focusing on two or three classes per day, for a total of three to five observations per student per marking period.

Another logistic consideration involves preparing a place to record notes before the observation period. Some teachers use an index card for each student; others keep a separate page for each student in a three-ring binder. One common method is to record notes on sheets of blank peel-off address labels. The labels can be prepared ahead of time with the student's name and the date. Later the notes can be transferred to individual student record sheets. Effective planning for who is to be observed and preparation for where the observations are to be recorded allow the teacher to focus on preselected students and to record observations quickly and efficiently.

The final and most important consideration involves what to observe. Throughout the day, teachers are continuously observing and noting their students' behaviors. Recording all behaviors germane to reading would be an impossible task and would offer little assessment value. Therefore a selected focus is required. When anecdotal notes are focused on particular standards-based outcomes, as recommended by Boyd-Batstone (2004), they become "a tool to work common ground across authentic and standardized assessment" (p. 238). When used in this manner, the teacher plans and prepares for observations in much the same manner that he or she plans and prepares for standards-based instruction. The selected standard allows the teacher to focus on particular behaviors; furthermore, the teacher can make use of the verbs in well-written standards to facilitate recording observations. When the standards are written in the language of observable behaviors, such as *identifies*, *arranges*, or *retells*, the teacher can quite easily record observations using that same language.

Subsequent analysis of anecdotal records provides the teacher with valuable information on the overall progress of students, as well as the overall effectiveness of the instruction given. From an analysis of the records of a particular student, the teacher can easily determine both the student's reading accomplishments and the areas in need of additional instructional support or

practice. Such documentation of student progress can become the outline for narrative reports to parents and administrators. From an analysis of all the records on a particular standards-based outcome, the teacher can determine both the progress of students on that standard and the amount of additional work required before all students meet the standard. In addition, such analysis serves as a point of reflection for the teacher who wishes to improve his or her efficacy in reading instruction. When the analysis indicates slow or unacceptable progress on a particular standard, the teacher can re-evaluate the instructional approach used and plan accordingly for additional instruction. It is in this manner that anecdotal records fulfill the most basic task of informal reading assessment: they inform the instruction that occurs subsequent to the assessment, providing a blueprint for continued reading instruction.

CONCLUSION

Reading assessment is the gathering of data about students' reading for various purposes. Formal, norm-referenced tests compare a student's performance to that of a large representative norm group. Such standardized reading tests are used appropriately to make decisions about programs and groups of students. They are used inappropriately to make decisions, such as grade retention or promotion, about individual students. For such decisions, multiple measures of performance give a more holistic portrait of a student's reading development. Achievement or survey tests identify what the student has already mastered or achieved in reading, whereas diagnostic tests identify those aspects of reading still in need of continued growth. Criterion-referenced tests compare student performance to a preset criterion or performance level. Most state tests for reading proficiency use preestablished outcome standards as the criteria or benchmarks to which student performance is compared.

In addition to methods of formal reading assessment, many opportunities for informal assessment exist. An informal reading inventory can yield a great deal of useful information in the development of an effective instructional plan. Other informal methods such as running records and anecdotal records are examples of more authentic assessments that make use of classroom materials and daily literacy experiences. Whether using formal or informal assessments, questions of reliability and validity must be addressed with all measures of reading development.

There is no one right way or even one best way to effectively measure the complex cognitive process of reading. To ensure that reading assessments are used effectively and ethically, it is important to understand the purpose of the assessment being administered. Whether seeking to understand the efficacy of the reading program at the district level or the reading proficiency of an individual student, we suggest that the best possible use of reading assessment is

to improve students' learning. When the data gathered have been thoroughly analyzed with that outcome in mind, teachers, administrators, and parents will be able to determine an instructional program for the continued literacy growth of all students.

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Chapter Six

WRITING DEVELOPMENT: CURRICULUM, INSTRUCTION, AND ASSESSMENT

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Our purpose in this chapter is to describe strategies that foster writing development between grades 4 and 8. The shift between learning to write and writing to learn, an essential part of development during these years, provides the rationale for deciding which aspects of writing to emphasize and which to background. For example, schools give less attention to spelling, handwriting, and other mechanical features, and instead focus on the generation and organization of ideas, and on the shaping of compositions that have clarity and appeal for the writer's intended audience.

By the upper elementary and middle school levels, students reach a critical stage in their acquisition of literacy. They have moved through a range of experiences, in and out of school, that give them something to talk about. They can now step back and reflect; they can think about something and can think about thinking. Most students have gained some degree of skill in handling print. All are entering a point in the academic curriculum where they are expected to deal with a broad range of substantial topics and concepts, most of which are genuinely new to them. Children still write narratives, but from 4th grade onward, there is a shift toward expositions—informational reports, research papers, persuasive essays, and so on. A book report may begin with a story, but the final product is an analytical work. Personal journaling, show-and-tell, and casual conversations suffice in the primary grades, but by 4th grade, successful students need to demonstrate the ability and motivation to engage in relatively sophisticated writing projects where they assemble material from various sources, develop plans for structuring the information, and add details

sufficient to embellish the final product. They confront decisions about the overall organization, the formulation of paragraphs, and the building of coherent sentences. The task may easily span a week or more, during which time students draw continuously on the elements of the writing process: *develop/draft; revise/review; polish/publish*. Accomplishing this task has critical implications for both their academic success and life outside of school. The task is partly about writing, but more important, it is about effective thinking and communicating—the acquisition of *academic language* (Wong-Fillmore & Snow, 2000).

This chapter focuses on *development*, on the movement from the 3rd grader's personalized scribbles to the high schooler's research report. We will use the National Assessment of Educational Progress (NAEP), the "nation's report card," to set the developmental stage. The NAEP illustrates the types of writing assignments that are presented to students in 4th and 8th grades, and reveals how well they perform on these tasks. We then move to the classroom setting, looking in turn at curriculum and instruction, to understand how students' literacy development takes place with support from teachers. Assessment does not appear as a separate category but is woven throughout the paper.

We begin with a review of conventional resources including research reviews, textbooks for students and teachers, and the content standards that now shape the U.S. curriculum. This chapter emerges within the context of the federal No Child Left Behind legislation, which privileges reading and mathematics. Along the way, we encountered a strange finding—from the end of the primary grades to the beginning of high school, the basic advice for writing instruction from all of these sources is "do more of the same, when you have time." Curriculum resources provide little in the way of a systematic progression of skills and knowledge designed to lead the 3rd-grade novice toward the expertise expected of the high school freshman.

After reviewing this situation, we offer suggestions about how to reshape the current state of affairs. Our hope is to persuade our audience of the vital importance of writing development across the content areas during this critical span of years, and of the potential of writing to enhance the full spectrum of students' cognitive, social, and motivational competence. The National Commission on Writing (2003) has called for "doubling the amount of time students spend writing" (p. 3), arguing that "writing today is not a frill for the few, but an essential skill for the many" (p. 3). We agree completely with these recommendations, but we suggest that it is also critically important to define what students are writing about.

BOOKENDS: WRITING ON THE NATION'S REPORT CARD

NAEP is a large-scale assessment regularly administered to 4th-, 8th- and 12th-grade students in several subject areas to track the academic progress

of the nation's students. Results are reported as aggregates for various demographic subgroups (e.g., boys and girls, level of parent education) and for state-to-state comparison. The 4th- and 8th-grade writing assessments span the grade range addressed in this chapter. NAEP writing measures students' proficiency in three types or genres of writing: narrative, informative, and persuasive. The type of writing varies across the grades in response to variations in state standards. In 4th grade, 40 percent of the writing tasks are narrative, 35 percent are informative, and 25 percent are persuasive. By 12th-grade, the emphasis is reversed, with the greatest emphasis placed on the expository or informational writing tasks. In 8th-grade, each genre receives relatively equal attention. Students receive 25 minutes to complete each writing assignment. They are encouraged to draft a plan before beginning the composition and to revise and edit their work.

Each composition is graded as basic, proficient, or advanced. Proficient is defined as "solid academic performance," and basic is the label for "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work." The scale is not especially fine grained; basic is considered as "marginally passing" at best. The 2002 NAEP results showed that only 28 percent of 4th graders and 31 percent of 8th graders performed at or above the proficient level, which means that the majority of the students were at or below the basic level. Only 1 or 2 percent of the compositions were advanced, which identifies "superior performance." The data showed the usual demographic trends: girls received higher scores than boys, and writing performance varied with family income and education. The report is quite extensive, but the executive summary makes little note of differences among the three genres.

A few released items on the NAEP presented in Table 6.1 give an idea of such factors as familiarity of content, degree of support (e.g., identification of purpose and audience, prompts for details or support), and students' interest. Two of the items are stand-alone and two are text-based (some background material is provided). A couple of the items seem fairly easy, in the sense of familiarity and accessibility of the topic, and a couple are more difficult.

Let's take a look at the writing demands of the 8th-grade prompts. In the easy, text-based prompt, students compose a persuasive text. They read a newspaper article on teenage sleep patterns. The main idea of the article is that because teenagers are at their lowest energy levels in the morning, they should stay up late at night and sleep late in the morning. This topic should appeal to adolescents who are inclined to pull the sheets over their heads in the morning. The article invites the students to ask the principal to think about changing established school routines. The prompt provides useful support. It draws the reader/writer into the situation. The task and audience are clear, and the proposition is authentic. It provides clues to the genre and reminds the writer to support the argument with convincing details.

Table 6.1
Sample Released Items from National Assessment of Educational Progress Writing

4th Grade

8th Grade

Easy

We all have favorite objects that we care about and would not want to give up. Think of one object that is important or valuable to you. For example, it could be a book, a piece of clothing, a game, or any object you care about.

Write about your favorite object. Be sure to describe the object and explain why it is valuable or important to you.

Imagine that the article shown below appeared in your local newspaper. Read the article carefully, then write a letter to your principal arguing for or against the proposition that classes at your school should begin and end much later in the day. Be sure to give detailed reasons to support your argument and make it convincing.



Difficult
 (more challenging)

IMAGINE!
 One morning you wake up and go down to breakfast. This is what you see on the table:



You are surprised. Then when you look out the window, this is what you see:



Write a story called "The Very Unusual Day" about what happens until you go to bed again.

A novel written in the 1950s describes a world where people are not allowed to read books. A small group of people who want to save books memorize them so that the books won't be forgotten. For example, an old man who has memorized the novel *The Call of the Wild* helps a young boy memorize it by reciting the story to him. In this way, the book is saved for the future.

If you were told that you could save just one book for future generations, which book would you choose?

Write an essay in which you discuss which book you would choose to save for future generations and what it is about the book that makes it important to save. Be sure to discuss in detail why the book is important to you and why it would be important to future generations.

Analysis of the second item reveals more challenges. Students are asked to select a book from the 1950s to guard for future generations. From the outset, students must deal with ancient history (the 1950s) and an unrealistic premise—a world without books. The reference to *The Call of the Wild* is useful only for those students who know the book and who appreciate the influence of books on people's lives. The directions seem straightforward: discuss the book you would save, why it is important, and why the book is important to you and to future generations. One challenge for the writer is to identify a book worth saving for posterity. Actually, the larger puzzle for a 14-year old is to understand what it means to save something for posterity. The audience is unclear; the most likely target of such an essay would probably be the writer of the text, but the implication is that someone else would be interested.

These examples illustrate the challenges and supports that confront students in the NAEP writing tasks. These are tests, and even though the developers encourage planning, drafting, and revising, students are constrained by time and standardization. They must work alone with no opportunities to refine ideas; they receive no feedback and the results do not affect their grade—the tasks have no clear purpose or audience. From one perspective, the results show what students can do under conditions that are not especially supportive. On the other hand, classroom writing is often quite similar, except that the work is graded.

CURRICULUM: WHAT NEEDS TO BE TAUGHT

Writing, like reading, is something of a curiosity. Everyone knows the importance of the “three R’s”—readin,’ writin,’ and ’rithmetic—the curriculum cornerstones for the elementary grades. Unlike the content areas—biology, physics, history, geography, and so on—the three R’s do not appear in university catalogues, at least not in a form useful to elementary and middle school teachers. As a result, certification in most states requires relatively little attention to writing instruction.

To be sure, there are *writing standards*, statements about what students should know and do, developed by states as the foundation for tests required by the federal legislation of No Child Left Behind (NCLB). Something strange happened, however, between the creation of standards and development of the tests: the writing “R” disappeared! The Academic Yearly Progress reports mandated by NCLB include reading, math, and science, but not writing. There are several reasons for this decision. It is difficult to prepare valid writing tests that are also cheap, such as those that use multiple-choice formats. NAEP has stayed the course and requires students to actually write something, and some states include actual writing tasks at selected grades, but writing is not on the test. Interestingly, many states include short-answer items in reading, science, and even math, but do not score these as “writing.”

For teachers and students in the age-grade range addressed in this chapter, learning to express thinking becomes increasingly critical for success in school. Of course, if students don't have anything to say, they won't have much to write about. *Thinking* is an essential first step, followed by *saying*, and then *writing* (Moffett & Wagner, 1976). In this section, we focus on the writing curriculum, the final stage of the composition process, but we will refer repeatedly to "thinking and saying."

Writing as a Course of Study

What should students be taught about writing during the late elementary and middle school grades? We turned to state and national standards for an answer, and because our assignment was to address development, we also skimmed the earlier and later grades to find out what students should have already learned and what they should prepare for. One set of results, based on a summary analysis of state standards by the Mid-continent Regional Educational Laboratory or McREL (Kendall & Marzano, 2004), is shown in Table 6.2.

Table 6.2
Developmental Spectrum of National Writing Standards by Grade Clusters and Composition Domains After McREL

Domain	K-2	3-5	6-8	9-12
Genre	Variety of genres	Exposition: Information, cause-effect, chronology	Exposition: Common expository structures, compare-contrast, problem solution	Exposition: Describes and differentiates; compares-contrasts
Organization	Not clearly specified	Topic: Identify, develop, conclude	Thesis: Logical organization of detail, intro and conclusion	"Organizes" Develops main idea and details in relative importance
Sources	Picture books, personal experiences, response to literature	"Several sources:" Facts, details, examples, explanations	Knowledge about topic	"First and second-hand:" Books, magazines, computers, community
Presentation and style/ Purpose and audience	Letters, personal stories, entertain, inform		State purpose	Interesting facts, anecdotes, scenario, technical terms, history

The McREL compilation is organized by four grade clusters, the design used by most states, and one that makes considerable sense. We selected elements from several McREL benchmarks and organized them according to four developmental continua: genre (what “kinds” of writing to expect and support), organization (what structural features should be found in student compositions), sources (what should students routinely draw on as a basis for writing), and presentation/style (how to deal with purpose and audience). These categories are admittedly constructed from a complex array of entries, but we think that they capture important features of the McREL summary.

A broad survey of the matrix suggests a few trends. First, the genre category (types of writing) emphasizes exposition from the mid-elementary grades on, with little apparent “development.” The same types of writing (e.g., information/description, compare-contrast, persuasion) appear at every grade cluster. Second, organization also seems quite constant; students need to identify a topic (or thesis, which might be an important distinction), and stick with it. The standards from 3rd grade through high school call for compositions with a beginning, middle, and end, as well as reasonable use of details throughout. The standards for sources lay out a progression from familiar and personally relevant items in the primary grades to actively locating and analyzing more abstract and complex information in high school. The nature and progression of this stream are not spelled out. For practical purposes, the standards look the same whether you are teaching 4th or 8th grade.

Why Genre Is Important

What should be changing across the middle elementary grades other than “more of the same?” For both theoretical and practical reasons, we decided to use *genre* as a target for responding to this question. As it turns out, this choice casts a new light on other elements of the developmental curriculum. The genre concept has taken on increasing importance in recent years and ensures a better balance with writing conventions. Proper spelling, correct grammar, and basic organization (beginning, middle, and end) are reasonably easy to identify, assess, and teach. *Genre* includes the other significant aspects of a composition: the choice of a significant topic or thesis, creation of a coherent and appropriate structure, and attention to purpose and audience.

Genre shows up regularly in state standards, but often without clear purpose. Our suggestion is that teachers think about a “genre tool kit” as the foundation for a developmental writing curriculum. Helping students understand when and how to use these tools to construct engaging and informative compositions may be one of the most important developmental tasks during the middle grades.

Genre emphasizes *form*, which implies structure. The definition also mentions criteria calling for the form to fit the topic or function. If your car has

a brake problem and the mechanic launches into a long story about how her uncle's car had a similar problem, the genre is wrong for the function. You need information about brake problems and solutions. "Vague" and "no fixed boundaries" might seem troublesome, but they actually invite alternatives to the standard "five-paragraph essay" model—the idea that students should learn to decide on a topic ("peanut butter sandwiches"), sketch three paragraphs with a few details ("type of bread, style of peanut butter, toasted or not"), and finish by composing the introduction and conclusion. Authentic writing surely requires more than this "one size fits all" approach. Writing is partly an artistic activity, whether a novel or the Report of the Iraq Committee. Variations in the patterns are numerous, reflecting the interplay among writing, speaking, and graphic representations. In the midst of this variety, genre can provide a set of constancies that guide the individual from novice through competence to expert.

Table 6.2 shows that students in the primary grades must write in a variety of genres. From the mid-elementary grades onward, the emphasis shifts to *exposition*. Exposition has several meanings but most often contrasts narrative with technical writing, stories with reports, English with the content areas (sciences and social studies), or fact with fiction. None of these comparisons is perfect, but the basic idea is that as students move from the late elementary grades toward high school, academic tasks shift from stories toward reports, narrative toward exposition, for both reading and writing.

One simple approach to the development of genre is that teachers from 4th grade onward should increase writing (and reading) that emphasizes information and sequence—that "expounds." Magazines and newspapers offer examples: what, who, when, where, and so on. Students often read such materials on their own, but are less likely to write academically unless required to do so—text messaging does not count. The five-paragraph essay offers a model to help students compose in a slightly more formal manner, rely less on the first-person pronoun, and pay more attention to the conventions of grammar and spelling. These styles are somewhat rare outside of school; most parents don't "expound" when they take their children to the grocery store, nor do they expect an exposition in response. This image of the developmental course seems simple enough, however, like the shift from crawling to walking.

Why then do so many 8th graders write so poorly? In the McREL summary, genre plays a minor role. Table 6.3 offers a more detailed example from the California Content Standards for "Writing Applications: Genres and their Characteristics."

California requires grade-by-grade standards, and so an explicit progression is laid out. California was late in developing standards, and so this list used

Table 6.3
Developmental Progression of Genre from California State Content Standards
(Cell Entry Indicates Placement in Standards list)

Grade/genre	4	5	6	7	8
Narrative	1	1	1	1	1 (Biography)
Response to literature	2	2	4	2	2
Research report	3 (Information report)	3	3	3	3
Summary	4			5	
Persuasive and argumentation		4 (Letter)	5	4	4
Exposition			2		
Career documents					5
Technical documents					6

many other states for models. Because the standards are grade-by-grade, they are, for practical purposes, scope-and-sequence charts. Between 4th grade and high school entry, California students are expected to make a giant step in the mastery of exposition. The standards are cumulative; writing narratives and responding to literature (book reports) remain at the top of the list. Research reports and persuasive compositions enter at grades 4 and 5, but remain much the same through grade 8. In fact, there is little development along the way. Consider the standards for 4th and 8th grades:

Fourth Grade: Write information reports that (1) frame a central question about an issue or situation; (2) include facts and details for focus; and (3) draw from more than one source of information (e.g., speakers, books, newspapers, other media sources).

Eighth Grade: Write research reports that (1) define a thesis; (2) record important ideas, concepts, and direct quotations from significant information sources and paraphrase and summarize all perspectives on the topic, as appropriate; (3) use a variety of primary and secondary sources and distinguish the nature and value of each; and (4) organize and display information on charts, maps, and graphs.

The 8th-grade standards are longer, call for more refinement, and add graphs and charts. In 8th grade (but not before), the standards include career documents (business letters and job applications) and technical documents (activities to design a system, operate a tool, or explain the bylaws of an organization). The standards do not seem to require much to be learned, so why do national and international assessments conclude that student writing

is not up to par? We believe, as discussed in the next section, that the standards are off the mark because they focus solely on “writing.”

A Different Perspective on “What Develops”

We initially assumed that our assignment was quite straightforward. We could refer to various resources—textbooks, research papers, standards documents, and so on—to trace the developmental path of writing from the middle elementary grades toward entry to high school. We felt reasonably familiar with the practicalities of this age-grade spectrum. As we began our work, however, we encountered much sparser territory than we expected. Summarizing what is known about writing development is easy, but it reveals a large “black hole.”

By the end of the primary grades, most students have learned something about writing as a technical activity and can use paper and pencil to express personal experiences—simple stories and brief descriptive pieces. Six years later, when they enter high school, they are expected to compose complex expositions in a variety of disciplines using genres and conventions appropriate to the discipline. Psychologists describe this move as the shift from novice to expert. Much is known about the difference between novices and experts; much less is known about how to help individuals manage the shift. One might expect, for a fundamental task like writing, that the curriculum would provide a road map, standards and scope-and-sequence charts would provide guidelines, and textbooks (for both students and teachers) would fill in the essential details. But much like the situation for reading comprehension, the advice is “practice, practice, practice.”

Practice—with feedback—is certainly important in developing expertise. But practice only makes permanent. A great deal depends on what is practiced, as anyone who learned the hunt-and-peck system of typing can testify. As we reviewed standards and textbooks and classroom activities, we experienced an epiphany, centered in part around genre, but also around the “what” question. In previous research (Chambliss & Calfee, 1998), we viewed genre as roughly synonymous with text structure.

In this approach, writing development during the middle grades occurs as students acquire a set of simple structures (e.g., topical net, hierarchy, matrix) and apply these structures to increasingly difficult content, learning along the way the stages of the writing process listed previously. One challenge, well recognized in practice, centers around the question of who is to teach what. By middle school, English teachers handle literature and grammar, content-area teachers deal with content, and nobody really teaches reading and writing.

In the process of constructing this chapter, our conception of writing development during the middle grades turned upside down. Adolescence is a time

of considerable change, marked by the emergence of greater self-awareness, greater engagement with peer groups and awareness of others, and the capacity to reflect (Wigfield, Byrnes, & Eccles, 2006). The changes begin in the late elementary grades. Experience shifts even more substantially when the student leaves the elementary grades. Science is no longer a 30-minute session a couple of times a week with the same teacher in the same classroom, but instead becomes 50 minutes crammed into a scattershot daily schedule in different places with different teachers, each dealing with snapshots of 100 to 150 students, and weekly tests that are graded. The same is true for English, mathematics, social studies, physical education, and the occasional elective.

Our reconception, which covers the middle grade span from late elementary through middle school, centers around the development of writing in these subject matters. Why in the world should students learn the Pythagorean theorem, the causes of the Civil War, the structure of the solar system, the different varieties of mammals, *Hamlet* and *Macbeth*, and so on? One answer centers around the traditional notion of the well-educated person—not really at the top of the adolescent agenda. Another approach is more pragmatic; learn these things so students can pass the tests, finish college, get a good job, and make a lot of money. A third response is that the real reason for school is for child care, and the curriculum is a way to keep everyone (students and teachers) busy during these formative but confusing years. To be sure, some teachers manage to find bits and pieces of content that are interesting and engaging: how to measure π with a piece of string, observing a garter snake deal with a cricket, creating a classroom constitution, creating a model moon colony, interviewing your grandparents about the early years of television, and so on.

Each of these approaches appears in practice, but none seems an adequate response to the “why” question. We argue that the situation offers an important developmental opportunity for changing the way that students view the world, and that literacy is an essential ingredient in the process. Our argument builds on two familiar foundations—curriculum integration and literacy across the curriculum.

As noted, the argument contains two essential elements. The first is the potential of the content areas to change the way that individuals view the world. In recent years, psychologists have discovered much about the differences between novices and experts (cf. Bransford, Brown & Cocking, 1999). For example, when the car won’t start, the novice opens the hood and sees a tangle of junk, but the expert sees a cable that has come loose from the distributor cap. Most of us, standing on the beach during a brilliant sunset, see the sun sink behind the horizon. The expert experiences the movement of the earth as it rotates away from the sun. The academic disciplines, as recorded in the standards, capture the knowledge accumulated over the ages for changing

perspectives, and for building new insights. Standards and books and even five-paragraph essays, however, can amount to little more than “inert knowledge” (Whitehead, 1974). Only as students move from knowledge-telling to knowledge-transforming (Bereiter & Scardamalia, 1987) do the disciplines come alive. The key to knowledge-transforming is composing—taking content from various sources and disciplines and changing it into new constructions, a process in which the genre “tool kit” plays an essential role in assembling, organizing, and constructing projects.

Development is a critical consideration in this argument. The typical 4th grader is just beginning to move beyond the worlds of personal experience, in which the neighborhood sets the limits of space and holidays define the spectrum of time. Friends are important, but the family is still the social centerpiece. Education offers the opportunity for the 8th grader to participate in an entirely new set of possibilities. As noted previously, natural development moves the adolescent into a different world, quite apart from school influences. The challenge is to ensure that educational experiences support and enhance the developmental possibilities. The evidence suggests that schooling in the middle grades actually has a largely negative impact on youngsters (Eccles et al., 1993). To be sure, several case studies offer optimistic views of what is possible (Anders & Guzzetti, 2005; Langer & Applebee, 1987). These studies address questions such as these: What is happening in the best of cases that might inform practice more generally? What are the implications for developmental issues and for writing?

We will use geology to contrast our proposal with present practice. On the surface, the earth looks flat and solid. Geology, we learn in school, presents the earth to be round and dynamic. Of course, most of the time most of us still see the earth as flat and solid; when required, we can “tell” things that we don’t fully understand. Geology begins with volcanoes and earthquakes, exciting topics that only a few individuals experience. In the late elementary grades, students learn about three types of volcanoes, and they build models from clay, using baking soda, vinegar, and red food coloring to simulate an eruption. Reading is important; books tell about the three volcanic types and describe how to construct a model. Writing is generally not important; although students may retell what they have read and done, the task does not require any significant amount of thinking. The content is engaging and connects students with experiences that most will not encounter in everyday life. The writing task can provide a foundation for introducing relatively simple genre: comparing and contrasting the three types of volcanic cones, or describing the process of building a vinegar-soda eruption. Students can still see the earth as flat and solid, but they have learned content (sometimes lava erupts from somewhere inside the earth) and process (describing different ways in which eruptions take place) that provides a foundation for the later grades.

By 8th grade, geology presents the globe as a turmoil of dynamic structures and forces: the thin crust on which we live, the molten mantle on which the crust rests, and the dense core that generates the heat that roils the mantle. Describing this system requires of the curriculum designer the skillful interplay of text and graphics, and a constant move between geological concepts and the local environment. Volcanoes and earthquakes now appear as bit players in a much larger drama—the emergence of mountain ranges and the submerging of the Hawaiian Islands, the movement of Los Angeles toward Seattle, the creation of the Grand Canyon. For students to “tell” this knowledge calls for much greater expertise in the use of the structures from the genre tool kit. The telling can be done in a variety of ways, but all require significant decisions about how to reconstruct knowledge. One approach might begin with a description of the structure of the globe, as sketched here, followed by cause-effect segments, using various examples to make the point. A different approach might begin, as many trade books do, with engaging details that are then woven into the larger images of structures and processes. Young children build simple structures with simple blocks; older children still rely on simple blocks, but they build more complex structures. Think about Lego sets, in which simple pieces can be combined into a cube or used to build a model of the Golden Gate Bridge. The move from the cube to the bridge illustrates development.

The preceding example represents more advanced knowledge telling, but we think that knowledge transformation is also an important developmental goal during the middle years. Transformation is partly about transfer, about applying content learned in one setting to a different situation. For instance, a 4th grader uses the compare-contrast structure for different types of volcanoes and then demonstrates understanding of this structure by writing a piece on different types of rocks. Or an 8th grader explains the similarity between the gullies on his family’s farm and how the Colorado shaped the Grand Canyon. Both examples demonstrate ways in which students “go beyond the information given” (Bruner, 1957). Transfer depends on an appreciation of similarities, both surface-level and conceptual. Transformation, as we imagine it, occurs when students take information from a variety of sources and create something distinctive, using both content and genre during the construction. For example, the social studies curriculum generally includes investigations of various aspects of a community, both physical and social. Students read about government, the environment, and so on. Transfer happens when, after analyzing one community, students analyze a very different one. For instance, they might study sets of sister cities—San Francisco, Sydney, and Manila. A more challenging and transformative activity would be to design a new community on Mars, considering cities that work and that don’t work. In these examples, the content is important, but structuring the

task is equally demanding. Writing is part of the building/composing task, but so are graphics and realia.

In summary, as students move from the mid-elementary grades toward high school and beyond, what “develops” in school centers around the various academic disciplines. This development doesn’t happen naturally; it is taught. Schooling serves to pass traditions from one generation to another. Youngsters also develop in other ways during this age span, of course, acquiring a variety of informal genres along the way, forms of discourse that often bewilder their parents and other adults. But for schooling, writing is the means by which students demonstrate their acquisition of the various content-area genre—the templates or schemata that academic disciplines have constructed across the years to capture and convey domains of knowledge. From this perspective, the idea of writing (and reading) across the content areas misses the point. Every content area has its own set of structures, and *development* occurs as students acquire the structures that form that discipline. Every teacher, from this perspective, is necessarily involved in teaching reading, writing, and language.

Throughout this section we have focused on curriculum in dealing with development because the two are so tightly related. Educators may see many barriers in the way of practical implementation of the ideas sketched previously, including the daunting pressures of the accountability age—building a Martian community is unlikely to be on the test. On the other hand, we would argue that all of the curriculum “pieces” can be found in the standards, for both content areas and the literacy domain. To be sure, state standards were not constructed with either integration or development as key principles. In addition to curriculum, the teacher has responsibility for instruction and assessment, which are also missing in state standards, but which are essential for implementation of a developmental curriculum.

INSTRUCTION: PROMOTING WRITING DEVELOPMENT

Teachers are central in guiding students’ acquisition of the curriculum presented in the previous section. They require knowledge of how students develop in writing from the time they leave 3rd grade to the end of 8th grade. Also, they require the pedagogical knowledge and skills to ensure students leave 8th grade ready to confront the demands of high school writing. From 4th through 8th grade, the teacher’s role shifts from generalist to specialist, and as the grades increase, so does the specialization of content knowledge. English teachers still assume the primary responsibility for providing instruction in writing, and teachers of other disciplines assign writing to evaluate student learning. We propose that all teachers provide not only opportunities to write, but also *instruction* that improves students’ abilities

to compose in a variety of disciplines and to use writing to deepen their content knowledge.

Case studies examining the benefits of integrating literacy and content areas found that when students read and write in science, their thinking and performance were greatly enhanced (Langer & Applebee, 1987). Writing can reveal one's knowledge, but it can also increase learning as students move from knowledge-telling to knowledge-transforming (Bereiter & Scardamalia, 1987). In the next section we present a model that integrates literacy and content areas to advance students' understanding of content and promote literacy development.

The Read-Write Strategy

Historically, reading and writing have been taught separately; in the elementary grades instruction occurs during different times in the day and both have their own curriculum. We recognize that instruction is most effective when the language arts and content are integrated and when students are appropriately scaffolded. The read-write strategy was originally designed as an assessment tool to find out what students can do, when supported, in the area of writing and comprehension. Here we present the model as a framework for instruction: students are guided from the gathering of information (e.g., textual reading) to group discussion to writing. The general strategy is to start with a problem that holds genuine interest and purpose, which requires finding information from a variety of sources, to create a document or presentation for a real audience. The read-write strategy is designed around the CORE framework—connect, organize, reflect, extend. CORE is a conceptual framework that is based on social-cognitive theory as a basis for the acquisition of reading, writing and language. The elements that follow are not discrete stages; they are revisited throughout the learning process.

Connect. Acquiring new knowledge is most effective when it connects to what the student already knows, when it builds on prior knowledge. Teachers facilitate the process by providing experiences and resources, and by clarifying misconceptions. In the Read-Write Strategy the teacher introduces the activity—reading a collection of articles in order to write a position paper. The students might access prior knowledge by generating a semantic map on the primary topic of the text, brainstorming concepts, and organizing them into categories.

Organize. We understand and remember information better when it is organized into meaningful chunks. As students think through and organize information, they develop their understanding of the content and the genre appropriate to the discipline. In the read-write strategy, students read and discuss, actively gathering information and generating concepts and vocabulary that will be useful when composing. Teachers scaffold knowledge building along the way by teaching students how to respond to texts—to take notes, ask questions, and seek additional resources. Ideas are organized using graphic structures such as webs and matrices.

Reflect. Learning is most effective and long lasting when students step back from the task and reflect on the process, the learning, and the next steps. In the read-write strategy, students confer with peers about their reactions to the readings and other information, and develop plans for writing by considering the purpose, audience, structure and content. In a persuasive piece, students consider the available evidence to support their claims. Do I have enough support to help the reader understand my points and to be convinced? Feedback from others is critical; small-group discussions help students clarify their thinking and deepen understanding.

Extend. Students apply their new learning and continue to develop their understanding as they compose using their prewriting notes, discussion notes, and graphic structures as resources. They use the writing process—*develop/draft, review/revise, polish/publish*—to construct the text. Peer interactions and self-monitoring continue, and students receive feedback, revisit their organizational schemes, and revise accordingly. In this context, students are likely to be more motivated, and the quality of their work is likely to increase.

In this section we have focused on instruction that supports students' writing development across the curriculum. Further, we laid out a model for integrating writing (and the other language arts) and curriculum. The model provides the structure for students to acquire content knowledge and the ways of thinking and organizing information in discipline-specific ways.

CONCLUSION

We have focused on curriculum in dealing with development because the two are so tightly related. Educators may see many barriers in the way of practical implementation of the ideas sketched previously, including the daunting pressures of the accountability age—building a Martian community is unlikely to be on the test. On the other hand, we would argue that all of the curriculum “pieces” can be found in the standards, for both content areas and the literacy domain. To be sure, state standards were not constructed with either integration or development as key principles.

Instructional practice and assessment techniques are also barriers. The proposal sketched in this chapter assumes substantial student engagement around group tasks, with authentic performances as the primary outcomes. We briefly reviewed both of these matters in the final section of the chapter, but the territory has actually been well traveled during past decades. The most significant hurdles center around teacher knowledge and autonomy, a point of continuing controversy. For those who are convinced that teachers are incapable of making principled decisions in adapting the curriculum to local contexts and opportunities, the proposal may seem unrealistic. Some teachers and some students might be able to handle the demanding tasks entailed in this proposal, but most teachers and most students need to follow a more prescribed

and routinized path. We agree with the basic theme that “no child should be left behind,” but we think it important to consider “behind what?”

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Chapter Seven

CHILDREN'S LITERATURE: CONNECTING AND TRANSFORMING CHILDREN'S WORLDS

Kathy G. Short

Children's literature can be defined in many different ways, but the most essential criterion is that children view these books as reflecting their life experiences, understandings, and emotions. A children's book is one that occupies a child's attention. The uniqueness of children's literature is the audience that it addresses, both in terms of whom the author focuses on as readers and which books children claim as their own. In general, children's literature is considered to be books written expressly for children from birth through age 12. There are books, however, that children reject as nostalgic or sentimental because they reflect adult perspectives of looking back on childhood or portray adult emotions of cynicism and despair. At the same time, there are books written for adults, such as the classic tale of *Robinson Crusoe*, that children adopt as their own.

Children's books, first and foremost, are literature and constitute the imaginative shaping of experience and thought into the forms and structures of language (Kiefer, 2007). These structures include narratives, poetry, exposition, and descriptive texts that can be presented as fiction or nonfiction. Children's literature has the same standards of quality as any other form of literature. The difference is one of audience, not the quality of the literature itself. These books include a range of topics and themes in the form of chapter books or picture books that span the genres of realistic fiction, historical fiction, folklore, fantasy, science fiction, poetry, biography, and nonfiction.

Children's literature and textbooks are both written for children, but they differ in purpose. Textbooks, by design and content, are for the purpose of instruction. Examples include basal readers, collections of abridged or short

stories used for reading instruction, and the textbooks used in schools to teach subjects such as science and social studies. Children's literature, also called trade books or library books, are written for the purposes of entertainment and information. Children read literature to experience and learn about life.

Literature offers children experiences that go beyond entertainment. One of the most critical experiences literature has to offer is the potential to transform children's lives through connecting their hearts and their minds, bringing together feeling and thought. Children find themselves reflected in stories and so make connections to literature that transform their understandings of themselves. This potential for transformation is also apparent in informational books that are written from the perspective of one enthusiast sharing with another to "light fires" in children's minds. Literature expands children's life spaces by taking them outside the boundaries of their lives to other places, times, and ways of living to see that there are alternative ways to live their lives and to think about the world. Literature also stretches their imaginations and encourages them to go beyond "what is" to "what might be." For generations, hope and imagination have made it possible for children to be resilient and to rise above their circumstances. Transformation occurs as children carry their experiences through literature back into their worlds and view their lives differently.

Rosenblatt (1938) defined reading as a transactional process in which each reader brings his or her personal and cultural experiences, beliefs, and values to the reading of a text so that both the reader and the text are transformed. Although a text has particular potential meanings, readers construct their own understandings and interpretations as they engage in "lived through experiences" with that text. Readers construct these understandings in light of their experiences and rethink their experiences in light of the text, thus bringing meaning to and take meaning from a text. A consideration of children's literature therefore must include both an examination of the texts and of the ways in which children as readers engage with these texts. The texts that constitute children's literature can be evaluated from a range of perspectives, including the literary and the content qualities of each book. The literary and aesthetic qualities include consideration of the literary elements, such as plot, setting, theme, character, style, and format, as well as visual elements and literary genre. The content qualities that are significant focus on multicultural and international issues, including the cultural authenticity of the books. Children bring their life experiences to construct interpretations of these texts as they read for pleasure and understanding and to develop reading strategies.

THE ROLE OF LITERARY AND VISUAL ELEMENTS IN CREATING EXCELLENCE IN LITERATURE

The elements that work together to create a story determine the potential of a text to invite readers' responses and constructions of meaning. Lynch-Brown

and Tomlinson (2005) point out that children are particularly drawn to stories in which something happens. They want a plot that is fast moving, with conflict to build the excitement and suspense to keep them engaged. Long after the plot is forgotten, however, readers remember the characters that they have come to know through that story. The characters involved in the plot events must matter to the reader to make the reading relevant, so authors find ways to help readers know a character through actions, dialogue, description, and interactions with other characters. The events and characters occur within a particular setting, a time and a place that sometimes is specific and well developed, as in historical fiction, and other times is more vague and general, as in folktales.

Plot, character, and setting are connected by theme, the underlying meaning or significance of a story. A theme is not the message or moral, but the larger meaning beneath the surface of a story that goes beyond the plot action and reveals something of the author's purpose in writing a particular story. Sometimes, adults write stories to teach morality lessons, leading to a didactic or "preachy" story that children resist, instead of telling the story in such a way that the messages evolve for readers. Style refers to the way in which the author tells the story and includes the word choice, the flow of language, the organization of the book, the point of view from which the story is told, and the use of symbolism to suggest meanings by analogy. The author's goal is to tell a story that integrates all of these elements into a compelling whole.

Many children's books use both written language and illustrations to tell the story. In picture books, the illustrations are essential to the telling of the story. Other books use illustrations to help the reader visualize the physical setting and the characters' appearance and actions, as well as to provide visual appeal. The visual elements of line, color, shape, and texture are arranged within an illustration to create relationships and an overall composition. Illustrators make decisions about proportion, balance, and harmony within the various elements to provide a visual impact that extends and enriches the meaning and mood of the text.

Illustrators use a range of artistic media, materials, and techniques to create pictures, including drawing, collage, printmaking, photography, and painting. The media and visual elements are used in distinctive ways by each illustrator to create an individual artistic style. These artistic styles can also be grouped by general characteristics to reflect realistic, impressionistic, expressionistic, abstract, surrealist, folk, and cartoon art. Effective illustrations combine the elements, style, and media to reflect, extend, and enrich the text without contradicting its message.

The written language and visual images in children's books are organized within a book format to create the final product—a book. This format includes the external dust jacket, the book cover, the endpapers inside the front and back covers, the title page and other front matter that proceed the beginning of the story, and any additional back matter, such as glossaries or author notes.

The size, shape, and darkness of the print type also vary from book to book as does the page layout or placement of illustrations and print on each page. Other factors include the type of paper, the size of the book, and the book-binding.

THE RANGE OF GENRES AVAILABLE TO CHILDREN

These visual and literary elements interact in varying degrees of significance within the various genres that constitute the broader body of children's literature. Typically within children's literature, the genres include poetry, traditional literature, fantasy, realistic fiction, historical fiction, biography, and informational books. All literature is either poetry or prose that can then be divided into fiction (fantasy and realism) and nonfiction (biography and informational). In addition, each of these genres can be found within two different formats, picture books and chapter books. An in-depth examination of genres is the most typical approach to organizing and understanding the field of children's literature for adults, although the lines between genres often blur. These genre categories are less important to children than theme and topic, but adults use genre to understand the broader field and to develop evaluation criteria and balance in their collections and use of books with children.

Picture books are a genre based on format rather than content in which the illustrations are of equal or greater importance as the written language in creating meaning. A majority of picture books are for younger readers, with some geared to older readers, even adults. Books with occasional illustrations that break up or decorate the text or add interest are known as illustrated texts. The illustrations are incidental to the content and are in contrast to picture books in which pictures or illustrations are essential to the telling of the story.

Children's first experiences with books must be enjoyable to encourage their involvement with reading, so picture books play a critical role for young children. The category of picture books contains books ranging from fiction to nonfiction and from fantasy to realism and includes special types such as baby board books, pop-up books, wordless books, alphabet books, counting books, concept books, and pattern books. Baby board books are simply designed, brightly illustrated, durable picture books in which the illustrations dominate to focus on a particular concept or story. Wordless books use only illustrations to convey a story or information, whereas concept books explore or explain an idea or concept rather than tell a story.

Many picture books are intended to be read aloud to young children, but some are created to be read by children themselves. Pattern books, for example, use a repetitive pattern or refrain and predictable sentence and story structures to invite young children to participate in the reading of the book. The books intended to

be read by young children usually include fewer words and highly predictable sentence structures and rely more heavily on illustrations to convey a story.

The most prestigious award for children's picture books in the United States is the Caldecott Award, given annually by the American Library Association to the illustrator of the most distinguished American picture book for children during a particular year. The text should be worthy of the illustrations, but the award is made primarily for the artwork. Other comparable awards are given in other countries, such as the Kate Greenaway Medal in the United Kingdom and the Vivian Wilkes Award in South Africa.

The Newbery Medal, given annually by the American Library Association, is awarded to the author of the most distinguished contribution to American literature for children published in a particular year. Similar awards in other countries include the Carnegie Medal in the United Kingdom and the Australian Book of the Year Award. Although the Newbery Medal has sometimes gone to writers of picture books, poets, and biographers, it is typically awarded to writers of chapter books of realistic fiction, historical fiction, and fantasy.

Realistic fiction, which reflects the actual world that children live in today, remains very popular and includes books on animals, adventures, mysteries, sports, humor, family and peer relationships, and growing up. These books increasingly portray the harsh realities of life and current societal issues such as racism and poverty, which are part of many children's lives. This genre also includes many popular series books that focus on a particular character or group of characters across a number of books.

Historical fiction brings history to life by placing children in accurately described historical settings. Through the stories of characters' everyday lives, young readers explore the human side of history, making it more real and memorable, and indicating how their lives were influenced by a particular historical time period. The settings are typically presented in great detail to make the content more believable and interesting.

Fantasy refers to stories in which the events, settings, or characters are outside the realm of possibility. The story needs an original setting and an internal consistency and logic to persuade readers to open themselves to the strange, whimsical, or magical. Fantasies that have long been popular include animal fantasies in which animals behave as human beings, stories in which beloved toys are brought to life, and worlds inhabited by miniature people. Other fantasies include time travel, modern variants of traditional folklore, and science fiction. Quest stories have recently gained general popularity as a result of the enormous success of the Harry Potter books and movies about C. S. Lewis's Narnia and Tolkien's world of Hobbits. These stories, also known as high fantasies, reflect the struggle between good and evil through the quest of a character on a journey of self-discovery and personal growth.

Other genres include traditional literature or folklore, poetry, and nonfiction. Traditional literature is the body of ancient stories and poems that grew out of the oral tradition of storytelling. These stories reflect cultural “truths” for a particular group of people and remain popular with children because of their strong emphasis on action plots, rhythmic language, familiar stylistic features, and beautifully illustrated interpretations. Poetry is the expression of ideas and feelings through a rhythmical composition of imaginative and carefully selected words that range from simple lullabies to complex metaphoric explorations of life. This genre is often a natural beginning to literature for young children because of the musicality of nursery rhymes. The National Council of Teachers of English sponsors an award every three years to an outstanding poet for children in honor of that poet’s work.

Nonfiction includes biographies giving factual information about the lives of actual people and informational books about features of the biological, social, or physical world. These books highlight expository writing whose purpose is to inform and explain in contrast to fiction or narrative writing where the purpose is to tell a story. This genre includes topics that span a large range of information in which the author has shaped the content to reach a particular audience of children. The quality of writing and illustration and use of organizational features in nonfiction have increased substantially, with recognition being given by several awards. The National Council of Teachers gives the Orbis Pictus award to an author for excellence in the writing of nonfiction and the American Library Association gives the Robert F. Sibert Informational Book Medal to the author of the most distinguished informational book.

LITERATURE THAT IS MULTICULTURAL AND INTERNATIONAL

A literary perspective on children’s literature is the one traditionally taken by most educators and librarians and has allowed particular insights about the literary elements and structures that authors and illustrators use to construct meaning. Readers, however, engage with literature not only because of the literary qualities of a well-told story, but also because the content connects and transforms their understandings of themselves and the world. One of the ways in which this content focus has been frequently explored within children’s literature is through exploring multicultural and global issues and how they play out in determining the cultural authenticity of the literature that children read. Concerns about multicultural literature grow out of research showing that people of color have been consistently underrepresented and stereotyped in North American children’s books. The more recent interest in international literature has come in response to the increasingly global nature of society, the mobility of people within the world, and the growing availability of books from other countries.

Fifty years ago, children's books reflected the culture of those in power—white, middle class, male, suburban/small town, and North American. Publishers believed that children's books should reflect the dominant society and focus on “universal” experiences that cut across all children. The result was many bland books that did not reflect the lives of real children, even those children who were supposedly the focus of those books. This emphasis on the universal gave way to a focus on children as individuals, highlighting books connected to children's personal interests.

Eventually, educators and publishers began to focus on children as members of communities and cultural groups that influence their thinking, values, and ways of living. This realization led to ethnic studies where children's books were organized by specific ethnic groups and countries, particularly focusing on books about people of color who have been excluded or negatively stereotyped in children's literature. Over time, this definition of culture has expanded to include many aspects of cultural identity, including but going beyond ethnicity and race. Geertz (1973) defines culture as “the shared patterns that set the tone, character and quality of people's lives” (p. 216). These patterns include language, religion, gender, relationships, class, ethnicity, race, disability, age, sexual orientation, family structures, nationality, geographical regions, and rural/suburban/urban communities. At the same time, international books originating in a particular country became a stronger focus, in contrast to “travel” books written by Americans who visit a country for a short period of time.

Sleeter and Grant (1987) state that multicultural perspectives should be part of all education and literature, not just a special book or curriculum unit. They argue for the term *an education that is multicultural* to indicate that multiculturalism is an orientation that pervades the curriculum. A literature that is multicultural and international includes a broadened definition of culture as a perspective that cuts across children's books to highlight the many different cultural identities that children bring to their reading experiences. Children need to find their specific cultural experiences within their reading, as well as to connect to the universal experiences and needs they share with children around the world.

This expanded understanding of culture needs to be balanced by the recognition that people of color and other groups who have not historically been in positions of power in society have largely been absent from children's literature. The tremendous discrepancy in the amount of quality literature reflecting the experiences of people of color indicates the need for a continued emphasis on publishing books that focus on the experiences of those who have been the most excluded and marginalized. These same issues of marginalization and exclusion are present in international literature, which has been dominated by

Western perspectives through books from English-speaking countries, especially the United States and United Kingdom.

The number of high-quality books reflecting the cultural diversity of society has also been affected by the changing nature of the publishing industry in children's literature. The majority of publishing houses have been acquired by large entertainment conglomerates, leading to less diversity in what and who are being published. The increasing commercialization of children's books has resulted in a focus on how much money a book and its products can make, rather than whether the book tells a worthwhile, compelling story.

THE COMPLEXITY OF CULTURAL AUTHENTICITY

One of the major issues related to a literature that is multicultural and international is that of cultural authenticity. This issue seems to continuously resurface, eliciting strong emotions and a wide range of perspectives. Authors, illustrators, editors, publishers, educators, librarians, theorists, and researchers have different points of view that they each feel strongly about based on their sociocultural experiences and philosophical perspectives. Arguments about cultural authenticity in literature for children are not just academic in nature; the voices in these debates are passionate and strong, reflecting deeply held beliefs at the heart of each person's work in creating or using books with children.

Even defining cultural authenticity is difficult. Many authors and educators discuss the complexity of cultural authenticity rather than define it, often arguing that "you know it when you see it" as an insider reading a book about your own culture. The reader's sense of truth in how a specific cultural experience is represented within a book, particularly when the reader is an insider to the culture in that book, is the most common understanding of cultural authenticity. Insiders know a book is "true" because they feel it, deep down, saying, "Yes, that's how it is."

Howard (1991) states that an authentic book is one in which a universality of experience permeates a story that is set within the particularity of characters and setting. The universal and specific come together to create a book in which "readers from the culture will know that it is true, will identify, and be affirmed, and readers from another culture will feel that it is true, will identify, and learn something of value about both similarities and differences among us" (p. 92). Given that each reading of a book is a unique transaction that results in different interpretations (Rosenblatt, 1938), and given the range of experiences within any cultural group, this definition indicates why there are so many debates about the authenticity of a particular book.

The outside/insider distinction is the most frequently debated issue within cultural authenticity. The question of whether outsiders can write authentically about another culture is often asked and answered from oppositional

positions, with both sides vehemently arguing their perspective. Some see this question as a form of censorship and an attempt to restrict an author's freedom to write. Others argue that the question reflects larger issues of power structures and a history of misrepresentations of particular groups of people and countries. Most see the question as simplistic, setting up a dichotomy that overlooks the broader sociopolitical issues and that can potentially narrow the discussion to pretentious jargon and an emphasis on conformity.

This debate can be viewed as revolving around an author's social responsibility, rather than the freedom of authors to use their creative imaginations and literary skills to tell a powerful story. Authors have a social and artistic responsibility to be thoughtful and cautious when they write about characters, plots, and themes related to specific cultural groups, whether they are insiders or outsiders to that culture. Although authors need freedom to determine their own writing, their work has social origins and effects that need to be examined and critiqued.

Harris (1996) argues that the real issue is the contrast of authorial freedom with authorial arrogance, the belief that authors should be able to write without subjecting their work to critical scrutiny. Authorial arrogance connects to white privilege in that whites, specifically whites in Western countries, have been socialized into a racialized society that gives them particular privileges and status that are not available to people of color and to developing countries and that are not acknowledged but taken for granted as the way life is for everyone. Without critical scrutiny, white authors are often unable to transcend their positions of privilege when writing books about people from marginalized cultures and so continue subtle forms of racism, even when the more blatant racism and misrepresentations of the past have been eliminated from their writing. This cultural arrogance is based in the unconscious assumption by many members of mainstream society that what they value is universally valued by other cultures. An additional consideration is that members of a particular culture want to tell their own stories as a way to pass on their culture.

Both literary excellence and cultural authenticity should be used as criteria for evaluating children's books when the book reflects the experiences of a specific cultural group. A book is always evaluated for both content and writing style. Cultural authenticity focuses on content, whereas literary criteria focus on writing, so there is no dichotomy between a good and an authentic story. Thus the debate is not whether or not cultural authenticity should be part of the criteria for evaluating a book, but what kind of criteria and understandings should be used, particularly when the book is created by outsiders.

The question of what counts as experience and the kinds of experiences needed to write with truth as an outsider of a specific culture is often debated. Cai (1995) addresses this issue as the relationship between imagination and experience, noting that imagination is needed for a book to have literary excellence

but that too much imagination without experience leads to inaccuracies and bias and defeats the purpose of literature to liberate readers from stereotypes. Specific authors, such as Katherine Paterson and Paul Goble, have successfully crossed cultural gaps to write outside their own experiences; crossing cultural gaps is difficult, however, and requires extreme diligence by authors to gain the experiences necessary to write authentically within another culture. There is disagreement on what counts as the experience needed to cross a cultural gap as an outsider, particularly whether direct personal experiences are essential or if those experiences can be gained through careful research. Most authors who successfully write outside their own culture have had significant in-depth experiences within that culture over many years, and have engaged in careful and thorough research.

One question that authors can ask themselves is *why* they want to write a particular book. Not only does making an author's intentions and beliefs explicit influence the criteria for evaluating a book, but this process also engages an author in the critical self-examination necessary to choosing whether or not to write outside one's culture and to clarify the kind of story that the author is seeking to write. Bishop (2003) points out that authors who write within their own culture usually have the intention of enhancing the self-concept of children from that culture and of challenging existing stereotypes and dominant culture assumptions, as well as of passing on the central values and stories of their culture to children. Authors writing outside their own cultures often write from the intention to build awareness of cultural differences and improve intercultural relationships. These differing intentions result in different stories for different audiences and different evaluations of authenticity.

Criteria that are typically considered in evaluating the content of a book are the accuracy of the details and the lack of stereotyping and misrepresentation. Authors cannot ignore cultural facts, and so both the visible facts of daily life and the invisible facts of values and beliefs must be accurately represented. Cultural sensitivity refers to whether a book is sensitive to the concerns of the culture that is portrayed. Cai (1995) refers to this cultural sensitivity as an ethnic perspective, the worldview of a specific cultural group that has been shaped by an ideological difference with the majority view. It is the existence of this ethnic perspective that he believes authors who write outside their own culture often do not take on; instead they may unconsciously impose their own perspective onto that culture.

Authenticity goes beyond accuracy or the avoidance of stereotyping to include the cultural values and practices that are accepted as norms within that social group. Accuracy focuses on cultural facts; authenticity focuses on cultural values. Evaluations of accuracy can indicate whether the facts in the story believably exist in a culture, but not whether those facts actually represent the values held by most of the people in that group. Mo and Shen (2003)

state that a story can be accurate but not authentic by portraying cultural practices that exist but are not part of the central code of a culture. This central code is the range of values acceptable within a social group and recognition of the conflicts and changes in beliefs within a culture.

Authenticity of illustrations is based on whether the art form serves its purpose in relation to the story. An authentic art form does not have to be rigidly interpreted as a typical or traditional style for a particular social group. The creative process leads to art that is part of the story to create an authentic whole. The role of art, however, differs across cultures, and mainstream traditions of experimentation with art elements to enhance meaning can change or confuse meanings for members of particular cultural groups when that experimentation contradicts cultural traditions.

Another aspect of authenticity is the use of particular words and phrases from a specific culture within an English-language book. Barrera and Quiroa (2003) note that the issue is not just accurate translations, but how the words are used, particularly whether the words are added for cultural flavor and result in stereotypes. These elements have to be used strategically and skillfully with cultural sensitivity to create powerful multilingual images of characters, settings, and themes. These phrases and words must not only enhance the literary merits of the book but also make the story comprehensible and engaging to both monolingual and bilingual readers without slighting the language or literary experience of either. The tendency to stay with formulaic and safe uses of Spanish, for example, and to translate these words literally to cater to the needs of monolingual readers often results in culturally inauthentic texts for bilingual readers and poor literary quality for all readers.

Another complicating factor is that there is no one insider perspective that can be used to evaluate cultural authenticity. Opposing evaluations of the authenticity of a book can be made by different groups of insiders because of variations within that culture. Insiders can also inadvertently perpetuate stereotypes of their own culture. Recognizing the complexity of both insider and outsider perspectives adds another layer to the issues that have been previously raised about cultural facts and values and what is considered "truth" about a particular cultural experience. Bishop (2003) argues that because variance always exists within a specific culture, no one set of definitive criteria can ever be created to evaluate books about that culture. She also notes, however, that scholars can create criteria to show the range of themes and ideologies at the core of a particular culture through a serious scholarly study of the books published by insiders.

All children have the right to see themselves within a book, that is, to find within a book the truth of their own experiences instead of stereotypes and misrepresentations. Culturally authentic books are more engaging for children from that culture and are a source of intercultural understandings

for children from other cultures. These books provide children with insights into power and social and political issues while also serving to challenge the monocultural perspective of dominant society that characterizes most schooling. In addition, authors have the right to tell stories that are used within their own particular cultural group to pass on their cultural identity to children. Literature is one of the significant ways that children learn about themselves and others; therefore those images should not be distorted.

A number of awards recognize excellence in authenticity and literary qualities for a literature that is multicultural and international. For example, the American Library Association gives the Batchelder Award for the most outstanding book published in another country and translated into English. This same association gives the Coretta Scott King Award to African American illustrators and authors and the Pura Belpré Award to honor Latino authors and illustrators. The International Board of Books for Young People gives the Hans Christian Anderson Award to an illustrator and an author whose complete works have made important international contributions to children's literature. This organization also publishes the IBBYP Honor List of top books from countries all over the world.

Evaluations of the literary excellence and cultural authenticity of a book are not designed to lead to censorship, but rather to engage children in critical readings of these books to question the meanings embedded in texts from dominant cultural perspectives. Children need to be able to tackle issues of literary quality and cultural difference, equity, and assumptions about race, class, and gender as they read literature. Thus criteria for evaluating literary excellence and cultural authenticity are not just issues about creating or choosing books for children; they are also criteria that children themselves need to understand and use as critical readers. Children need regular engagements with quality children's books that are culturally authentic and accurate.

CHILDREN'S ENGAGEMENTS WITH LITERATURE

A book has the potential to engage children when it captures children's attention and invites their participation in the story world of that text. This intense experience with literature goes far beyond extracting information from the text. Engagement with literature connects children to the pleasures of reading and encourages lifelong reading. Reading is devalued if the books children read are not worth the effort of reading—when what they read adds nothing of significance to their lives. Reading fiction and nonfiction literature with authentic, rich language and convincing narratives is the first step to engagement, but this literature must be supported by effective experiences that powerfully bring children and books together.

These experiences include reading for enjoyment, reading to think about oneself and the world, and reading to learn about literacy. Balancing these experiences supports the child's development as a reader and as a person, although the emphasis may shift as children become proficient readers and gain life experiences. Older readers may primarily focus on using reading to think, whereas young children focus more on reading for enjoyment and to learn about reading strategies. This shift in emphasis does not exclude the other types; all three should be integrated into the experiences offered to children, no matter what their age, because each serves a different purpose and highlights different books and roles for adults and children.

Reading literature for enjoyment involves reading for pleasure from a wide range of reading materials. The focus is on choice and the extensive reading of many books for personal purposes. Often these books are predictable materials where readers can easily follow the plot and language, such as patterned language books for young children and series books for older children. Extensive reading provides children with a broad background of literature from which to develop comprehension and interpretation, promotes positive attitudes about reading, and encourages the development of lifelong reading habits. In addition, reading many materials with ease increases fluency and the integration of reading strategies.

Experiences that encourage reading for pleasure include independent reading and read alouds. The role of adults is to provide a regularly scheduled time and a variety of reading materials and to read alongside the child. For preschool children, this reading often involves "telling" the story as they hold a book. Many children prefer nonfiction materials and computer-related reading, and so they resist an overemphasis on fiction. Reading for personal purposes increases the likelihood that children will continue to read as adults and is correlated with gains in fluency, vocabulary, and comprehension. Research indicates that many adults stop engaging with books once they leave school and view reading as boring school work because of the lack of choice in reading materials in schools (Gambrell, 2000).

Reading aloud to children is another means of inviting children to engage with literature through a pleasurable experience. Research indicates that there is a high correlation between parents reading aloud frequently to young children and later reading achievement in school (Galda & Cullinan, 2000). Reading aloud introduces concepts of print, book language, and story structures, as well as encourages positive attitudes. Children from cultures with strong oral traditions often enter school with a background in oral literature and storytelling, rather than in written literature. In addition, children from families living in poverty frequently have many experiences with functional everyday print. The success of these children depends on whether teachers build from children's strengths in oral stories and functional materials.

Reading literature to think about oneself and the world involves reading to consider issues in children's lives and in the broader society. These experiences support children in becoming critical and knowledgeable readers and thinkers. Readers are encouraged to engage deeply with the story world of a text and then to step back to share their personal connections and to reflect critically with others about the text and their responses.

This focus on the intensive reading of a few books to think deeply and critically balances the extensive reading of many books. Because the books chosen for intensive reading have multiple layers of meaning, they are challenging for readers and invite social interaction and discussion. Children share their connections and move into dialogue around particular issues. Because the focus is on children's thinking, the literature may be beyond their reading ability, so the text is read aloud to them, particularly in the case of young children and struggling readers. In addition, children may engage with literature as part of a thematic study or inquiry within content areas such as math, science, and social studies. They read critically to compare information and issues across these books and to learn facts about the topic, as well as to consider conceptual issues. Literature becomes a tool for understanding the world and considering broader social and scientific issues, as well as a means of facilitating children's interest in a topic. Children are challenged not only to think about *what is* from a critical perspective, but also to ask *why* things are the way they are and to consider *what if* in order to imagine new possibilities.

Reading literature to learn about literacy creates strategic readers who reflect on their reading processes and text knowledge. These engagements highlight instruction by adults to help children develop a repertoire of strategies to use when they encounter difficulty, either in figuring out words or in comprehending, and to gain knowledge of text structures and literary elements. Readers who have a range of effective reading strategies and text knowledge can problem-solve when encountering difficulty and thus develop reading proficiency. Adults take the role of guiding children's reflections on their reading processes and teaching lessons on strategies and text structures. Adults choose literature to highlight particular reading strategies based on their knowledge of children's needs.

Many schools use commercial materials for reading instruction, rather than literature. Research has indicated that, although children are taught how to read through these materials, they sometimes do not develop the desire or habit of reading (Gambrell, 2000). They are capable of reading but are not engaged readers who are motivated, knowledgeable, and strategic.

Most cultures view reading as necessary to a well-ordered society and to the moral well-being of the individual. Engagement with literature invites children to make meaning of texts in personally significant ways to facilitate learning and to develop lifelong reading attitudes and habits. In addition, children

gain a sense of possibility for their lives and that of the society in which they live along with the ability to consider others' perspectives and needs. Engagement with literature thus allows them to develop their own voices and, at the same time, go beyond self-interest to an awareness of broader human consequences.

CONCLUSION

Rosenblatt (1938) reminds us that children's engagements with literature matter not only as ways to learn and think about self and the world, but also as tools for democracy. If democracy is the negotiation between individual diversity and community needs, then each child needs to have faith in his or her own judgments and beliefs, as well as to consider the consequences of those values on others and maintain an open mind to alternative perspectives. Literature encourages imagination, supporting children in considering other possibilities and putting themselves in the place of others in order to go beyond self-interest to broader human consequences. Children's talk about literature opens up space for readers to share their individual voices and engage in dialogue about other points of view. Literature can thus play a key role in how children transform themselves as human beings and in how they think about and act on the world.

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Chapter Eight

THE NATURE AND DEVELOPMENT OF SPELLING

Shane Templeton and Bob Ives

As a topic, *spelling* is far broader than traditionally conceived; it is more than merely a skill for writing. When students spell words, they give insight into their underlying word knowledge—the knowledge that underlies their ability to *read* words as well as their ability to *spell* words (Perfetti, 1997). Learning to spell is a process of *conceptual* development and not merely a process of memorization. In this chapter, we explore this broader conception of spelling, or *orthography*, through an examination of the nature of the spelling system, the developmental phases through which students move in acquiring knowledge of the spelling system, and implications from research for how teachers may best guide this development in typically developing students, English learners, and students who are struggling.

THE NATURE OF SPELLING AND OF SPELLING DEVELOPMENT

The spelling or orthographic system of English makes far more sense than most people think—we just have to know where to look. It is a system that represents information about the meaning and history of words, as well as information about sound. These types of information interact to result in an “intricate simplicity” (Cummings, 1988, p. 461). The intricacies lie in the different levels on which spelling represents information about language, from sound through meaning. The simplicity lies in the design and consistency with which it represents this information at the level of sound and of meaning. Unlike some spelling systems that have a consistent letter-sound correspondence, English spelling

uses 26 letters and letter combinations to represent approximately 44 sounds. These letter and letter combinations, although not representing sound perfectly, do a better job than often believed. For the vast majority of English words, however, these letter combinations correspond more directly to *meaning*.

Three fundamental principles determine the spelling of words in English: the *alphabetic* principle, the *pattern* principle, and the *meaning* principle (Henderson, 1990). The alphabetic principle—that speech can be segmented into sounds that may in turn be represented by individual letters—is acquired during the kindergarten and 1st grade years. The pattern principle applies both within and between syllables. How groups or clusters of letters *within* single syllables correspond to sound—the within-syllable *pattern* principle—develops later in the 1st grade and continues through 2nd and in many instances 3rd grade. The between-syllable pattern principle develops from late 2nd grade on through the intermediate grades. The *meaning* principle, interestingly, begins to apply when students are learning about within-syllable spelling patterns. Selecting the appropriate spelling for /brāk/ is not a matter of flipping a coin to decide between *break* or *brake*: The correct spelling depends on the *meaning* that is intended. If one is writing about what happens to a bone the spelling is *break*; if writing about a bone, the spelling is *brake*. As students move through the grades—particularly in the intermediate grades and beyond—they learn about the broader application of the meaning principle: words and word parts that are similar in meaning are spelled similarly. This applies to prefixes and suffixes, base words to which prefixes and suffixes have been added, and to Latin and Greek stems—parts of words to which prefixes and suffixes attach but that cannot stand alone as words. An interesting corollary to the meaning principle is that, when meaning is visually represented in a consistent fashion, sound is not represented as consistently. This is the trade-off between sound and spelling, and for most words in English, representing meaning consistently trumps representing sound consistently. This is an advantage for readers; as Venezky explained, “Visual identity of word parts takes precedence over letter-sound simplicity” (1999, p. 197). For example, note how the spelling of the base word remains constant in the words *similar/similarity* and *condemn/condemnation*, even though the pronunciation changes. Words that are related in meaning are often related in spelling as well, despite changes in sound. Table 8.1 presents the significant spelling categories that characterize alphabet, pattern, and meaning principles.

Learners acquire knowledge of the system as they move through a developmental sequence that reflects these sound, pattern, and meaning principles. Young children attempt to spell by matching letters they are learning to features of speech. The criteria they use to establish this relationship have been studied by a number of researchers over the years. For example, younger children often match up letters with syllables, as in this five-year-old’s spelling: BBCUS (“Bye bye, see you soon”). When children are fully phonemically aware—explicitly

Table 8.1
Common Spelling Features: Alphabet, Pattern, and Meaning

Alphabet	Pattern: Within Syllables	Pattern: Between Syllables	Meaning
Beginning single consonants	Common long vowel patterns	Inflectional suffixes <i>-ed, -ing</i>	Simple homophones: <i>sail/sale</i> <i>beat/beet</i>
Consonant digraphs	<i>r-</i> and <i>l-</i> influenced vowels	Plural endings Changing final <i>y</i> to <i>i</i>	Simple homographs: <i>dove</i> (N) / <i>dove</i> (V) <i>tear</i> (N) / <i>tear</i> (V)
Consonant blends	Three-letter consonant blends	Syllable patterns: VC/CV	Compound words
Short vowel patterns	Complex consonants: Final sound of /k/ Final /ch/: <i>ch tch /j/</i> : <i>dge Vge</i>	<i>bas/ket rab/bit</i> V/CV open: <i>hul/man</i> VC/V closed: <i>cabin</i>	2-syllable homophones: <i>peddle/pedal</i> <i>duall/duel</i> 2-syllable homographs: <i>present</i> (N) / <i>present</i> (V) <i>record</i> (N) / <i>record</i> (V)
	Common spelling for diphthongs /ow/, /oi/ Less-frequent vowel patterns	Vowel patterns in accented and unaccented syllables	Spelling/Meaning Connection: <i>sign</i> <i>music</i> <i>signal</i> <i>musician</i> <i>ignite</i> <i>reside</i> <i>ignition</i> <i>resident</i> <i>mental</i> <i>mentality</i>
		Greek and Latin stems <i>-therm-</i> <i>-spect-</i> <i>-photo-</i> <i>-dic-</i>	
		Assimilated/Absorbed Prefixes: <i>in-</i> + <i>mobile</i> = <i>immobile</i> <i>ad-</i> + <i>tract</i> = <i>attract</i>	

aware of consonant and vowel sounds within single syllables—they may learn how the sounds of many words in English are spelled quite straightforwardly. At first, their spelling attempts reflect the sound and articulatory characteristics of letter names: I LIK SETG INDR MY FAVRT CHRE (“I like sitting under my favorite tree”). They match letters and sounds in a consistent left-to-right manner. We know that beginning readers and writers, in fact, expect the spelling system to work this way: They hear a sound, and they search to find a letter that matches that sound. Many of the simple words with short vowel sounds that children learn to read and spell in first grade—*Sam, cat, fan, go, we*—certainly work this way. Children also apply this level of analysis, however, to words that have a long vowel sound in them: *tape* and *rain* may be spelled TAP and RAN, respectively. With continued exposure to words through reading, writing, and phonics/spelling instruction, learners will come to understand how spelling *patterns* work. Although children first approached spelling from a one-letter/one-sound perspective, they now learn that groups or chunks of letters—*patterns*—work together to represent sound. So, for example, students learn about the vowel-consonant-silent *e* pattern: When they see a word that has this spelling pattern in it, odds are that the vowel will be long, not short, as in *tame* and *bike*. Although the letter *e* in this vowel-consonant-silent *e* does not itself stand for a sound, it provides information about how *other* sounds in the pattern are to be pronounced. Most children learn about these spelling patterns in the primary grades and apply this knowledge when they spell words and when they read words. Pattern knowledge develops first *within* single-syllable words.

Two broad types of information help to determine how sounds are spelled within a word, and knowledgeable teachers guide students’ learning, over time, to an understanding of these types: first, is the word a *homophone*—a word that has different spellings but the same pronunciation? Rather than bemoaning the fact that the word /māl/ may be spelled two different ways, for example, students should attend to the *meaning* as they are learning the spelling: When children are writing about sending and receiving letters, /māl/ will *always* be spelled *m-a-i-l*; when writing about boys or men, /māl/ will *always* be spelled *m-a-l-e*. Second, how sounds are spelled usually depends on their *position* within a word (Venezky, 1999). Does the sound occur at the beginning, the middle, or the end of the word? What other sounds and spellings occur before and/or after it? For example, although there are different spellings for the /ch/ sound, as in the word *chip*, when the /ch/ sound comes at the beginning of a word, it is almost always spelled *ch*; hardly ever will you see the spelling *tch* at the beginning of a word. On the other hand, both the *ch* and the *tch* spelling of the /ch/ sound occur at the *end* of a word: The appropriate spelling usually depends on the sound that precedes /ch/. If it is a long vowel sound, as in *coach*, use *ch*; if it is a short vowel sound, as in *catch* and *snitch*, use *tch*. Yes, there are exceptions on occasion (*rich, such*), but the number of words that follow the pattern far outnumber those that do not. A bit later, students learn how spell-

ing patterns apply *between* syllables within words. For example, compare *bitter* and *biter*: In the first word, the *t* is doubled to indicate that the vowel in the first syllable is short; in the second word, the *t* is not doubled, and this indicates that the vowel in the first syllable is long. These two patterns are widespread in the spelling system: Where syllables come together, two consonants indicate the vowel preceding them is short, and one consonant indicates the preceding vowel is long. Do these syllable patterns *always* work? For most two-syllable words, yes. For many other polysyllabic words, particularly those with more than two syllables, no. This is because the *meaning* principle takes precedence. For example, when a task is completed it is *finished*. Because there is an /i/ in the first syllable; why isn't the *n* doubled? The *n* is not doubled because it shares a meaning relationship with the word *final*, and a meaning relationship will usually override a rule based on sound—in this case, the “double the consonant when preceded by a short vowel” rule. The common spelling of *fn* occurs across the spelling-meaning family that includes *finish*, *final*, *finite*, *infinite*. This common spelling reflects the Latin stem, *-fin-* (meaning “end”), from which all of these words came.

As shown in Table 8.1, students' understanding of how the meaning principle operates begins with simple homophones; develops later in the elementary grades with the spelling-meaning connection in which the combination of base words, prefixes, and suffixes is explored; and then moves to an exploration of the more abstract function of Greek and Latin stems. Linguists refer to prefixes, suffixes, base words, and Greek and Latin stems as *morphemes*, or the smallest units of meaning in the language. It is important to emphasize that students' awareness of many of these morphemic elements begins to develop through teachers' vocabulary instruction *before* students are expected to consistently spell words containing these elements.

IMPLICATIONS OF RESEARCH FOR SPELLING INSTRUCTION

Most researchers agree that students do not learn the underlying principles of English spelling simply through immersion in reading and in writing; nor do they learn by memorizing and applying spelling rules. Rather, most learners need guidance by knowledgeable teachers in exploring the spelling system and learning how the principles of alphabet, pattern, and meaning function. As we noted at the beginning of this chapter, effective instruction supports students' *reading* as well. Perfetti (1997) observed that practice in spelling helps reading more than practice in reading helps spelling. “Practice,” however, does not include repetitive, low-level activities such as writing words several times each. Rather, effective activities should include reading and writing words in contexts that engage students in comparing and contrasting words in an active exploration for patterns. Given that a common underlying core of word knowledge supports both the encoding and the decoding of words, a number of

researchers and educators are reframing the traditional perspective on spelling, using the term *word study* (Invernizzi & Hayes, 2004). Word study is defined as a developmental approach to phonics and spelling instruction, and the term has also been applied to a developmental approach to spelling and vocabulary. In general, what are the implications of the recent research into the development and instruction of spelling or orthographic knowledge?

First, it is critical that teachers encourage emergent and beginning readers and writers to apply their knowledge of letter names and their developing phonic knowledge as they write. For emergent learners particularly, this contributes to the development of phonemic awareness, a critical understanding in the development of literacy. For beginning and transitional readers and writers, this encouragement accelerates the acquisition of conventional spelling (Snow, Burns, & Griffin, 1998) provided that developmentally appropriate word study is also ongoing. At all developmental levels, not surprisingly, frequent opportunities to write should be provided so that students are able to apply and exercise their developing spelling knowledge.

Second, effective instruction is based on determining students' appropriate developmental or spelling instructional level. The appropriate instructional level may be determined by administering a qualitative inventory of spelling knowledge. Such an inventory will usually reveal a range of spelling instructional levels within the same classroom, just as there is a range of reading levels. Within one 4th-grade class, for example, it is not uncommon to find the following range and types of spelling errors: SHEP for *ship*; WHAN for *when*; HURY for *hurry*, ALOW for *allow*, STRIPPED for *striped*; IR-RELEVENT for *irrelevant*, CONFERENCE for *conference*, COMPISITION for *composition*. Clearly, these errors reflect the different levels of spelling knowledge across several students.

Third, at all developmental or instructional levels, *comparing* and *contrasting* words in the active search for pattern is very effective (Bear et al., 2004). This approach to examining words involves students in making categorical decisions about the spelling patterns that they are examining while reading and writing the words. These activities strengthen connections among pronunciation, spelling, and meaning. These connections, in turn, facilitate the identification of words in reading and the more automatic spelling of words in writing.

Following are examples of the types of comparison/contrast word sort or categorization activities that would be appropriate at each developmental phase of spelling and literacy: Beginning readers and writers would compare and contrast words such as *rag*, *map*, *sip*, *slip*, *flag*, and *flap*, attending to the differences in sound and spelling at the beginning, middle, and end of the words. Transitional readers and writers would compare and contrast words such as *show*, *know*, *roast*, and *coach* and *sock*, *bike*, *pack*, and *take*, noting the effects

of position and adjacent sounds on the spelling of vowels and consonants. Intermediate readers and writers would explore words such as *super/supper*, *later/latter*, and *tiger/Tigger*, noting the interaction of vowel sound and consonant doubling. Later, intermediate readers and writers would explore, for example, how to determine the spelling of the *-ion* suffix (*-sion*, *-ssion*, *-tion*, *-ation*, *-ition*) by comparing and contrasting words such as *subtract/subtraction*, *discuss/discussion*, *digest/digestion*, *ignite/ignition*, and *inflate/inflation*, learning that the spelling of the base word provides the clue to the spelling of the related suffixed word. More advanced readers and writers would explore words such as *custody/custodian*, *conspire/conspiracy*, and *impede/impediment*, examining the sound changes and spelling consistency that derivationally related words share. The systematic exploration of Latin and Greek stems is also underway at this level; for example, students examine words that are derived from the Latin stem *spect*, meaning “to look,” in the words *inspect*, *introspect*, *spectator*, *perspective*, *circumspect*, and *spectrum*, as well as words derived from the stem *tract*, meaning “pull,” in the words *attractive*, *traction*, *distract*, *protract*, *abstract*, and *extraction*. Not only is the relationship between the spelling of such words and their meanings reinforced through students’ examination of these stems and their combination with prefixes and suffixes but the intersection of vocabulary development with spelling is most pronounced at this level as well (Carlisle & Stone, 2005). A number of studies suggest that awareness of these morphological or word-formation processes in English may be facilitated by attending to the spelling of these morphological elements. For example, Leong (2000) pointed out that “there is a need for systematic and explicit teaching of word knowledge and spelling, based on morphemic structure and origin of words and their productive rules, from elementary grades onwards” (p. 298).

Teachers are addressing the challenges and opportunities presented by students speaking a broad array of languages other than English. It is not realistic, of course, to expect classroom teachers to become competent in all the conversational registers of the home languages spoken by the students in their classrooms, but the following three types of knowledge will help teachers better support their English language learners’ understanding of English orthography: first, their own awareness of the principles that govern English spelling; second, a familiarity with the types of activities that best support knowledge about English spelling; and third, their awareness of the degree to which their students’ spoken and written home language corresponds to the sounds of English—where is there overlap, and where is there divergence?

The first two of these guidelines are appropriate, of course, for teaching native English speakers; the third will require additional effort. It is important to know that, for most languages that have a written script, learners approach the script expecting a correspondence to sound; they then attend to pattern and meaning. How much attention is given sound, pattern, and meaning depends

on the degree to which the writing system reflects that type of information. When first approaching English spelling, English language learners who are literate to some degree in their home language will apply what they know about the relationship between sound and print in their home language to their learning of English. For example, when native Spanish speakers initially approach the exploration of English orthography, their perspective is more alphabetic than pattern-based. Spanish orthography represents the alphabetic principle more consistently than does English, which represents pattern and meaning more frequently. When reading words such as *break* and *couch*, native Spanish speakers who are beginning readers and writers in English will attempt to sound out each vowel; when spelling, they will often elongate the pronunciation of English words in their attempts to represent the sounds, with the effect of adding additional sounds. *Blade*, for example, may be spelled BLEAD; *ripen* may be spelled WAIPEN (the *w* is often used in place of initial /r/). The initial /s/ in blends does not occur in Spanish, so *snake* may be spelled ESNAK; native Spanish speakers who are transitional readers and writers in English may spell *spoil* as ESPOLLO. Students who are not literate in a home language will depend on the sound features of their home language in attempting to spell English words. A seven-year-old Korean student, for example, spelled *top* as TO, because there is no syllable-final /p/ sound in Korean. She did, however, attend to the final /t/ sound in *bat*, spelling it BT. She spelled *wag* WC; she chose the letter *c* because she had learned it can stand for the /k/ sound, and /k/ is the closest sound to /g/, a sound that does not occur in Korean.

English language learners who are intermediate or advanced readers and writers benefit from the examination of *cognates* shared by English and other languages. Cognates are words whose spellings and meanings are similar in different languages. With respect to Spanish and English, some cognates are straightforward, such as *tecnología/technology*, *teléfono/telephone*, and *aeropuerto/airport*; others are close but not exact, such as *enfermo/infirm*. This second category, incidentally, provides an opportunity for native English speakers to expand their vocabulary in English while acquiring a bit of Spanish vocabulary as well. In English, *enfermo* means “sick” but the corresponding cognate, *infirm*, does not occur nearly as often in the language as the word *sick*, so by attending to the Spanish word *enfermo*, native English speakers may become aware of the word *infirm*.

SPELLING INSTRUCTION FOR STRUGGLING STUDENTS

There is far less research on spelling instruction for students who struggle than there is for typically developing students. Many of the studies in this area actually look at instruction intended to improve reading skills rather than

spelling skills specifically. In these cases, spelling is an additional outcome measure. At the same time, students who struggle may struggle for a wide range of reasons. The relative scarcity of research and the diversity of struggling students make it difficult to reach any general conclusions about instruction for these students, but it does appear that a majority of these students follow the same developmental continuum as do typically developing students (Ehri & McCormick, 1998). We focus here specifically on instruction for students with literacy-related learning disabilities (LD) and young students at risk for future difficulties with spelling within the context of the alphabetic, pattern, and meaning levels of spelling principles. Students with LD have average range or better intelligence, but they are achieving well below average in one or more academic areas. Research has led to a widely held consensus that these students benefit from direct, explicit, supplementary instruction that is intense and of extended duration; and these approaches to instruction are reflected in studies on spelling instruction.

Some of these studies of spelling instruction for students with LD have focused primarily on the alphabetic level of spelling. Jitendra et al. (2004) provided supplementary reading instruction consisting of phonemic awareness, phonics, reading fluency, vocabulary, and reading comprehension to a group of 1st- to 3rd-grade students with LD, as well as attention disorders and to students who were English language learners. All of the students were poor readers. These instructional components focus on the alphabetic level of reading and other reading skills, which was appropriate given the spelling developmental level of these students. At the end of 16 weeks of this supplementary instruction, the students showed significant gains in basic reading, reading comprehension, and spelling. Joseph (1998–1999) also demonstrated significant improvement in spelling in elementary school students with LD. Word boxes were used to conduct word study activities that focused on the alphabetic level of spelling. Joseph and McCachran (2003) have found similar results when applying word study, including word sorting activities, at this level to students with mild to moderate mental retardation (MR), and students reading in the bottom 20th percentile. Maki, Vauras, and Vainio (2002) worked with a small number of 3rd- and 4th-grade students with writing difficulties, and whose spelling knowledge reflected alphabetic and within-word pattern principles. The instruction was carried out for approximately 20 weeks for 90 minutes per week and involved developing self-regulating strategies with a focus on phonetic knowledge, and a small number of orthographic patterns. Here again, the students' spelling improved, as did their ability to correct spelling errors.

Some studies have taken a more balanced approach to teaching at both the alphabetic and pattern levels of spelling. Graham, Harris, and Chorzempa (2002) worked with 60 students in the 2nd grade whose spelling was at

least two-thirds of a standard deviation below average. The students received supplemental word study instruction for six months that addressed high-frequency words through letter-sound association, patterns, and rime. Spelling improved significantly for the group and the spelling gains were maintained for at least six months after the supplementary instruction ended. Vadasy, Sanders, and Peyton (2005) provided word study tutoring with and without reading practice to 1st graders in the bottom quartile for reading. The word study addressed letter-sound associations, two-vowel combinations and digraphs, and onset-rime patterns. Some word endings were also taught as patterns, but not for meaning. Both groups in this study made significant spelling gains compared to peers who did not receive the additional tutoring. Hatcher (2000) compared spelling outcomes for a group of students with dyslexia, a group with mild to moderate MR, and a group of younger students matched for literacy level to the group with dyslexia. All three groups participated in 12 weeks of multisensory training focusing on grapheme-sound linkage and onset-rime patterns. The two groups with disabilities made comparable gains in spelling, but those gains were less than the gains made by the younger group without disabilities.

Students who are considered at risk for future problems with literacy skills are typically 1st grade or younger students who score low on assessments of skills and abilities that are foundational to literacy skills. Examples of these foundational skills and abilities include auditory processing, phonemic awareness, and letter naming; however, these students have not been identified with specific disabilities. Sustained, systematic, direct, explicit instruction has been recommended for these students, but relatively few studies have looked at instruction for these students. Poskiparta, Niemi, and Vauras (1999) identified 1st-grade students at risk because of low phonemic awareness. These students participated in a linguistic awareness program that included instruction on rhyme, phonemic awareness, and word and syllable awareness. Interestingly, the instruction led to improved spelling skills. Schneider, Ennemoser, Roth, and Kuspert (1999) provided phonemic awareness instruction to at-risk kindergarten students. These students showed improved spelling at 1st- and 2nd-grade follow-up assessments. Vadasy, Jenkins, and Pool (2000) provided supplementary tutoring to at-risk students that addressed both the alphabetic level and the pattern level. These students were in the 1st grade and had been identified by teachers as at risk for LD. Instruction in this study focused on letter-sound association. The students showed significant gains in spelling after one year of 30-minute sessions four times per week. These gains were diminished at a one-year follow-up assessment; however, this may have been a result of the pattern-level instruction being at a level above the students' actual developmental level, which was alphabetic. Morris, Tyner, and Perney's (2000) reading intervention with 1st-grade, at-risk students also targeted spelling,

including word-sort activities in the context of a systematic word study component.

Recent research into struggling students' spelling development confirms that more supportive and direct instruction does produce spelling gains for students with LD and students at risk for future difficulties with literacy skills. More specifically, instruction that addresses the alphabetic level of spelling, or both the alphabetic and pattern levels, improves these students' spelling skills. Opportunities to explore consistency of spellings at the alphabetic level and at the pattern level help students integrate their spelling knowledge with reading and with the development of a sight vocabulary. The answer to the following question is somewhat ambiguous: "Can teachers provide spelling instruction to struggling students that will have lasting effects?" Graham, Harris, and Chorzempa (2002) and Vadasy, Jenkins, and Pool (2000) have conflicting answers to this question; research reviewed by Ehri and McCormick (1998) strongly suggests that instruction that is developmentally based is more effective than instruction that is not.

SUMMARY

The spelling system of English is more logical than often assumed. Acquiring knowledge about the types of information it represents, however, is a process that continues over many years. Learning to spell is a conceptual process, and spelling knowledge underlies the ability to read as well as spell. It is not simply a skill for writing. By determining where students fall along a developmental continuum of spelling knowledge, teachers are able to provide more appropriate word study that resonates with students' focus on the alphabetic, pattern, or meaning principles of the English spelling system.

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Chapter Nine

TEACHING LITERACY FOR SOCIAL JUSTICE

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One of the most difficult tasks we face as human beings is communicating meaning across our individual differences, a task confounded immeasurably when we attempt to communicate across social lines, racial lines, cultural lines, or lines of unequal power.

—Lisa Delpit, *Other People's Children* (p. 66)

After a packed summer of graduate school, curriculum planning meetings, and a too-short vacation on Edisto Island reading nothing but children's books, Megan was eager to meet her new students. She imagined the blank canvas of walls filled with personal narratives, poetry, letters, and the science and history projects her new class of 28 diverse 3rd graders would create. She imagined the tables around the room filled with the buzz of children's voices with their rich linguistic heritages of Spanish, African American vernacular, and other English dialects, and perhaps other languages. Megan began filling the tables with her favorite children's literature, a mix of beautiful picture books, short chapter books, intriguing informational texts, poetry collections, and texts her previous students had written.

Last year, Megan started the first day with “business”—class rules, textbooks, procedures, and information forms. It had been a negative experience for both her and her students. This year, she wanted her students to fall in love the very first day—with a book, with writing and sharing something of their own, with their new school family. She wanted them to fill the blank bulletin boards with their lives.

Just then, Frank Jenkins stepped into Megan's doorway. A veteran 3rd-grade teacher, Frank often called impromptu meetings, "Just wanted to let you know all the 3rd-grade teachers are meeting in the library in 15 minutes to go over the student files. Let's get a feel for this new bunch of kids."

Last year, Megan dutifully attended this meeting where teachers read comments from previous teachers and swapped stories about the children. The comments tended to focus on behaviors: "He can't sit still for a single minute," and "Bless her heart, she doesn't get any discipline at home"; academic ability: "We need to get him another segment of special ed—he just can't do 3rd grade math" and "He was in the lowest reading group all year;" and families: "Watch out for that one—I had his brother." So many negatives remarks, and so many of them were about African American boys.

"Frank, I'm not coming to the meeting," Megan said with more confidence than she felt. "I hope nobody gets offended. I want to get to know my students before I read their test profiles—and by then, maybe I won't even want to read them. I want to learn what they are interested in reading before I look at what level they were reading on last year." She'd been thinking about this annual ritual ever since she read *Ways with Words* (Heath, 1983) in her language, literacy, and culture class that summer. Heath's research in South Carolina had convinced her that African American students who had rich home language abilities and knowledge often shut down in school settings because of the mismatch with school tasks. She had been very uncomfortable reading about teachers who judged poor students, both white and black, as less intelligent based on their language, where they lived, or what their parents did. "I know I've done that," she thought to herself. "And I know where it started—in that very first preplanning meeting."

A DUAL FOCUS ON SOCIAL JUSTICE

Megan had survived the first two years of teaching, gaining confidence in planning curriculum and managing the classroom; however, she felt she had not done nearly enough to meet the needs of her culturally and linguistically diverse students. Megan was determined this year to focus on two aspects of teaching for social justice. The first was educational equity, ensuring that all her students had an equal opportunity to learn and succeed. The commitment to increased equity grew out of her sense of failure with several students in the past. She had stopped ability grouping last year, when her principal had shared research by Richard Allington (2000); Megan realized that her "low group" suffered the stigma of being "poor readers" and were being short-changed with a focus on word recognition at the expense of meaning. There were so many areas in which she felt her teaching could be more equitable: better support for English language learners, teaching students living in poverty, and looking

critically at special education placements, especially for her African American males who were, as educational consultant Jawanza Kunjufu (2005) had pointed out, overrepresented in classes for students with “behavioral disorders” and underrepresented in gifted classes. She decided to focus on a process that had potential impact across many areas of concern, learning more about students’ home cultures to make learning more relevant.

The second aspect of teaching for social justice was involving her students in issues that affected their lives. In terms of making social issues central to her curriculum, Megan had written in her journal over the summer:

It doesn't seem that there is ANY room in our schools for addressing social issues that have deeply affected our society for hundreds of years. My kids so desperately need to talk about these issues and learn how to positively deal with them. I wish I could teach reading and writing, social studies, and science *through* addressing social justice issues.

Megan had been inspired by teachers who somehow had found a way to do just that. Could she do something like Maria Sweeney (1997), who asked her 4th-grade students to question what they read constantly: “Is this fair? Is this right? Does this hurt anyone? Is this the whole story? Who benefits and who suffers?” (p. 279). Sweeney’s students studied the end of apartheid and the elections in South Africa and wrote a play, “No Easy Road to Freedom.” They performed it for the rest of the school and community, and urged the audience to get involved with fighting racism by actions such as giving money to the Africa Fund and joining antiracist groups.

Maybe she’d encourage her students to explore a topic closer to home. She was often disturbed by the way students talked to each other, using words like “fag,” “retard,” and racial slurs. Could she get her students to examine their own prejudices, like 4th grade teacher Barbara Michalove had? Disturbed by the intolerance her students displayed toward Hispanic classmates and those with hearing impairments, Michalove (1999) created an interdisciplinary immersion into discrimination. Through biographies, fiction, a video on the history of intolerance in America, interviews with family members, and shared stories, her students learned not only about the various groups who have been the brunt of discrimination in the United States, but also about themselves. It took time to “circle in” on their own prejudice, but once they did, students were honest in their recognition of intolerance and decisive in their actions. They created rules for their own conduct as they successfully changed their classroom.

To learn more about what other teachers were doing and gather resources, Megan started by entering “teaching for social justice” in her computer’s search engine. She subscribed to *Rethinking Schools* and *Teaching Tolerance*, journals and Web sites with a wealth of teaching materials and detailed classroom examples. Megan also joined the National Council of Teachers of English

(NCTE) and began receiving their elementary journal, *Language Arts*. Finally, she spread the word among colleagues; several people slipped articles into her mailbox or e-mailed resources to her all year.

Everything she read emphasized the importance of multicultural literature, including books that explored social issues in her community such as racism, gender stereotypes, attitudes about immigrations, and name-calling. She asked the media specialist to order books she'd identified and also checked out armloads from the public library. Megan wanted books that the kids could relate to and that would encourage critical thinking. She had read an intriguing article by Karla Möller (2002) who led literature discussions of books about social issues, like *Heart of a Chief* (Bruchac, 1998) about preserving Native American culture as well as the ravages of poverty, and *Run Away Home* (McKissack, 1997) on difficulties experiences by southern African American and Native Americans in the late 1800s. Maybe like the students of 2nd-grade teacher Andrew Allen (1997), whose antiracist/antibias approach helped them identify omission and stereotyping in children's literature, her students would learn to name instances of race, class, and gender oppression and even rewrite problematic texts.

Megan had so many questions. What was her role—should she introduce issues or wait for them to come up naturally? What if they didn't? Could her students handle these topics? Would they engage her students who seemed so turned off to reading? She was determined to find out.

CONNECTING HOME CULTURES AND SCHOOL LEARNING

The first month of school, Megan concentrated on initial connections with her students' families. She had been thinking all summer about how to more effectively incorporate home-school reading journals in which she, the students, and their parents wrote about the literature they were reading. Her home-school journals last year had been disappointing. How did those teachers in *Engaging Families* (Shockley, Michalove, & Allen, 1995) find the time to respond every day to the journals? Shockley and Michalove's students had taken library books and their reading journals home three to four nights a week, and families read with their students and then wrote in the journals about the books. The teachers had written back in each journal every day, and formed a close relationship with the parents, grandparents, older siblings—whoever wrote back. The neat thing to Megan was that it wasn't about behavior or signing a "My child read xx minutes" log; it was about the books the children were reading. "This kind of home reading connection could really make a difference for all my students, and especially my struggling readers," Megan thought. "And it's a way of involving parents who can't or don't feel comfortable coming to school for PTA and workshops."

This year, Megan explained the journals and invited family members to participate during home visits. She also asked each family, “Tell me about your child” to get insights on how to connect her curriculum to the students’ home lives. She talked with parents, grandparents, and guardians, some in their homes, some at a local restaurant, a few by phone, and three at the community housing center. She thought of Heath’s (1983) time in the homes of children, of getting to know what was important to them, what they “bragged on” about their kids, and what they confessed as worries.

Megan had her own worries. As a white, well-educated woman, she was just beginning to question her own biases. When she had visited the homes of children who lived in the nearby housing project last week, she had been unsure what to expect. Would she be looked at with suspicion? What could she learn that would help her teach each child and connect with each family? After one visit she wrote in her journal:

What I can’t get out of my head are my unconscious expectations. I realize that because Stan is poor and African American and has some behavioral and academic issues, I assumed certain things about him and his family. What I found was a mother who obviously cared deeply about her son. I found a simple but neat apartment where Stan had a room with a bunk bed that he was extremely proud of. I saw a note on the refrigerator from his 2nd-grade teacher praising him for getting 100 percent on a spelling test. But I am wrestling with other things. I saw a lot of adults sitting outside in the middle of the day. I heard yelling, cursing, and threatening within earshot of young children. Now I understand why some of my students told me that their parents don’t let them play outside.

The home visits made Megan more determined than ever to stay in touch with parents throughout the year and to enlist their help through the home reading journals. She had to learn more about her students’ home lives from them and from their families to create an equitable classroom where learning was meaningful and all her students grew as literacy learners.

BUILDING ON STUDENT STRENGTHS AND INTERESTS

At the same time she was getting to know the children and their families outside of school, Megan was learning their strengths and needs as learners. She held individual conferences with each student to listen to them read, find out about their interests, and match children and books. Students tried out all the learning centers and recorded their discoveries, giving Megan valuable information about both content knowledge and informational writing abilities. Students interviewed their family members with questions they generated, such as “What was school like when you were in 3rd grade? What did you like to read? What was your favorite game at recess?” They created pie graphs of major findings and a Venn diagram of “School Then/School Now”;

Megan learned a great deal about the children's literacy, as well as about their families.

Megan was eager to move into books about social issues, but she knew she needed to start with the children's own experiences. She read aloud Patricia Polacco's *My Rotten Red Headed Older Brother* (1994). "Do you know why I chose this book?" she asked. "Because I really do have a rotten red-headed older brother!"

"Is he mean?" Donedra asked.

"Does he look like a weasel?" asked Jordan, referring to a description in the book.

Megan laughed, "Well, he's not so bad now, but he used to give me "the tickle torture" until I yelled for Mom to make him stop. It was not fair—I was the one who got in trouble!" Megan was working harder this year to help students find connections between their lives and their learning. She began with a favorite 3rd-grade topic, fairness. She planned to build on the topic throughout the year, reading books like *Fly Away Home* (Bunting, 1993) about a boy and his father who didn't have a home, and *The Faithful Elephants* (Tsuchiya, 1999) about how even animals suffer in times of war. But she had to begin with the students' own experiences. "Sometimes we don't feel like everything is fair in our families. Can you think of a time when you think you were treated unfairly?"

Students eagerly recounted injustices in their own families. Megan encouraged them to write the stories they had just told. She conferred quickly with those who had trouble getting started, encouraging some to start with a picture of a family member and then write a description; some to write letters to family members in Juárez, Dominica, and New York City; and some to write a "cartoon," illustrating sequenced panels with short captions.

Megan sat down next to Michael, and asked, "What are you writing about?"

Michael answered, "My cousin Julian."

"Would you read it to me?" Megan asked.

Michael read slowly from his text: "Julian my cuzin he ride a 4 wheelr. He don't let me driv."

Megan nodded and asked, "Why wouldn't he let you drive?"

"He said I'm too little, but he's only 10," Michael replied angrily.

"Tell me more—why do you want to drive a four wheeler?" Megan encouraged. Michael's eyes lit up and he talked more in the next three minutes than he had in three days. He told her about the machine, his cousin, and the trails around their house.

"Wow! You've got so much to write. I think everyone is going to want to hear all about what you just told me," Megan said, handing Michael a sticky-note with several phrases he had mentioned to prompt his memory. She

noticed several possible mechanical topics she could focus on—spelling, run-on sentences, and subject-verb agreement—but she would save those for an editing conference.

She moved around the table to Santiago. A recent immigrant from Juárez, Mexico, Santiago spoke softly and infrequently. Megan had teamed him with Lilia, who spoke fluent English and Spanish. Santiago had drawn a detailed picture of a woman driving a bright yellow car with purple fire on the hood. Santiago covered everything with penciled illustrations, from his writing journal to the fact sheet in the science center. His passion was drawing hot rods, '68 Mustangs and '71 Cobras. He rarely wrote, however.

Megan's conference with Santiago was less successful. When she asked questions about the drawing, praising its color, precision, and sense of motion, Santiago shrugged. When she pressed him about the woman in the picture, he said softly "Tía," one of the 20 or so words Megan knew in Spanish. She helped him sound it out, and asked Lilia if she would help him write other words. She readily agreed, then asked if she could share first.

Nestled in the Storyteller's Chair, Lilia read, "My Beautiful Black Haired Young Mamá. My mamá is the bravest person I know. She crossed the Rio Grande when she was just 16 years old. I was not even born yet because I was in her belly. I was born in Houston and I am American citizen." Lilia read with her head high to this point, but dropped her chin before going on. "She is brave and beautiful, but she is scared and so am I. There might be a new law that makes her go back to Mexico. It is not fair." The other children had many questions, and Megan let the discussion go on longer than usual. This was the kind of issue she wanted at the center of her curriculum, issues that affected children and their families. She need not have worried that her students might not identify important issues. The next day she read aloud *How Many Days to America* (Bunting, 1990), a story of a harrowing boat journey to the United States. After a heated discussion about issues of fairness (why some people have to flee their countries, why some are turned away from the United States, how those who immigrate are treated), the students generated a chart to guide their inquiry: What do we know about immigrants to the United States? What do we want to learn? How can we find out? By the next week they had 13 books, 8 Web sites, and 3 community members—including Lilia's mother.

RESPECTING AND STUDYING LANGUAGE DIVERSITY

As the children became more engaged throughout the fall by investigating, reading, and writing about "fairness," Megan began to focus in individual conferences on specific literacy strategies for reading fluency, word analysis, comprehension, vocabulary, grammar, and spelling. She was uncertain whether she

should push her Spanish speakers like Santiago to write in English, and she really struggled with what to do about dialect variations. She kept thinking about a passage she read during her summer course:

[Teachers] should recognize that the linguistic form a student brings to school is intimately connected with loved ones, community, and personal identity. To suggest that this form is “wrong” or, even worse, ignorant, is to suggest that something is wrong with the student and his or her family. On the other hand, it is equally important to understand that students who do not have access to the politically popular dialect form in this country, that is, Standard English, are less likely to succeed economically than their peers who do. How can both realities be embraced? (Delpit, 1995, p. 53)

That was her dilemma. According to Delpit, correcting children’s oral speech was both ineffective and damaging. How would they learn standard English then? Delpit suggested that writing conferences were a logical time to discuss language choices. Megan tried to find the balance by honoring their home languages, whether that was Spanish or an English dialect, and also by teaching the politically powerful dialect.

During her daily read aloud, Megan focused on language: learning new words, learning nuance to familiar works, studying the author’s sentence structures, and talking about language choices. Megan was reading Jacqueline Woodson’s (2003) book, *Locomotion*, a poetic novel, when the perfect occasion arose. The main character Lonnie writes in his poetry journal, “Not a whole lot of people be saying *Good, Lonnie* to me.”

Jordan’s hand flew up, “Ms. Megan, is Lonnie a black kid?”

“What makes you think he’s black, Jordan?” Megan questioned.

“He talks like a black person,” he answered. Many heads nodded.

“How so?” Megan asked.

“He said *people be saying*, and white folks don’t talk like that.” More nods.

“Why do you say that?” Megan asked.

Jordan paused and then said, “You’re white. You don’t talk that way.”

“That’s true,” Megan thought for a minute, “but Ms. Teish is a black teacher and she and I talk in a similar way.”

“That’s because she teaches school.”

“So you think we’re supposed to talk a certain way at school?”

More vigorous nodding. Megan seized the opportunity to introduce some of the language about language—dialects, code switching, and different registers. “How could we study this?” Megan asked when the children were reluctant to end the discussion. Ten minutes later, they had given themselves an assignment: in the next week, keep a log with examples of different languages, dialects, and registers on their favorite TV show. “Pretty sneaky of us, isn’t it Ms. Daniels,” Amanda concluded in delight, “TV for homework!”

The language study, which seemed like a natural extension of their study on immigration, extended several weeks. The students, who fell in love with Lonnie in *Locomotion*, decided to study their classroom library for decisions authors made about language. They were disappointed. “We don’t have any books in Spanish,” Lilia moped.

“Lilia, I have an idea. Why don’t you talk with Ms. Órea today when you go to her class? Ask her if she has any books written in Spanish,” Megan suggested.

“Guess what!” Lilia announced when she returned from her class for English language learners. “Ms. Órea has lots of bilingual books and she’s going to come talk with us tomorrow!” The class language study became a full-blown inquiry. Students posed questions, with help from Megan and Ms. Órea: Which children’s authors use black dialect in their books? How did English become the national language? What is the English-only law in our state, and how did it come about? Why do people get so mad about Spanish and dialects? And of course, can English speakers learn Spanish from watching Spanish-language TV shows, and vice versa for Spanish speakers?

CONNECTING AND DISCONNECTING WITH FAMILIES

The empty classroom canvas of August was awash in texts by December. There were student drawings; Santiago’s “muscle cars” had generated a study of transportation and an illustrated, annotated travel timeline. Student writing covered the walls—science observations, math estimations, language comparison charts, and immigration stories the students had gathered from their families. There were books in every center, on every ledge. Megan introduced new books, music, poetry, and magazines each week with a “book tease” connecting with their home cultures, expanding the science and social studies curriculum, and introducing new “mentor” authors. Students began to do their own book teases, following Megan’s dramatic techniques like dimming the lights, displaying a quote with the LCD projector, even shouting “Lights, Camera, Action!” before reading just enough to pique interest. Megan introduced poetry by Maya Angelou, Gary Soto, and Nikki Giovanni; the students brought in the poetry of their favorite music, including country, Christian, and rap and spoken-word poets like Floetry and Common.

With the music they loved opening the door, Megan’s students often wrote poetry. Some of her students who usually stared in dismay at the blank page excelled at writing poems, raps, even TV advertising jingles. At the end of the semester they invited family and friends to a Coffee House Poetry Reading.

The night of the event, parents, grandparents, and neighbors filled the classroom, many dressed up for the gala social occasion. Students were at stations serving hot chocolate, playing CDs of their favorite artists (they had engaged

in heated debate to establish the play list), leading a “gallery walk” of their artistically displayed poetry, and seating guests at tables festooned with candles and class poetry albums.

The students had practiced until most were able to perform the pieces, not just recite them, using a karaoke microphone. Lilia and Santiago alternated voices on a poem they had written in both Spanish and English; Michael wore a motorcycle helmet and read his four-wheeler poem, an extension of his first writing piece; and Stan shared a moving tribute to his uncle who had died of AIDS. Megan was thrilled as she circled the room after the last performance, accepting the praise of grownups, relishing the pride her students showed. Then Michael’s mother approached Megan. She was not smiling.

“Why did you let Michael read that piece before correcting it?” she asked.

“What do you mean?” Megan answered, caught off guard.

“Well, for starters, he said, ‘Julian ride his four-wheeler’ instead of ‘Julian *rides* his four-wheeler.’ Isn’t subject-verb agreement on the 3rd-grade test?”

Megan answered, “Yes, and we’re working on subject-verb agreement. We’ve been investigating when authors use formal and less formal language styles. Michael said that’s the way he and his buddies talk about four wheelers.”

Michael’s mother responded, “I want my son passing 3rd grade. I’m not interested in him learning a ‘less formal style.’ You make him sound stupid by not correcting him.”

Megan was stunned. She had been working so hard to honor students’ language, and now she found her philosophy in direct conflict with at least one of her student’s parents. Did others feel the same way? The evening was further dampened when Stan’s aunt left early, saying angrily, “Stan knows better than to be telling things like that about his family. And you should know better too.” Megan went home in tears.

RECONNECTING WITH FAMILIES

The comments troubled Megan throughout the winter holidays. Was the intense language study a waste of time—should she have been teaching formal English exclusively? Should she have discouraged topics that were too personal? In trying to make her classroom more equitable, she had made assumptions about what families valued rather than learning first hand. Her home visits and the home-school reading journals had been a starting point, but they were not enough.

That afternoon, she and her students drafted a letter to their families: “Dear _____, We are starting our home reading journals again after the break. We want to know your opinion. Do you like to read with us? Do you like to write in the journals? Do you like it when Ms. Daniels writes back? What would make the journals special to you? Please write back. Love, _____”

Students personalized the letters in their journals. Megan emphasized their most readable handwriting; she also worked in explicit instruction on letter writing and subject-verb agreement. (“Is it ‘When Ms. Daniels *write* back or *writes* back? Why?’”) By Friday, they had 12 responses. Several parents said they thought reading at home helped their children, and they appreciated it when Megan wrote back. But they also wanted to know how their children were doing, what they were studying, and what they could help with at home. Megan eagerly agreed to extend the written dialogue; she could share curriculum (like their language study), enlist family participation, and let parents (and students) know what each child needed to be working on.

During independent reading later that week, Megan pulled her chair beside Santiago. After he told her about his book, she asked casually, “Santiago, is there someone at home you like to read to? I notice you’ve been checking out many books from Ms. Órea’s room. Do you read them in English or Spanish—or both?”

“Mostly I read them to myself. Ms. Órea said to read both languages, so I could be bi- bi- . . .” he looked up for help.

“Bilingual—no, biliterate! She talked with our class about that. I wish I could read and write in two languages! So maybe you could read to someone at home and they could write in the journal—what do you think?” Megan queried.

After a long silence, Megan put her hand gently on Santiago’s arm. Finally he said softly, “They don’t write, my family.” Megan had assumed that Santiago’s family wrote in Spanish. What was that book they had read last summer—*Con Respeto*? The researcher, Guadalupe Valdés (1996), had documented many miscommunications between Mexican immigrant families and their teachers, and now Megan was guilty herself. She had gotten the letter translated inviting parents to participate in the journals, but had never thought about families who might not have the literacy levels or family networks to read the Spanish version. No wonder they had not been participating.

“Santiago, let’s try an experiment. I think your mamá might enjoy hearing this book you are reading. She mentioned several times when she drops you off in our classroom that she wants to help you be a good reader. After you read, could you write down one thing that you say, and one thing that your mamá says about the book?” Megan almost held her breath. She felt like she was asking a lot, but also that she had been asking too little for too long. Santiago shrugged, noncommittal. When he left that afternoon, however, the book was tucked in his backpack.

FAILING

Megan had been assessing her students’ reading through a variety of formal and informal strategies throughout the year. She celebrated the progress most

of the children were making, but worried about several children who were not making enough progress.

One of those students, Bobby, stumbled over many words in a 1st-grade level book and wasn't able to talk about the text after he finished. Several other children in the class had begun the year with similar difficulties. Knowing that all children had to pass the state reading test to pass the 3rd grade, Megan was beginning to panic.

She had what she considered to be a balanced reading program: each day children read self-selected books independently or with a partner; participated in the shared reading where the whole class read together a newspaper article or something from the class set of 3rd-grade reading books; read in a small guided reading group a book carefully selected by Megan to be at their instructional reading level; wrote on topics of their own choice or topics related to what they were learning in science or social studies; and studied the way language works—phonics, spelling, and other word analysis strategies. Still, six students were reading below grade level by district standards. They had made progress, they were becoming more confident, but they would not pass the standardized tests. Should she abandon her balanced literacy program? What was more “just”: to focus only on skills that were tested and have her students say they hated reading, as several had done last year, or to focus on what she considered meaningful reading and writing and risk students flunking 3rd grade? With the state test pressure building, she asked more experienced teachers for advice.

“I focus on phonics, vocabulary, and test-taking skills. We do daily drills and practice tests every week,” Frank Jenkins told her when she brought the topic up in the teachers lounge. “Third grade is do or die. If they fail, they don't go to 4th grade. I spend most of the year getting kids ready for the test—they hate it, I hate it, but that's what we are being forced to do. It is no kindness to your students to ignore high-stakes tests.”

“But if they hate the drills, don't they start to hate reading?” Megan asked.

“For the short term. I hope Linda, Barb, and Lois can help them regain that love in 4th grade. I just know I have to get them there. We can see what happens when they flunk; I'm sure Bobby came into your class hating reading, because that's why he is in 3rd grade again,” Frank pointed out.

Megan's mentor teacher Janice Teish arched her soda can into the trash and said pointedly, “I'm sure you have noticed which kids are struggling Megan.”

She did. Five of the six students she was worried about received federal lunch assistance. How could this be? Surely being poor didn't mean these children couldn't read as well as more economically advantaged peers. Surely it didn't mean she couldn't teach Bobby to read. She walked out of the lounge with Janice, asking confidentially, “Do you agree with Frank, that from now until March 14 we just do test prep?”

“Yes. But Frank and I have a little different approach. I show them how the test is going to try to trick them. Then I show them how smart they are, and how they are going to do well on that test. I take books we are reading, stories that they are writing, science notebooks they’ve been writing observations in, and help them translate what they know into what they’ll be asked to demonstrate. I start using test language, and I point it out to them. Our genre study in March is ‘Reading Test Genre.’ Once they get the hang of reading those weird little passages and those trivial questions, they can tell you exactly how “reading-test reading” is different. We act out stories and then I ask them comprehension questions—once they’ve acted them out, they can infer so much better!”

Megan was taking furious notes. Kids were coming back from lunch.

“One more pearl of wisdom,” Janice offered. “Pull that little group of six you are most worried about and work directly with them on the particular skills they need.”

“But that’s ability grouping—I can’t . . .” Megan sputtered.

“No, it’s sitting down with the kids who need the most help, not for the whole year but right now so they can succeed on the test, and saying, ‘This is what you need to know and I’m here to teach it to you!’” Janice said convincingly.

Megan hurried through her door to see almost everyone with a book. “They know the routines so well,” she thought. “I hope I can teach them this test routine without wrecking our learning community.”

For their first step, Megan went back to books they had read earlier about families and fairness: *Grandfather’s Journey* (Say, 1993) about Japanese immigrants and their longing for home; *Oliver Button is a Sissy* (dePaola, 1979) about a boy who countered name calling and gender stereotypes; *Tar Beach* (Ringgold, 1996) about life in Harlem in the 1930s; and *Fly Away Home* (Bunting, 1993), which they had read in their first inquiry into fairness. In these rereadings, Megan incorporated strategies Janice had suggested to help students focus on vocabulary and drawing inferences, two areas in which her students had underperformed in previous years.

Megan’s next move was to restructure her literature discussion. The students loved choosing their own books, especially ones related to their inquiries on immigration and language, but they struggled at times in their student-led discussions. Her less-proficient readers needed more support, her shy students needed her encouragement, and almost all of them had trouble asking what they called Really Important Questions. Janice Teisch encouraged her to read *Literature Study Circles in Multicultural Classrooms* (Samway & Whang, 1995), which detailed a more teacher-directed approach that some of her students needed.

For these literature discussions, students began identifying books for their next inquiry, sparked by Megan’s rereading of *Fly Away Home*. After the

students had gotten beyond their initial reaction—that it would be cool to live in an airport—they decided to study homelessness and how it affected children. Megan told them about how teacher Mary Cowhey (2006) collaborated with her primary-grade students and their families. They not only baked pies and cookies for a Thanksgiving dinner for the homeless, they studied the complex causes of poverty, challenged stereotypes of “poor people,” and learned how local activists fight poverty. Megan’s students selected *Bud, Not Buddy* (Curtis, 1999), about an orphan on the run from abusive foster homes in 1930s; *Maniac Magee* (Spinelli, 1999), about a homeless boy and the racism he encountered; and *Lucy’s Wish* (Nixon, 1999) and other books in the Orphan Train Children series, as well as nonfiction books like *Orphan Train: One Boy’s True Story* (Warren, 1996). Homelessness and affordable housing were issues the community was focusing on, which made it especially timely. Several of the books dealt with difficult subjects, however, including child neglect and abuse. Megan sent a note to parents in the reading journals telling them about the books and the inquiry; she followed up with a phone call to each family to see if they had concerns or suggestions.

Megan worked especially hard with the children she was most worried about failing the state test. She helped them select a book on their reading level, taped the book herself so they could listen as they read along, and worked on specific skills they would be tested on. She was determined to keep her dual focus on a social justice curriculum *and* on social justice for her students.

She failed.

Bobby, Marcus, and Santiago failed the test. Bobby and Marcus’s parents appealed retention, but Santiago failed 3rd grade. Megan was outraged that a child who entered her class speaking little English had been failed by an English-only test.

RENEWING RESOURCES FOR TEACHING FOR SOCIAL JUSTICE

It had been an exhausting and exhilarating year. School was barely out for the children when Megan returned to her studies. At Janice’s urging, Megan had applied for the local chapter of the National Writing Project (<http://www.writingproject.org/>). The two friends attended the month-long, all-day institute together. Megan soon realized many teachers in the institute were asking social justice questions similar to hers: What can I do to make students’ out-of-school lives central in my curriculum? How do I turn racist, sexist, and homophobic comments into learning situations? How can I teach writing through new technologies in an equitable way? Megan’s question, sharply focused by her experience the previous year, was how can I create a social justice curriculum that also prepares students for standardized tests?

Throughout the summer, Megan renewed the emotional, intellectual, and relational resources she needed to begin thinking about her next year of teaching. She took to heart suggestions by Herbert Kohl (Ayers, Hunt, & Quinn, 1998); he had been teaching for social justice for more than 30 years! Kohl encouraged Megan, “Watch your students . . . listen to them, observe how they learn, and then, based on your experience and their responses, figure out how to practice social justice in your classroom.” Kohl reminded her of Paulo Freire (1998), whom she’d read in the writing institute. This Brazilian educator and champion of social justice encouraged teachers, “And as we dream about democracy, let us fight, day and night, for a school in which we talk to and with the learners so that, hearing them, we can be heard by them as well” (p. 68).

Kohl’s (2000) final suggestion was “protect and nurture yourself. . . . Don’t turn teaching for social justice into a grim responsibility, but take it for the moral and social necessity that it is.” Megan wrote in her journal the day before she left for Edisto Island:

My head is spinning—so much to think about. I think I’ll have a meeting with parents and students to plan the home-school journals, and maybe talk about issues that students want to study and parents could get involved with too. I can’t wait to sit by the ocean and read the new multicultural children’s literature I’m taking. I’ve packed *Open Minds to Equality* by Schniedewind and Davidson—it’s supposed to be a great resource for helping students address issues of race, gender, class, language, sexual orientation, physical and mental ability, and even religion. Anna loaned me *Writing Sense* by Kendall and Khuon; she said it has practical ideas for teaching writing to English language learners. Note to self: order Allen’s new book, *Diverse Families, Welcoming Schools* when I get back from Edisto. It’s all about forming partnerships with families that support kids’ learning. I think that’s my next step—parents as partners in creating a social justice curriculum!

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Chapter Ten

ACCOMMODATING DIGITAL LITERACIES WITHIN CONCEPTIONS OF LITERACY INSTRUCTION FOR A NEW CENTURY

David Reinking and Amy Carter

It is difficult to overstate how much reading and writing have changed between the beginnings of our respective careers as classroom teachers. The first author of this chapter began his career as an elementary and middle-grade teacher during the early 1970s; the second author began her teaching career at the turn of the new millennium. The older first author began teaching in a world that included the clacking of the keys on a typewriter, often after writing a handwritten draft, searching for books in the library using a card catalogue, completing virtually all school assignments on paper with a pen or pencil, and writing a research paper by taking handwritten notes on 3 × 5 index cards that were then scattered on the living room floor to experiment with different organizational schemes. There were no cell phones, FAX machines, or home and office printers, and making copies of a map for a social studies lesson meant learning how to use a ditto or mimeograph machine (and learning which cleaners best removed the inevitable smudges and stains on hands and clothes). The most advanced technologies for teaching were the movie, film-strip, or the overhead projector, although personal computers were just beginning to attract some attention.

On the other hand, the younger second author began teaching at a time when handwritten drafts were often a last resort after a laptop battery expired and the clacking keys of a typewriter were a distant childhood memory. She was required by state teaching standards to instruct her students on how to conduct research on the Internet and to teach them about the differences between print and electronic sources. In her 3rd-grade classroom, students'

presentations were created with the assistance of widely used software for displaying digital slide shows on a large screen. The accompanying artwork was often created by using a computer program that allowed digital painting on a computer screen, not the paint in the art supply cabinet. Even among her 3rd-grade students, it was not uncommon to hear a cell phone ring during instruction. The scope and sophistication of digital technologies available for her to integrate into her teaching were almost overwhelming and made it difficult to keep abreast of them or to decide which ones to use.

As this contrast suggests, the most prominent and consequential change in the lives of students and teachers spanning the years between the beginnings of our respective careers is that written communication has become increasingly digital and decreasingly handwritten or printed. Both acknowledging and understanding that change are critical for educators because of the implications with regard to how they conceptualize and approach virtually every aspect of literacy instruction in schools today and for the foreseeable future. Because literacy is foundational to formal schooling, a shift to digital forms of reading and writing also has important implications for other subjects. It should also be relevant to parents, policy makers, and others who have a vested interest in preparing students to be literate in the twenty-first century.

In this chapter, we provide background pertaining to these changes in relation to what they imply for literacy instruction in schools. Our intent is to highlight the importance of accommodating digital technologies into conceptions of literacy instruction and to highlight the challenges that have worked against achieving that accommodation. We begin by tracing the roots of the digital revolution and how it gave rise to a shift from an essentially monolithic view of literacy based on printed materials to one based on diverse electronic forms of reading and writing that have been referred to collectively as digital literacies. Then, we summarize how educators and researchers have responded to the increasing prominence of digital literacies and what factors have limited their response. We also provide a few examples of how digital literacies are modifying or might modify conventional print-based understandings of literacy instruction. Throughout the chapter, we cite additional sources of information for those who wish to delve more deeply into this topic.

THE DIGITAL REVOLUTION AND THE RISE OF DIGITAL LITERACIES

The shift to digital forms of reading and writing is a prominent part of a larger digital revolution, which might arguably be dated from an event in 1983. In that year, *Time* magazine did not select a man or woman in its annual issue highlighting the person of the year. Instead, it named the computer “machine of the year,” citing how advances in technology made computers

small, powerful, and affordable enough to be within the reach of people in all walks of life, not just computer scientists. At the same time, two software applications, word processing and the electronic spreadsheet, represented powerful tools readily applicable to tasks in the home and in the workplace. Computers, *Time* argued, were poised to make a tremendous difference in the lives of people in the future.

In retrospect, *Time's* decision in 1983 seems clearly justified and prescient. Computers, or more generally an array of digital technologies, affect almost every aspect of our daily lives. Perhaps none of the applications of digital technologies affect us so pervasively today as those we use to communicate and to search for information. E-mail is ubiquitous. Today, not having an e-mail address to list on a form requesting personal information is almost as anomalous as not being able to list a phone number or credit card. Cell phones, another prominent example, not only enable voice communication, but also allow a vast textual world, including e-mail, the Internet, and text messaging to be available 24 hours a day and 7 days a week, and is as convenient as reaching into a pocket or a purse. The Internet today, arguably the most culturally and globally significant technology of the new century, is increasingly the first source to which people, including students at all grade levels, turn when they need information.

These and other digital forms of communication fundamentally change the nature of reading, writing, and texts. For example, a host of new forms of digital reading and writing have raised interesting and sometimes controversial issues. There is instant messaging, with its possibilities for creating and exploiting false identities. Like e-mail, it also promotes a conversational informality in writing that is at odds with the more formal conventions of spelling, grammar, and usage associated with printed texts. There is Wikipedia (www.wikipedia.org), the online, open-access encyclopedia that permits virtually any reader to edit its content, which raises issues about the reliability of information, how it is determined and by whom, not to mention the questions it raises about traditional understandings of authorship. The blog (short for web log) is a new genre of writing that allows anyone with Internet access to claim a public writing space for sharing his or her thoughts and musings. The far-reaching implications of such open forums are suggested by at least one notable occasion when bloggers scooped professional journalists in exposing a national hoax (http://news.com.com/Bloggers+drive+hoax+probe+into+Bush+memos/2100-1028_3-5362393.html). Presentations to audiences today, whether in person or on a Web site, often involve using digital tools to create multimedia texts that may come into conflict with conventional understandings of intellectual property and with copyright laws that evolved mainly in a typographic world.

Young people particularly have claimed their own niches in the digital world of communication, which has implications for fully understanding their

literate lives. Instant messaging is one example. *Zines*, which are an on-line outgrowth of independently published fanzines (i.e., small independent fan magazines), frequently developed by and for young people, represent another example. These forms suggest how personally engaging digital forms of writing may be, because they allow students to access a potentially large and diverse audience and because they have an aura of subversion as underground publications that allow adolescents to explore their own identities beyond the control of adults.

Clearly, every aspect of people's literate lives, young and old, has become more digital, a trend that has been documented and written about for at least a decade. That trend is indisputable and irreversible. An abundance of statistical information substantiates that conclusion. An excellent source of such information is the Pew Internet and American Life project (<http://www.pewinternet.org/>), which systematically tracks Internet use and trends in the United States. For example, several of that project's reports issued during 2006 reveal the following: 39 percent of Internet users have gone online to find a place to live; on a typical day in August 2006, 26 million Americans were online to seek information and news pertaining to the forthcoming mid-term elections (in 2005, an estimated 50 million people got their news daily from the Internet). High-speed Internet connections increased twice as fast in 2006 as in 2005, particularly among middle-class Americans, and 87 percent of online users reported using the Internet at least one time to research a scientific topic or concept. At the same time, newspaper subscriptions continue a 20-year decline (see <http://www.washingtonpost.com/wp-dyn/content/article/2005/05/02/AR2005050201457.html>), particularly between 1994 and 2006, when the percentage of Americans reporting that they had read a newspaper the previous day dropped from 58 to 40 percent.

Paralleling these societal trends, the National Center for Educational Statistics of the U.S. Department of Education has provided data substantiating that schools are increasingly equipped to gain access to the Internet and to the diverse sources of information and forms of communication that it provides. One report (U.S. Department of Education, 2006) indicates an increase from 4 to 94 percent in the percentage of instructional rooms in public schools with Internet access between 1994 and 2005. That increase is matched during the same period by a decrease in the ratio of students to computers with Internet access from 12.1 students per computer in 1994 to 3.8 students per computer in 2005.

The status of printed texts in what defines daily literacy in the twenty-first century might be compared to the status of currency in our financial transactions. Cash still plays a role in everyday financial transactions, particularly in certain circumstances, but it is a diminishing and increasingly secondary role. Just as daily commerce, ranging from personal transactions, such as swiping

a debit or credit card at a gas pump, to corporate bookkeeping, is increasingly electronic, so too is our reading and writing and our access to information. That unrelenting shift toward digital forms and processes in every aspect of our daily lives creates and defines digital literacies and consequently establishes the clear need to incorporate digital literacies into schools.

The rise of digital literacies has far-reaching societal and global implications. If schools are to be at all relevant to the world as it is, and if they are to prepare informed, productive, and democratic citizens for the future, it is clear that they must weave digital literacies into the fabric of their curricula and instruction. How have literacy educators and researchers responded to the rise of these digital literacies beyond bringing the necessary technologies into the schools? What issues and challenges do they face, particularly in the language arts curriculum?

THE RESPONSE OF LITERACY EDUCATORS AND RESEARCHERS

It would be shortsighted and foolish, if not unethical, for educators to ignore this shift from printed to digital forms of communication or to ignore the Internet as a means to access information digitally. For example, who today would congratulate a teacher for an innovative and skillfully delivered lesson on how to use a card catalogue in a library, especially if that teacher never engaged students in activities that helped them become proficient in locating information in electronic databases? Is it acceptable for a teacher to teach students the conventions of writing a business letter without addressing the conventions of e-mail communication? Likewise, is it acceptable to teach students how to use an index in a book without teaching strategies for using a search engine on the Internet? Such questions are becoming harder for educators to avoid and more anachronistic when they do fail to address them.

Yet, there is general agreement that the overall response of educators to the revolutionary changes in reading and writing has not been timely or adequate. Many observers who are interested in how digital technologies alter conventional conceptions of literacy have lamented the slow pace at which educators and policy makers have responded. For example, Leu (2006) pointed out that as recently as 2005, not a single state in the United States had made provision for students to use word processing when taking mandated, and often high-stakes, state writing assessments. This example is representative of many other points of divergence that often exist between the availability and use of digital literacies in everyday life and the print-based literacy instruction that remains entrenched in many schools.

From the outset of the digital revolution, education has lagged behind the increasingly widespread adoption of digital technologies for reading and writing in society at large. Historically, that lag is typical as evidenced by other new

technologies that have crept only slowly into schools. To illustrate, there is a well-known story about an educator who many years ago observed out of frustration that he was hoping to get an overhead projector in his classroom now that he saw them in bowling alleys. Schools are typically conservative institutions that are rarely in the vanguard of adopting new technologies, especially when, as is the case with digital technologies, they require essentially new ways of thinking about teaching, learning, and literacy. One writer (Papert, 1993) argued that schools treat computers like the human body's white blood cells treat an invading virus. Even in California's Silicon Valley, the Mecca of the digital revolution, populated by some of the most tech-savvy individuals in the United States, Cuban (2001) found that the integration of digital technologies into curriculum and instruction was meager and perfunctory. Conservative attitudes, benign neglect, or active resistance to new technologies in schools may mean only a frustrating delay in incorporating a technology like the overhead projector, but it may be a much greater concern when it means that schools are no longer in touch with the literate demands of society at large.

Furthermore, when schools do embrace digital technologies, they often do so tangentially in ways that preserve conventional print-based literacy as the center of the curriculum. Taking students to a computer lab once a week to engage in activities involving word processing, e-mail, or the Internet hardly seems to be an appropriate and authentic response to the revolutionary changes in reading and writing occurring outside of the classroom. We find it useful to characterize such relatively superficial responses by borrowing the term *assimilation* from Piaget, the famous child psychologist, who applied it to children at a stage of development during which they tried to make new, anomalous observations fit into their existing internal schemes for understanding the external world. In a similar way, educators *assimilate* digital technologies when they squeeze them into existing curriculum and into conventional modes of teaching that remain essentially unchanged. As Piaget pointed out, however, when children mature cognitively, they come to *accommodate* new information that conflicts with their existing internal schemes by creating new and fundamentally different internal representations. Likewise, in light of the fundamental changes in reading and writing that digital technologies have brought about, it may be necessary for educators to reorient and to reframe fundamentally what is taught in the name of literacy.

It is important not to underestimate the difficulties and challenges that schools, teachers, and students face when literacy instruction moves from assimilating digital technologies into existing curriculum and instruction. It is understandable why this shift has been slow to occur. Many teachers, particularly more experienced teachers whose formative years preceded the digital revolution, are themselves on the trailing edge of digital forms of reading and writing. They rarely use the Internet or e-mail, and may have only a

vague notion of newer genres and forms, such as instant messaging, blogs, and wikis (evolving texts created on the Internet by groups of individuals over time where no one person maintains control of a text). Hence, they may feel incompetent or insecure about engaging their students in activities where the students are more expert. Some are novices who would like to know more, but who may not have the time or the professional support they need. Others are so invested in conventional printed forms that they actively resist engaging students in digital forms, and sometimes they may romanticize about how printed forms are an inherently superior or more valid technology for reading and writing.

The slow pace of movement toward accommodating digital technologies is also understandable because literacy educators must contend with a host of potentially challenging financial, technological, logistical, curricular, pedagogical, political, and other factors. These factors have a local dimension, such as the need for teachers to upgrade their skills and be provided an opportunity to do so, to feel confident in managing fast-changing technological developments. Other challenges, however, are the result of larger systemic factors. For example, there are substantial pressures on policy makers, administrators, and teachers to raise achievement on conventional basic literacy skills as mandated by the federal No Child Left Behind (NCLB) legislation in the United States (P.L. 107–110, 2002). Attempts to introduce digital technologies into classrooms may be significantly curtailed if they are perceived as distracting attention from that more pressing and immediately consequential concern. It is difficult for schools and teachers to become fully engaged in promoting and developing digital literacies when doing so may risk that they do not meet the annual yearly progress in conventional reading achievement as mandated by that legislation, particularly when failure to perform adequately may have dire consequences. The irony is that the need for global competitiveness often cited as a rationale for NCLB is more likely to be achieved through the development of knowledge and skills directly related to digital literacies, not to mention the higher purpose of maintaining an informed democratic citizenry in an age of digital information.

Even if a strong commitment is made to integrating digital technologies into curricula and instruction, it is not always clear what agendas should dominate such efforts. Should there be a focus on ensuring that adequate hardware and software are available, on using digital technologies innovatively to accomplish more conventional goals of reading instruction, on exploiting digital technologies to transform literacy instruction, preparing students for the literacy of the future, or empowering students in ways not possible or typically explored with more conventional technologies (e.g., engaging students in a critical literacy that entails community involvement, social critique, and social activism)? Or, should all of these as well as other agendas be addressed to some degree?

These are curricular issues that have not been resolved and about which there is little focused dialogue, let alone consensus. A related challenge is that digital technologies have implications for almost every aspect of language arts instruction including topics as diverse as assessment, vocabulary development, spelling, writing, comprehension, second language development, and readers with special needs.

Another challenge is that digital forms of reading and writing are continuously and rapidly evolving and each evolution typically requires logistical and conceptual accommodations. On the technological side new applications and new versions of existing applications often appear monthly, weekly, and even daily, not slowly across years or decades (Leu, 2006). For example, since the earliest days of classroom computing, each new and engaging application often required expanded memory, a peripheral device (e.g., a CD drive), a new or upgraded operating system, or an updated version of a software application that had to be purchased separately and installed. Advances in technology during the past few years have mitigated these difficulties, however. Many applications are web-based, and software applications and operating systems are upgraded through automatic downloads. Newer computers are ready to use out of the package and are equipped with built-in features that eliminate the need for elaborate setups with separate, external devices.

Conceptually, too, it is a challenge for educators to stay abreast of these developments and to accommodate such rapid change. Authentically accommodating digital technologies into education in general and into literacy education in particular involves major conceptual, physical, logistical, curricular, and pedagogical changes (e.g., see the technology standards created by the International Society for Technology in Education, 2002) that may call into question many longstanding assumptions and practices of traditional schooling. For example, a teacher may no longer be viewed as a font of knowledge. Instead, learning activities may more naturally be student centered, spontaneous, unpredictable, and open ended when multiple sources of online information are readily available. Textbooks are no longer likely to be at the center of instruction. These and similarly fundamental changes are implied by digital technologies and the literacies that they naturally promote.

Accompanying these technological and conceptual changes, the logistics for engaging in activities aimed at promoting digital literacies are remarkably more complex. A teacher who plans activities around a textbook, for example, faces few of the issues faced by teachers who wish to engage students with online activities. That complexity, however, is reduced somewhat by those teachers who are fortunate enough to participate in wireless laptop initiatives where all students have laptops with wireless connections to the Internet. Nonetheless, a teacher using conventional materials will not likely face difficulties such as a computer server that goes down in the middle of a lesson, or a school firewall

that is indiscriminate in denying access to benign and useful sites for the sake of guarding against the possibility of accessing inappropriate sites.

Younger teachers who may be more familiar and more comfortable with digital forms of reading and writing may be less resistant to, and more adept at, accommodating digital literacies into their teaching. Yet they may be hampered in doing so by their general inexperience in teaching and by a lack of support or understanding from their more senior colleagues and supervisors. They may have received relatively little guidance during their preservice preparation for how to accommodate digital literacies into their instruction, which may be explained in part by the fact that methods courses are often taught by instructors who are heavily invested in printed materials and who have little interest or background in teaching with digital materials. In our experience, few programs of teacher education include methods courses that help preservice teachers understand or cope with reading and language arts instruction devoted to addressing digital forms of reading and writing. The contrasting concepts of assimilation and accommodation that we introduced earlier in this section are no less applicable to teacher preparation programs than they are to elementary and middle-school classrooms.

Lest we paint too dismal a portrait, we wish to note that there are encouraging exceptions to our overall assessment that educators' response to the rise of digital literacies has been inadequate. There are indications that the tide is slowly turning. For example, some popular reading methods texts are beginning to go beyond the now obligatory section or chapter on technology. Those texts are beginning to suggest materials and activities that teachers might use to move beyond using digital technologies only to further the goals of conventional print-based instruction in reading and writing. For example, rather than providing examples of how digital technologies might be used to teach the conventional skills of reading and comprehending printed texts, such as finding or writing the main idea of paragraph, these texts may include ideas for engaging students in locating information on the Internet and creating multimedia presentations.

An increasing number of books and Web sites (e.g., www.reading.org/resources/community/links_rumphius_info.html) highlight innovative approaches and projects developed by teachers committed to integrating digital literacies and the Internet into their teaching, especially for teachers who have the motivation and wherewithal to face the challenges of doing so. Nonetheless, overall, a wide chasm still exists between the digital literacies that are continuously evolving in daily life outside of schools and the literacy instruction in the majority of classrooms. Education has not yet reached the point where digital literacies are fully incorporated or accommodated into literacy instruction and where the respective emphases on digital and print-based literacies reflect the shifting balance of those literacies outside schools and classrooms. This lack of progress is not surprising given the

many challenges and obstacles that stand in the way of educators moving from assimilation to accommodation of digital literacies. We are also impressed with the many creative, dedicated, and skilled teachers and administrators who are willing to face those formidable challenges and obstacles. There is much potential progress on the horizon with the Internet poised to become a mainstream instructional tool, as well as an object of study in its own right as it becomes more firmly entrenched as an inescapable artifact of the new century. The accommodation of digital literacies is likely to leap forward as laptops and wireless connections become more prevalent.

THE CONTRIBUTION AND ROLE OF PROFESSIONAL ORGANIZATIONS

The field's leading professional organizations have also responded to the awareness that digital literacies need to be accommodated within conceptions of literacy instruction. The International Reading Association (IRA; www.reading.org) is a prominent example. In 2002, IRA paired with the National Council of Teachers of English (NCTE) to create ReadWriteThink.org, a freely accessible Web site that includes peer-reviewed lesson plans for reading and language arts teachers, Web resources, and a plethora of interactive teaching tools, many of which related to digital literacies. In addition, in 1997, IRA launched *Reading Online* (www.readingonline.org), a free online-only publication to offer peer-reviewed articles on literacy practice and research. At its Web site, IRA also makes available a position statement articulating the importance of integrating technology into the literacy curriculum, the necessity of equal access to technology for students, and the need to provide students with technologically literate teachers. To provide literacy educators with a way to interact with each other about common problems and issues related to digital literacies, IRA also supports RTEACHER, an online forum for discussing instructional practice, research, theory, and policy. Members of RTEACHER also select teachers who develop outstanding Internet resources to receive IRA's Miss Rumphius Award, given to teachers each year who have developed innovative units, projects, and activities involving digital technologies.

THE STATUS AND ROLE OF RESEARCH AND SCHOLARSHIP

A consideration of how digital technologies connect to literacy instruction has attracted the interest of a relatively small group of scholars and researchers since the earliest stages of instructional computing. As early as the mid-1960s, a large federal grant to Stanford University included a project to create a computer-based reading curriculum that would teach children to

read independent of a human teacher. A historically noteworthy publication was a book entitled *Computer Applications in Reading* (Mason, Blanchard, & Daniel 1983), published by the International Reading Association. That book, which went into its 3rd edition in 1987, provided an exhaustive annotated summary of the many diverse research and development projects that incorporated digital technologies into the teaching of reading and writing. Its status as a best seller among literacy educators was an early indication of the interest and excitement generated by computers among literacy researchers and educators. Nonetheless, these early projects were often aimed at using a computer to enhance the goals of conventional, print-based reading instruction, and they provided little specific guidance about how educators might integrate applications into instruction. Understandably at this early stage, almost no attention was given to how digital technologies might completely reframe the experience of reading and writing, to how the computer might create new textual genres, or how schools might accommodate expanding definitions of literacy into their thinking.

Beginning in the early 1990s, however, there was considerable interest in hypertext, a nonlinear form of writing and reading, but it attracted mainly writers interested in its literary and historical implications. Literacy scholars and researchers were being confronted with the idea that broader definitions of literacy were necessary in an increasingly multimedia world (e.g., Flood & Lapp, 1995). That period, which saw significant technological advances and increases in computing speed and memory (e.g., the Compact Disk), also saw the first serious serious questioning of the centrality and future viability of the book as the dominant technology of written communication. The seeds for a more mainstream interest in new digital forms of reading and writing also arose at that time, however. The use of e-mail as a form of communication became almost a necessity, at least in the academic and business worlds (following its first use in the military) and for almost all sectors of society soon after. Also, early versions of the Internet appeared and rapidly precipitated the dot-com boom that solidified the Internet as a major cultural phenomenon.

As we moved into the new millennium, it became increasingly clear that the conservative walls erected by schools were unlikely to resist the juggernaut of digital forms of reading and writing growing outside those walls. Despite many calls for action among scholars and researchers committed to promoting the integration of digital technologies into curriculum and classroom instruction, other than the acquisition of hardware, the pace of change in schools has been relatively slow.

Given the revolutionary changes that digital forms of reading and writing imply for schooling, relatively little research has been conducted to guide educators in their efforts to accommodate digital literacies into curriculum and instruction. For example, Kamil, Kim, and Intrator, (2000) documented

the miniscule proportion of articles devoted to digital literacies in the field's leading research journals. The influential, yet controversial, National Reading Panel report (2000) commissioned by the U.S. Congress found only 21 studies published in technology and reading instruction that met their criteria for rigor, which was too few for the panel to draw conclusions. Reviews of the research literature related to digital technologies and literacy and published periodically since the early 1990s invariably conclude that the research base includes many studies of questionable conceptual or methodological rigor. There have also been calls for different research questions and methodologies that might more directly inform practitioners.

When compared to the small number of research studies, the scholarly literature related to digital literacies is dominated by reflections and commentary on the changing landscape of literacy (e.g., Bruce, 2003), theoretical perspectives on what those changes mean and how they can be interpreted (e.g., Alvermann, 2002), calls for more research (e.g., Kamil et al., 2000), and admonitions to the field stating that the interest in and response to digital literacies has been inadequate (e.g., Leu, 2006). That literature is supplemented by many books, articles, and Web sites offering innovative approaches and activities for using digital technologies in literacy instruction. This more practitioner-oriented literature rarely springs from, or is supported by, rigorously conducted research, nor is it often conceptualized in terms of accommodating new conceptions of literacy.

SOME ILLUSTRATIVE EXAMPLES OF ACCOMMODATION

In this section, we briefly highlight a few examples of how digital literacies might be accommodated into new conceptions of literacy instruction and of the type of issues that result in doing so. We first give examples drawn from traditional areas of reading instruction followed by examples from a more contemporary view that integrates reading and writing instruction. For readers who wish to become familiar with the full range of topics, issues, and research concerning how digital technologies have been integrated into literacy instruction, we recommend the following sources: (1) the *International Handbook of Literacy and Technology Volume 2* (McKenna, Labbo, Kieffer, & Reinking, 2006), (2) two comprehensive reviews of the literature pertaining to digital technologies and literacy for young children (Blok, Oostdam, Otter, & Overmaat, 2002; Labbo & Reinking, 2003; see also Labbo, this volume), and (3) the chapter on learning to read in the *Cambridge Handbook of Multimedia Learning* (Reinking, 2005).

TRADITIONAL READING INSTRUCTION

Traditional reading instruction can be divided roughly into three fundamental areas: decoding texts (automatically identifying words for fluent reading),

comprehending texts, and instilling an enjoyment of reading. Instructional applications involving digital technologies have been used and studied in each of these areas, and each area illustrates the potential to accommodate, rather than to more superficially assimilate, digital literacies into conceptions of literacy instruction. Each of the examples illustrates the following characteristic, which we selected from among the many potential attributes and characteristics of digital texts that have implications for accommodating digital literacies: digital technologies permit reading to be an interactive and multimedia experience that respond to the needs of an individual learner.

Decoding. Using digital technologies for decoding has been exploited in many ways in literacy instruction. Digital texts have been created to provide various types of assistance and instruction aimed at helping beginning readers identify difficult or unfamiliar words in ways aimed ultimately at creating more independent readers. For example, a beginning reader might, under certain circumstances, be given the option of clicking on an unfamiliar word to hear it pronounced. Several commercial software programs have these capabilities and many studies document the conditions under which these capabilities might be used effectively, often focusing on students who are having difficulty learning to read (Olson & Wise, 2006). These applications may reshape, if not undermine, some conventional notions about reading texts and teaching beginning reading. For example, what defines a text's difficulty when these supports are available? How does it reshape fundamental pedagogical concepts such as matching a reader's ability to the difficulty of the text?

Comprehending. How would a view of vocabulary development, a dimension of comprehending texts change if a reader can click to see a context-specific definition that goes far beyond a standard dictionary, perhaps including a video illustrating the word's meaning? The availability of such a capability has long been shown to have positive benefits for vocabulary development and comprehension of texts, and much more sophisticated approaches are becoming part of online reading. For example, a new extension can be added to one of the popular Internet browsers that provides automatic links to hundreds of authoritative sources defining terms and concepts when a reader clicks on any word in any text displayed by the browser. Having that capability makes the meanings of new vocabulary automatically more contextual, more incidental, less intrusive, and potentially more effective than the way vocabulary is typically taught in conventional reading instruction.

How might those possibilities lead us to rethink vocabulary instruction and its relation to comprehending a text? That is, how would this application be accommodated within our conception of literacy instruction? Other applications have similarly interesting and important implications for reading instruction in the area of comprehension. For example, could the Internet more readily facilitate critical reading when texts from different sources on the

same topic can easily be compared and contrasted and a variety of new possibilities exist for determining veracity and reliability? More generally, should our definitions of comprehension or our instructional emphases be modified in light of online reading and sources such as the Internet provides?

Instilling enjoyment in reading. Texts displayed digitally can be presented in multimedia formats that are dynamic rather than static, and they can be interactive and supportive of an individual reader's needs. Thus they are likely to be more inherently interesting and motivating to students than conventional printed texts. That view has been the underlying assumption for several commercial programs offering digital versions of popular children's books, which have also been the object of considerable research. Children who read these digital books can receive various types of assistance during reading, see clever animations related to or sometimes tangential to the story, select alternative routes through the story, and so forth. The research on these books is somewhat mixed, but overall it suggests that digital stories are highly motivating and under the right conditions are otherwise beneficial to children's developing literacy skills (e.g., see DeJong & Bus, 2004). Clearly, there are some playful and enjoyable aspects of digital reading and writing that not only initiate children into digital literacies but may also increase their overall motivation to read and their engagement in reading (Labbo, 1996). As this example illustrates, accommodating digital literacies into our conceptions of reading instruction may mean recognizing that digital texts have some advantages over printed texts, which is a possibility not readily embraced by many literacy educators.

CONTEMPORARY LITERACY INSTRUCTION

For many educators and scholars, separating reading and writing instruction into two distinct curricular areas is unnatural and inappropriate. They consider reading and writing to be essentially complementary, inseparable forms of communication that should be merged seamlessly into the curriculum. They also elevate the value of literacy as it occurs in everyday life (as opposed to a narrower academic view of literacy), and similarly they incorporate a wider range of purposes and media into their conceptions of literacy.

Accommodating digital literacies within conceptions of literacy instruction reinforces and fits well with that view. Reading and writing are clearly more closely connected in digital environments and more often involve authentic purposes for communication. E-mail is a prime example. Likewise, emerging genres of online collaborative writing (e.g., wikis) means reading closely what other authors have written before adding one's own modifications to the text. Seeking information on the Internet may entail e-mailing an individual for more information or responding directly to an author to express an opinion, to point out erroneous information, and so forth. Constructing a Web page

or developing an informative slide show for a presentation means mastering multiple modes of expression using various multimedia effects and genres. Thus adopting more contemporary views of literacy instruction opens up a natural space for accommodating digital literacies into conceptualizations of literacy instruction.

HOW WILL DIGITAL LITERACIES ULTIMATELY BE ACCOMMODATED?

In this chapter, we highlighted the need for a new conception of literacy instruction that accommodates digital literacies. We pointed out that despite the increasingly wide use of digital technologies outside of school and the increasing access to necessary technologies in schools, digital literacies have not been fully accommodated into conceptions of literacy instruction. Consequently, there is a widening gap between inside-of-school and outside-of-school literacies, in part because conceptions of literacy instruction in schools remain largely associated with the technologies of print. We also outlined some of the difficulties and challenges that explain the relatively meager and perfunctory response of educators and researchers to the imperatives of digital literacies, despite the calls for more attention to that issue in the literature and the resources made available by the field's largest professional organizations. Finally, we gave some examples of how digital literacies have been or might be accommodated into literacy instruction in terms of traditional reading instruction, and how adopting a more contemporary view of literacy instruction is more accommodating to digital literacies.

In closing, we draw attention to what is arguably the most important factor that might stem or turn the tide toward accommodating digital literacies into literacy instruction. It is based on one of the most robust findings in the literature related to integrating technology into instruction. In a word, it is *beliefs*. That is, the most important factor in determining how digital technologies are used in literacy instruction are the beliefs of educators, researchers, and policy makers about the essential goals of literacy instruction and the role of digital technologies in helping to achieve the goals that they value. If they believe that the longstanding conventional goals of literacy instruction rooted in print are essential, they are likely to conceptualize digital technologies as merely intriguing tools in service of those conventional goals. In short, they will assimilate digital literacies into curriculum and instruction. If they open themselves up to new conceptions of literacy consistent with the existing digital world, and they reformulate their beliefs accordingly, they are more likely to genuinely accommodate digital literacies into instruction. We hope this chapter makes a substantive contribution toward the latter transformation.

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Part Three

CHILDHOOD LITERACY BEYOND THE CLASSROOM

Chapter Eleven

CHILD CULTURE AND POPULAR CULTURE

Thomas Newkirk

McGuffey's Fifth Eclectic Reader, published in 1879, begins with a story called "The Good Reader." In the story, a young farm girl, Ernestine, skilled in oral reading from her many experiences reading letters for her neighbors, is in the court of Frederick the Great, who is tired from hunting and becomes frustrated when neither of his pages can successfully read a letter from a poor widow petitioning that her son be excused from military service. Ernestine steps forward and successfully conveys the emotion of the letter—and from that one piece of successful reading comes an avalanche of positive results. The petition is granted, and Ernestine's father gets a position in the king's court. Even the two pages, remanded by the king to develop their reading skills, become successful professionals "chiefly due to their good elocution" (p. 42). Literacy as presented here is not a neutral "skill," but a mode of socialization; the reader takes on the role of responsible, empathetic adult. As in many of the *McGuffey* stories, the moral is hardly subtle—reading is a practical skill that is linked to moral behavior and can lead to social advancement.

This moral dimension has been part of reading instruction in schools since the early *New England Primer* with its simplified religious lessons. The *McGuffey Readers* were full of moral uplift. For example, William Ellery Channing's sermon warned, "Erase all thought and fear of God from a community, and selfishness and sensuality would absorb the whole man" (p. 285). By contrast, there was deep suspicion of novels during this period because they were so focused on entertainment that did not pretend to be self-improving—romance, adventure, even the macabre. They had no place in formal school instruction and were

seen as particularly corrupting to women. Booth Tarkington, one of the most popular authors of the early twentieth century, recalled the way that he would read dime novels, tucked inside the official classroom textbook, a practice that continues to the present day as the official literacy of the school competes with (and loses to) unofficial literacy written (and often drawn) for popular consumption. Even in the twentieth century, as novels began to assume a central place in a reading curriculum, the case for reading them was often a moral one. The reading of quality literature was not a mere escape and not a cheap form of pleasure. It was a way to confront profound human dilemmas, to enter the experience of others, and, in doing so, gain greater sensitivity and empathy. As Matthew Arnold predicted at the end of the nineteenth century, literature would begin to take on the civilizing function of religion.

As print literacy faced competition from the visual media, even the act of reading itself came to be seen as a positive form of self-control. Reading is a skill that must be taught and learned, unlike the watching of television. It typically moves at a slower pace, requiring that the reader postpone the need for quick gratification. Reading requires the reader to operate actively as co-producer of the text, transforming written words into internalized images and action. For many parents and educators, silent sustained reading (of just about anything) is a deeply reassuring practice; it is a sign that the child can assume the role of student who can control inclinations to move about and to socialize. He or she can assume the particularized identity of a reader, making a personal transaction with the text, in sharp contrast to a homogenizing mass culture in which the individual participates in a more collective way (as at football game), submerging oneself in the group. School literacy often tends to define itself against visually mediated popular culture—it doesn't draw on that culture; it resists it. This chapter focuses on the wisdom of this opposition.

MEDIA HABITS OF U.S. CHILDREN

If popular visual media *are* in competition with school literacy, there is no question which side is winning. The most thorough study of media habits of U.S. children and young adults was conducted by the Kaiser Family Foundation and published as *Generation M: Media in the Lives of 8–18 Year Olds* (Roberts, Foehr, & Rideout, 2005). The authors of the study concluded the children they studied were “media-saturated”—often exposed to a seemingly improbable 9 to 10 hours of media per day. It seemed that the limit had been reached in terms of possible exposure (they estimate 6 to 6.5 hours a day), but *Generation M* documents an increase in multitasking, such as playing video games while listening to music on an iPod. Multitasking was particularly common among African American children who were engaged with two or more media 31 percent of the time in which they were involved with media.

The study both reinforces and challenges common assumptions about media use. Among the findings are these:

- *There are major gender differences in media use.* Girls spend more time listening to music and using Instant Messenger. Boys spend more time playing video games—38 percent as opposed to 31 percent for girls who report playing one in the last 24 hours. Although neither gender spends a great of time reading, girls spend more time reading books than boys (29 minutes compared to 19 minutes for boys).
- *There are major racial differences in media use.* African American children watch far more television than white children, with Hispanic children falling in the middle. White children watch an average of 2 hours 45 minutes per day; African American children watch 4 hours 5 minutes per day—a difference of 1 hour 20 minutes per day. Hispanic children watch 3 hours 23 minutes per day. The report also found that African American families were more likely to have television on during meal times, although this is a common practice among all racial groups.
- *Family education does not significantly affect TV watching.* Surprisingly, the study found that children of college-educated parents watched 3 hours 3 minutes per day; children of parents with a high school education watched 3 hours 12 minutes per day. Family education, however, does correlate with somewhat more self-chosen reading.
- *Comedy is the favorite TV genre across gender and racial groups.* If combined with reality shows (often watched as comedies), these two types account for more than 50 percent of the preferences. Paradoxically, the shows watched by the grandparents of the children studied would be more likely to feature guns and shooting, particularly in westerns like *Gunsmoke*, *The Rifleman*, *The Life and Legend of Wyatt Earp*, and *Wanted: Dead or Alive*. This finding corresponds with the general perception that young adults get much of their political commentary as satire—on shows like *The Daily Show with John Stewart* or *The Colbert Report*.
- *Reading is a small part of the media diet.* An average of 45 minutes per day is spent with print media. For boys, less than half of this time (19 minutes) is spent with books. Reading books declines after age 10; the authors speculate this occurs because this activity is associated with schoolwork, and children choose to spend their leisure time doing something else.
- *Heavy video game players tend to read more than light video game users.* One of the most counterintuitive findings of the study focused on the habits of heavy media users (e.g., those who watch more than five hours a day of television or spend more than one hour a day playing video games). One would expect that heavy use of video games would occur at the expense of reading (or even other media use). But the study found that children who were active in any media use tended to be active in all media use. Active video game players tended to be heavy TV watchers and even more active readers than light users (by 14 minutes per day). They even reported more physical activity by a statistically significant margin.
- Although the media use might suggest a “crisis” in reading achievement, there is no evidence for a decline in reading scores during the last 35 years. In fact, there is some evidence of slight improvement. According to the National Assessment for Educational Progress (“National Trends,” 2006), reading scores have been stable since 1971, particularly at the upper grades, with a modest improvement in the

4th-grade assessment. To put this trend another way, children today read as well, if not better, than their parents did when they were in school. Is there cause for alarm?

The virtually constant exposure to mass entertainment is a source of concern to almost everyone involved in child care and education—parents, educators, psychologists, social workers, pediatricians, and even those involved in the more traditional forms of family entertainment. For example, the National Park Service recently reported a steep drop in park attendance in the Northeast, about 20 percent at Acadia National Park and the Cape Cod National Seashore (MacQuarrie, 2006). The Nature Conservancy, a nonprofit conservation and advocacy group, attributed this decline to changing patterns of family entertainment. People, particularly children, are spending more time on the Internet, often playing video games, and less with their families in natural park settings.

Anecdotal reports from educators suggest that children spend less time with board games and for some middle-class children, a great proportion of play time is structured. Even school recesses are less frequent and more tightly regulated. These restrictions—combined with the dominance of mass media—may also lead to the extinguishment of traditional forms of child play. Opie and Opie (1969) catalogued children's games in post-World War II England and published their findings in their classic text, *Children's Games in Street and Playground: Chasing, Catching, Seeking, Hunting, Racing, Duelling, Exerting, Daring, Guessing, Acting, Pretending*. This title alone suggests the rich lore of children that may be lost as "the street" becomes perceived as too dangerous and the playground too regulated, and as the television becomes a substitute for play.

This general pattern of family change has been analyzed by sociologist Robert Putnam (2000) in his book, *Bowling Alone: The Collapse and Revival of American Community*. According to Putnam, the members of the post-World War II generation were joiners; popular culture was often a *local* form of association—bowling leagues, bridge clubs, piano recitals, PTA meetings, company picnics. Putnam demonstrated that this high level of involvement is closely associated with a number of social and personal benefits such as higher voting rates, more charitable giving, and even better personal health. For a variety of reasons (time spent driving, two-earner households, more time with home entertainment media), subsequent generations have fallen away from community involvement. A recent study of friendship in this country supports that the number of close friends or confidants has dropped in the past 20 years from an average of 2.94 to 2.08 per person, with respondents less likely to name individuals outside the immediate family (McPherson, Smith-Lovin, & Brashears, 2006). From this perspective, children's media exposure is part of a wider social problem of isolation.

Another concern about the influence of popular culture is the way in which mass media target young children as consumers, almost from the time of their birth, and justify the process in the name of “empowering” children. Schor (2004) in her study, *Born to Buy*, describes the ways in which advertising is not limited to commercials; many cartoons for young children serve as promotions to buy products depicted in the animation. Advertisers target the sugar craving of children to sell profoundly unhealthy products, and they offer guidance to children in how to “nag” parents to make the purchase. They also market an unhealthy vision of preadolescent sexual attractiveness with seven- and eight-year-old girls wearing tight tank tops that expose their midsections. Increasingly, advertisers are bypassing traditional commercials (which kids can flip away from) in favor of product placement in movies and television shows, so the dividing line between advertisement and entertainment is blurred. Even functional items like Band-Aids are designed and marketed as a form of toy. These marketing techniques, critics argue, are detrimental to children—they encourage poor eating habits, addictive behavior, acquisitiveness, and, ultimately, poor psychological health.

The exposure to media violence is also believed to promote aggressive behavior in young viewers. This position is forcefully advocated by the American Academy of Pediatrics (AAP) that claims that this exposure is “a significant risk to the health of children” (American Academy of Pediatrics, Joint Statement, 2000, n.p.). In its presentation to Congress, representatives from the AAP summarize their position:

At this time, well over 1000 studies—including reports from the Surgeon General’s office, the National Institute of Mental Health, and numerous studies conducted by leading figures within our medical and public health organizations . . . point overwhelmingly to a causal connection between media violence and aggressive behavior in some children. The conclusion of the public health community, based on over 30 years of research, is that viewing entertainment violence can lead to increases in aggressive attitudes, values and behavior, particularly in children. Its effects are measurable and long-lasting. Moreover, prolonged viewing of media violence can lead to emotional desensitization toward violence in real life. (n.p.)

Critics of the AAP position point out, however, that the increase in media violence and the emergence of home video games in the 1990s coincided with a dramatic decrease in youth crime (Juvenile Arrests for Selected Offenses, 2006), with the rate of juvenile crime at the millennium somewhat lower than it was in 1973 (Juveniles as Offenders, 1999). In other words, children today are somewhat less likely to become juvenile offenders than their grandparents were. These statistics cast some doubt on the causative weight that the AAP and others assign to media culture.

One general criticism of this line of research is the depiction of children as entirely passive and malleable recipients of the messages of media culture—

and the ability of researchers to determine these effects, often without interviewing children. David Buckingham, author of *After the Death of Childhood: Growing Up in the Age of Electronic Media* (Roberts et al., 2000), summarizes this problem:

Children, in particular, are implicitly seen to be passive and defenseless in the face of media manipulation. Audiences are not seen here as socially differentiated, or as capable of responding critically to what they watch. Television, because of its inherently “visual” nature . . . is effectively seen to bypass cognition entirely. It requires no intellectual, emotional or imaginative investment . . . no empirical evidence is offered for these assertions: they seem so self-evident, it is as though none were considered necessary. (p. 38)

One of the favored analogies of the AAP is the comparison of media violence to cigarette smoking. Smoking does not always result in lung disease because different people have different threshold or triggers for disease; in the same way media violence does not always promote actual violence because some people are more resistant to the message. The analogy, however, breaks down because lung cells cannot critically resist the effect of carcinogens, yet children are not so passive. According to researchers like Buckingham (2000) and Tobin (2000), children do make complex judgments about media, but the behaviorist “effects” paradigm of most of the media violence research fails to elicit children’s judgments of the media they watch.

This anxiety about media culture and its effects on children affects profoundly the ways in which literacy instruction is approached in schools. If media culture is viewed primarily as “toxic” and exploitative—as violent, sexist, and manipulative—it logically follows that instruction will be viewed as a counterforce to the media culture, as a counterbalancing that can direct students toward a more local and neglected form of popular culture, and to high-quality print literature. Many writing workshop approaches in elementary schools actually do take this stance—prohibiting any form of violence in writing and discouraging students from “inauthentic” topics derived from the media (e.g., superhero space adventures), while promoting writing that deals with nontechnological experiences with family, friends, animals, and the natural world (e.g., Parsons, 2005). This focus, it might be argued, pushes students to define an “authentic” identity that is not preconstructed by the media. Although not didactic in the way *McGuffey* readers are, this approach to literacy instruction works to inculcate a set of values associated with serious established adult genres (e.g., memoir, nature writing, profiles)—a responsiveness to others, a sense of stewardship toward the natural world, and a particularized sense of one’s own identity. Literacy and morality are intertwined: the “good reader” is not simply a skilled reader, but someone who takes on the ethical responsibility of being sensitive toward others.

EMBRACING THE MEDIA CULTURE

Over history, technological changes have profoundly affected literacy practices. These changes are often resisted by an adult generation that is comfortable and proficient in the established forms of literacy. In his dialogue, *Phaedrus*, Plato's character Socrates laments the increasing popularity of the new technology of his day—writing (Plato, 1973). He argues that writing is inferior to oral dialogue that allows for an active and continued exchange among participants (where writing says the same thing over and over again). He also claimed that because information can be stored in written form, this technology will also foster forgetfulness. Similarly, independent silent reading, made possible through the dissemination of books after the invention of the printing press, was viewed with great suspicion by religious authorities, who feared that it would lead to idiosyncratic and heretical readings of the Bible. In the first great European novel, *Don Quixote*, Cervantes plays with the common belief that excessive isolated reading of popular fiction can lead to madness.

Johnson (2005) satirizes this generational reaction by imagining the resistance to reading books if it were a literacy practice that came *after* video game playing:

Reading books chronically underestimates the senses. Unlike the longstanding tradition of game playing—which engages the child in a vivid, three dimensional world filled with moving images and musical soundscapes, navigated and controlled with complex muscular movements—books are simply a barren string of words on a page. Only a small portion of the brain devoted to processing written language is activated during reading, while games engage the full range of sensory and motor cortices.

... perhaps the most dangerous property of these books is the fact that they follow a fixed linear path. You can't control the narrative in any fashion—you simply sit back and have the story dictated to you. For those of us raised on interactive narratives, this property may seem astonishing. (pp. 19–20)

Johnson emphasizes that he is writing parody here—he does not endorse this condemnation of book reading. Rather, he is pointing out the ways in which adult practitioners of established literacies are insensitive to attractions of new ones and are unaware of the cognitive demands made on users.

In his book, *Everything Bad Is Good for You*, Johnson (2005) makes the contrarian argument that the media culture, and television in particular, is responsible for an *increase* in intelligence of the general population—a phenomenon he calls the “Flynn effect.” James Flynn was a civil rights activist who initially set out to prove that the lower scores of African Americans were due to their environment, and not, as Arthur Jensen had argued, to genetics. In sorting through data, he discovered that the intelligence scores of African Americans had actually been steadily going up, an untold story. He also found

that the scores of whites had gone up as well. In fact, the intelligence scores for the U.S. population had gone up by more than 13 points in the past 45 years, a change masked by the regular renorming of tests to keep the average at 100.

Johnson proposes three possible explanations for this increase. These include better diet, improved education, and the increasing complexity of the media environment. Neither dietary changes nor school improvement is a plausible primary explanation. The major dietary improvements ended at about the time this increase began, and there has been no major transformation in schooling to account for such a rise (as we have seen, school performance in reading has been flat). The component of the test responsible for the increase has been problem solving and the recognition of visual patterns, a form of cognition that is not likely to be affected by school learning, which tends to focus on verbal intelligence. Johnson concludes that rather than being a passive media, television is more complicated and challenging than it was in previous generations—with multiple plots, irresolution, parody, and quotation from other media (a staple of *The Simpsons*). Movies like *The Matrix* or *Harry Potter and the Goblet of Fire* would have been nearly unintelligible (not to mention terrifying) to those who crowded theaters in the 1950s to watch Fess Parker play Davy Crockett. The Pokemon card trading on school playgrounds was exponentially more complex than the trading of baseball cards decades earlier.

Video games are regularly viewed as a time-wasting pastime that detracts from academic performance, particularly among boys. Video games emerged in the early 1970s as young entrepreneurs tried to make video versions of arcade games and then later developed ways to play these games on home consoles. The first successful early game was *Pong*, which resembled ping pong, followed in 1980 by the hugely successful *Pac-Man* created by Atari, which helped bring arcade revenues to \$5 billion per year (Kent, 2001). Video games became more complex with games like *Final Fantasy* and *SimCity*, and Nintendo and Sony developed affordable consoles for home video use. A literacy scholar, James Gee (2003), argues that contrary to the popular perception of this medium as mindless and instantly gratifying, video games provide stimulating learning environments. For example, video games are often calibrated for difficulty (different levels of the game) so that gamers can work on an appropriately challenging level; they provide regular feedback on performance; they require the gamer to assume a variety of identities and to imagine the game from the standpoint of these created characters. Users learn the game through playing the game, and they get meaningful and interesting practice in following the rules of the game; they tend to form collaborative communities (on-line and in person) to discuss gaming strategies. Other literacy researchers have argued that boys regularly enter a “flow state” of optimal intellectual engagement when playing video games—yet rarely feel that connection to school work (Smith and Wilhelm, 2002).

This more appreciative perspective on popular visual media suggests two problems with the orthodox approach to literacy instruction and its focus on established literary genres. First, it fails to recognize that composing in the wider culture is increasingly multimodal. The third most commonly visited Internet site is MySpace.com, which features personally designed Web sites in which contributors represent themselves through photos, links to music, friendship lists, and any other personal information they choose to provide. From a traditional standpoint, this Web site building would be seen as a distraction. Yet, scholars like Gee (2003) and other leaders of the new literacies movement, would view it as a new multimodal genre with intriguing possibilities for identity construction. With some assistance, students can also learn to create digital stories that integrate text, voice, and photographs with a musical background. Relatively simple technology allows the composer to lay down various tracks (e.g., a visual track, a sound track, a commentary track) along a timeline so they will play simultaneously. Powerpoint similarly allows for the integration of text, photographs, or any digital source that can often serve as a backdrop to an oral presentation, as Al Gore demonstrated in his presentation in *An Inconvenient Truth*. Of course, multimodality is nothing new. A traditional church service is an integration of multiple and reinforcing modes of expression—architectural, musical, literary, and visual, such as the contemplation of stories in the stained glass windows, which themselves often combine text and picture. Beginning writers typically combine drawing and writing, and they frequently accompany their composing with sound effects. This more expansive multimodal model of composing also allows students to incorporate more representational skills; for many boys, their drawing ability develops faster than their ability to write. Thus a stronger system can support a weaker or slower developing system, and the child can feel successful.

Literacy instruction that resists (or ignores) the popular culture loyalties of children may introduce a cultural and gender bias into school learning. Few educational problems are more disturbing than the gap between white and African American children, and perhaps the amount of television watching contributes to this problem, as many leaders like Bill Cosby have argued. Yet if this visual screen culture is so prominent in the family life of these children—if it constitutes the primary cultural resource that many bring to school—it would seem irresponsible to dismiss these experiences as irrelevant or detrimental to literacy learning. Television programs are, after all, usually written; they have characters, plot, dialogue, often humor, and drama. Clearly, bridges can be built from these programs to story writing in schools; often this takes no “instruction” on the part of the teacher; many students will choose this story material if they have the opportunity.

National educational assessments have also established that the literacy gap between males and females is substantial in the area of writing approaching

the gap between white and African American students (“Average Writing Scores,” 2002). This gap is six times larger than the advantage that boys have in mathematics, which, except at the most advanced levels, has largely disappeared. (“Trends in Average Mathematical Scale Scores by Gender,” 2004).

Researchers and policy makers have offered various explanations for this gap and have even disputed the significance of it. One possible explanation centers on the tacit valuation of genre and the way that valuation coincides with certain class and gender tastes. For example, memoir and realistic fiction dealing with important social themes is often viewed as having the greatest “cultural capital”—these genres mark the student as a “serious” reader, a member of a reading elite. Not coincidentally, these genres are the staple of the reading clubs formed by professional middle and upper middle class women. Many adult men do not consider themselves “readers” at all because they are not novel readers, even though they may read regularly at work, read newspapers and magazines, and increasingly get their information from the Internet. In schools, nonfiction, which boys tend to prefer over fiction, is only recently being given prominence in literacy instruction. Genres that have been traditionally popular with males—trade magazines, comics, cartoons, satire, graphic novels, science fiction—are marginalized, if not actually proscribed. This emphasis leads boys to conclude that school reading is gendered female and does not fit the identity they are shaping for themselves, so that by the high school years, advanced placement literature classes are composed almost entirely of girls.

THE PERMEABLE CURRICULUM

The term *permeable curriculum* originated with literacy research by Dyson (1993) who uses the term to describe the complex interaction that can occur between children’s “unofficial” worlds and the school curriculum, which is porous enough to allow some of the outside to come in. Dyson rejects the common deficit stereotype of urban children, which assumes that only one kind of cultural experience (e.g., being read to by parents) can lead to a good start in literacy learning. Rather, Dyson sees the urban landscape children live in as rich—with children coming in to school knowing song lyrics, plots from television and movies, jump rope rhymes, sports affiliations, and family stories. Friendship groups are maintained and defined by talk about commonly held cultural knowledge (e.g., the plot of the Disney film *The Mighty Ducks*). Unlike media critics who view children as passive victims of unhealthy cultural messages, Dyson views children as capable of appropriating and transforming these cultural resources for their own purposes. One friendship group that Dyson studied virtually adopted Coach Bombay, the hockey coach in *Mighty Ducks*, as a friend and topic of conversation. Group members would

continually reference the movie as they worked on their writing. In other words, Dyson does not take the deterministic view of many media critics who feel confident they can predict “the effects” of media. The “effect” of a Barbie doll or a Disney movie cannot be predetermined by adult media critics. Culture circulates and is modified as it does.

The permeable curriculum allows some of these cultural affiliations into the classroom to provide a context, material, and motivation for literacy learning. Literacy instruction that is compartmentalized and separated from the unofficial worlds of children simply does not make sense, leaving the only motivation for such work to be in pleasing the teacher or “doing well.” As Tolstoy once remarked, for humans only the living and complex are easy. Simplified skills tasks and worksheets are stripped of meaning-making contexts. Dyson’s own painstaking analysis of texts and contexts of writing also disrupt stable conceptions of genre, as children are continually orchestrating their cultural and social resources in new ways, creating “hybrid” texts that contain traces of these multiple worlds. Each piece of student writing is, to some degree, an original modification or “remixing” of available genres.

To appreciate the conceptual power of this form of analysis, it is useful to examine actual examples of students’ writing from a study that I conducted (Newkirk, 2002). The following piece was written in a 4th-grade class and was one of a series of stories written by a group of friends. In each story, the group was confronted with some danger and had to devise a plan to deal with it. The italics in the story indicate the source of the dialogue, based on an interview with the writer and the writer’s teacher:

Motorcycle Mice! (the class had been reading from the Beverly Cleary Runaway Ralph series)

There once was (this opening is a literary code that places in it a fictional fairy tale space) five mice named Basil, Jimmy, Donny, Jake, and Russell (these are the actual names of his friends in the class). Basil was a crazy old mouse on a motorcycle who always took stupid risks. Basil had 1 broken leg, 1 broken arm, and 4 broken fingers! But he still rides his motorcycle. Jimmy was a mouse who always got in fights and always did stupid things. Donny is the kind of mouse that always made up these funny dances. Jake is a mouse that always takes a mouse’s jacket without asking! (here the author is pointing out some of the traits of his friends in a teasing way). Russell is a mouse that always sits around and shoves cheese up his nose and then pops them out and hits us! It hurts a lot especially when it hits you on the tail or in the ear! (a touch of gross humor that singles out Russell for special attention). One day when Basil, Donny, Jake, and I (the constant reiteration of names emphasizes the friendship group) were riding our motorcycles. Basil was in front of every one of us. Basil was going so fast that his tail was wandering around so much that it got caught in the spokes of his motorcycle! So Basil’s tail came right off! Now Basil looks like a hamster (the author once had a hamster as a pet). Russell was going really fast too. Too fast. He was going so fast that when he ran over Basil’s tail he crashed. Bye

Bye Russell, He got ate by the cat! (again, the specialness of Russell) Everybody was so mad at that cat. They wanted to get the cat back. (A classic revenge plot.) So Jimmy, Basil, Donny, and Jake (reiteration again) made a plan to get the cat back.

So here's the plan. Jake you go get some fish from the market. Basil, Donny, and I will distract the cat while you put the fish in the cat's food bowl. Then the cat will chase us but she will stop to eat the fish. Then we can go get some mouse traps. When she is eating her fish we can sneak up behind her and snap a mouse trap on her tail. Then Donny and Basil come out on your motorcycles and run over the cat's paws. (*this kind of visual action may come from watching Tom and Jerry cartoons*). That cat will never bother us again. And she never did. But Basil Donny, Jake, and I had a funeral for Russell. We invited every mouse. And they came. And all the mice said is we will remember Russell for the rest of our lives. (*Russell is now canonized*)

This writing accomplishes a great deal of “social work”—the constant reiteration of the names of the friends, and the special place given to Russell, whose death gives him a place of honor and significance. The writing draws on literacy sources, most notably the Beverly Cleary series that the author read in class, but also in the opening that places the story in a fictional space. The visual action involving the fish and mousetrap is a staple of cartoons like the Tom and Jerry series. Those who claim that children simply *copy* media plots in their writing typically fail to recognize the orchestration and “remixing” of multiple strands of child culture. As one 1st grader, a Star Wars fan, explained, it was always more interesting when he didn’t “play by the movie.”

Video games can also provide young writers with a scaffold that they can use in their own story writing. For example, a common narrative of these games is to traverse a space that is filled with dangers or obstacles where the protagonist has to use skills and weapons wisely to move from setting to setting, accomplishing “tasks” along the way. This general frame allowed two boys in one 1st-grade class to invent the kinds of dangers that their characters had to face. Abe chose to have his space filled with spikes, lava pans, snakes, and his favorite danger—killer bees. Jason created “lava robots,” a giant robot, and a boiling cauldron of magic potion. In their writing they described, at considerable length, the tactics the protagonist uses to navigate the dangers represented in the drawing. Although the boys mentioned two video games that helped them imagine this space (the *Frogger* series and *Dangerous Hunts II*), they were clearly inventing their own stories using elements from the games.

Examples like these show students using writing for multiple purposes: to consolidate friendship, to improvise with features of the video culture they love, and to use the scaffold and props of this video culture to accomplish the *curricular* objective of developing fluency in writing. The teacher in this particular 1st-grade class, not coincidentally, enjoyed much of the same media the children watched; she was familiar with the Star Wars series and once announced to the class that *Spongebob Squarepants* was one of her favorite shows. When I asked Abe whether he preferred writing true or made-up stories he said he

“wanted it to be fake” because there was no way he could include aliens or lava robots in a true story. With these made-up adventure stories, Abe noted, “kids in the class can bring their imagination out of their bodies.

CHILDHOOD AS PROJECTION

In Richard Ford’s (2006) short story, “How Was It to Be Dead?,” the main character must deal with the fact that his wife’s ex-husband, gone for more than 20 years and legally declared dead, had suddenly reappeared. As he copes with this difficult situation, he offers this advice:

I should say straight out: never tell anyone that you know how he or she feels unless you happen to be, just at that second, stabbing yourself with the very same knife in the very same place in the very same heart that he or she is stabbing. Because if you’re not, then you don’t know how the person feels. (p. 61)

More often, the claim to understand someone else’s reality is a form of projection; one group superimposes its fears, hopes, and personal histories onto another—without decentering or disengaging from one’s own perspective. A young, African American male teenager with sunglasses, wearing a hooded sweatshirt and baggy pants, stands at a street corner lost in the music of his iPod. Such an image can trigger fear among whites who project their worst racial fears onto this scene and keep their distance. The music is surely violent rap about cop killers and rape; African American males in particular are seen as “dry tinder,” ready to act on the slightest suggestion. Any serious analysis of popular culture requires a bracketing of these stereotypes and preconceptions if there is to be any understanding of children’s attraction to it.

This caution is especially important in any examination of childhood, which itself is not a biological fact, but an adult construction. The “good reader” in the *McGuffey’s* reader was not an actual child, but an expression of adult desire for children to act in a certain way. Children’s books are written by adults, and the awards they receive are given by adults. The conception of children as helpless and innocent is a relatively recent cultural construction, in the same way that that in earlier eras children were thought to be innately sinful or, before the seventeenth century in Europe, thought of as young adults. James Kincaid, a scholar of childhood and critical theory, as quoted in Jenkins (1998), writes:

The child was there waiting . . . defenseless and alluring, with no substance, no threatening history, no independent insistences. As a category created but not occupied, the child could be the repositories of cultural needs or fears not adequately disposed on elsewhere. . . . The child carries for us things we cannot carry for ourselves, sometimes anxieties we want to be divorced from and sometimes pleasures so great we could not, without the child, know how to contain them. (p. 4)

This projecting, or depositing of needs, leads to a curious form of public discourse where youth culture is viewed as discontinuous from adult culture. Child obesity is a social problem, yet children eat from the same grocery bag (or at the same fast food restaurant) as their parents. Video game playing is corrupting young males, yet the average gamer is 33 years old (*Top Ten Industry Facts*). It may be unhealthy for so many children to have televisions in their own rooms, but such an arrangement allows parents to choose their own shows without negotiation or distraction. By treating these as distinct “youth” problems, adults can “deposit” or displace anxieties about their own lifestyle onto children, and even construct a narrative of cultural decline.

Clearly, there are elements of popular culture that are harmful to some children and young adults. It is naïve to believe that eating disorders are unrelated to the relentless exposure of girls to the “ideal” of super thinness, or to ignore the role of some rap and MTV videos in glamorizing ghetto street culture for some African American males, or to deny the possibility of video games becoming addictive and isolating, or to accept the current pattern of media exposure in families as entirely healthy. It is equally unproductive, however, to ignore the appeal of this culture and the pleasure children take in participating in it—or to prejudge it as mindless without ever engaging with it. As James Gee once noted, most of the critics of the video game *Grand Theft Auto* “couldn’t get the car out of the garage” (personal communication, 2004).

Several years ago, I remember watching my nephew, then in middle school, play one of the first shooter video games that came under such criticism. The “shooter” moved through a dark warehouse from room to room, with enemy shooters popping out of hiding places. My nephew would change weapons with such fluidity that it almost seemed he was playing a musical instrument. He allowed me a turn, and I helplessly fumbled with the controls, and was “dead” in short order. The appeal, it seemed to me, was not the violence, but the challenge of anticipating a situation and having the right weapon at the right time. At a stage in his life, when little else was in his control, he was master of this domain.

CONCLUSION

The central feature of contemporary American childhood is the omnipresence of media, and a key question for educators is how to deal with this “saturation.” In this chapter we have explored two broadly defined responses—one that views popular culture and literacy as in opposition and the other that is more open to media affiliations and views them as resources for literacy development. In the end, both perspectives are necessary. As Postman (1987) argued in *Teaching as a Conserving Activity*, schools need to make a stand in favor of thoughtful habits of mind, of reasonableness and sensitivity (even civility) that are in opposition to the glibness and superficiality, to the easy flattery, of much that comes over

the popular media. Yet a blanket dismissal of popular culture leads to a defensive, embattled kind of instruction (and parenting). The barbarians are always at the gates—or even closer than that. At the very least, educators and parents need to perform that most difficult of tasks: to attempt to understand, from the child's point of view, the attractions and pleasures of this media culture. By extension, schools should acknowledge that children can draw from the narratives of popular culture, even video games, to develop fluency and storytelling skills. From this standpoint, the hybrid texts that children create—with elements from their multiple worlds—are wonders to contemplate.

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Chapter Twelve

RESOURCES FOR CHILDHOOD LITERACY

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The term *literacy* within education describes the teaching of reading, writing, language arts, literature, and anything else related such as spelling, grammar, or word origins. This chapter includes an overview of the kinds of literacy resources available concerning K-8 classrooms organized as guidelines and suggestions for evaluating resources, especially Internet ones; an overview of national professional organizations, which can serve as a first stop for resources; and specific topics in literacy including action research, reading and language arts, children's literature, vocabulary and word study, writing, and diversity issues. Each topic provides some "best picks" in books, online resources, periodicals, and related organizations.

SELECTING RESOURCES

Because so much information is available through resources in books, journals, or the Internet, it is difficult to determine which ones are worthy. Here are points to consider to be a critical consumer of resources and information.

Who Is the Author? What Is the Source?

When examining any source, good first questions are: Who is the author? What are the credentials of the author(s) or organization? In the case with education, is the author identified as a classroom teacher, principal, or professor? Is the organization identified as a professional society? These questions do

not automatically guarantee credible information, but they are a good starting point.

Facts can be gathered to make an informed decision about the information or resource. A public library and its staff are a great resource, as are school libraries, local colleges or universities, or related nonprofit groups, such as the Parent Teachers Association or Parent Teachers Organization. An Internet search may be appropriate to find out more about a person, book, resource, or organization.

One goal in searching and querying others is to decide if a person, resource, book, or organization is a reliable, unbiased, credible source. Reliable organizations present their beliefs, sponsors, and affiliations. In journals, such information is typically presented either in the beginning or at the end.

What Is the Documentation of Sources?

One way to assess sources is to first examine their bibliography or references. *Any good resource contains references.* Although searchers aren't always familiar with the names of individual(s) or books listed, there are some definite possible problems to look for when browsing a bibliography.

First, are the entries on the bibliography quite a bit older than the resource itself? Imagine a resource purchased in 2006 in which most of the references are from the 1970s. That gap in dates should make any savvy reader beware. It's possible that much work on a topic was done in a particular time frame, but it's also likely that the authors of the resource are not consulting more current works.

Second, are the entries on the bibliography by many people, nearly all by one person, or by just a few people? Although it's possible that there are only a few experts on a niche topic, it's also likely that many have been omitted. The resource developers may have selected only experts who agree with one perspective. Too-narrow references warrant further examination.

Who Published or Sponsored the Resource?

Although there are many conscientious and responsible producers of educational resources, including commercial ones, other publishing companies may have a specific agenda. Here are some questions to consider: Does this publishing company have a reputation for publishing quality materials? What organization or individuals are involved in the company or resource?

Many good resources are published by *professional learned societies*. A professional learned society is one that consists of practicing members who pay dues, is typically nonprofit, and has as a mission to further knowledge and practice in a profession. Such organizations have structures that include elected leadership, systems of peer reviews, and periodicals and publications that inform

those in the field and the public. The mission of such an organization may also be to spearhead professional development of its members and may be responsible to offer, publish, and maintain *standards* within that profession. Education has learned societies that are trustworthy resources (listed in a section that follows).

When considering organizations that are *not* learned societies, evaluation of the related resources becomes more difficult. Many organizations are altruistic, well intentioned, and produce good resources, but other organizations may have a specific nonmainstream point of view.

Knowing more about the organization and its viewpoints is an important aspect of reviewing the resources it offers. Again, public libraries and academic libraries all have reference librarians who can help locate information about publishers and organizations. For example, is a publisher a legitimate educational press with a skilled editorial staff? Or is it a “vanity press” (publishes anything for a fee), or a business owned by an individual or group? Librarians know where to locate who and what (and what money in some cases) is behind an organization.

INVESTIGATING INTERNET WEB SITES

Web sites offer their own particular challenges. Once the Internet came along, people had ready access to a wide range of resources that were previously either unavailable or secured only through a library system. Along with genuinely useful Internet resources, there are thousands of sites that are a business enterprise, or the homework of school children learning to use technology. Many libraries offer handouts for evaluating Internet Web sites. Here are some points to consider that particularly pertain to evaluating Web sites as sources for information and other resources.

Is the Resource a Sponsored Web Site?

Sponsored Web sites that have a “.org” ending are usually reliable resources. This address ending signals a nonprofit society, which rarely has anything other than good intentions. For example, www.pbs.org is a Web site with many resources published by the citizen-supported and nonprofit Public Broadcasting Network.

Similarly, another group of Web sites ends in “.gov.” These sites are the domain of a federally funded agency and generally contain information of interest to the general public, as well as educators. For example, www.loc.gov is the Library of Congress Web site, with a wealth of information on U.S. history. Similarly, www.nasa.gov is a well-constructed Web site with current information about space, shuttle missions, new discoveries, and much more. Many “gov” Web sites are reliable. Consider, however, that government

agencies, too, can have biases that support or criticize the current political climate.

Web sites that end in “.edu” indicate education-related sites, such as schools and universities, and can sometimes be useful sources of information. Many university sites have important accessible information for their students on their Web site that is also of interest to others. At the same time, the “.edu” ending does not ensure that the material is sound, accurate, or current. A graduate student teaching a university class could post handouts for class members that contain outdated or inaccurate material. Professors, too, make mistakes. No one knows, when simply finding materials, how the materials were intended to be used. Caution should be used when consulting “.edu” Web sites.

Web addresses ending in “.com” are commercial. Some commercial sites may still be helpful and useful, but the consumer needs to proceed with caution, keeping in mind that the function of the Web site is to make money. For example, many books and DVDs are sold through www.amazon.com. Amazon does not choose only products that someone agrees are of high quality or conform to certain standards. They sell a vast array of materials. What they do offer are “customer reviews,” which are not regulated in any way but can still offer consumers varied perspectives on a book, film, or product under consideration. Consequently, a Web site like Amazon can be a viable resource when the consumer is conscientious about reviewing possible products of interest.

Is the Information Current?

Not all Web sites are well maintained. A Web site that was posted 10 years ago might still be available and functioning, but it may have had no updating. Material on a Web site needs to be current in terms of up-to-date facts, as well as having updated editions of books, links that actually work, and more.

PROFESSIONAL ORGANIZATIONS

Teaching is a profession guided and governed by learned societies. Professional scholarly organizations play important roles in the advancement and dissemination of knowledge. Professional organizations are probably one of the best and easiest places to begin a search on a particular literacy related topic, with a variety of teacher resources including journals, books, and various online and Web-based materials.

Many organizations offer at least one research-based scholarly journal, often denoted by the word *research* in the title, and perhaps one aimed at the practical application of ideas. These journals are peer reviewed, meaning that all articles published are “blind reviewed” by fellow educators (names and affiliations are removed when being considered) to help ensure quality. Many organizations offer online access to journals for subscribers. Most organizations

offer position statements, which offer the organization's stand on educational-related issues, including controversial ones. These organizations also publish many resources including books, pamphlets, video/DVDs, and more.

Professional organizations hold annual conferences where attendees can learn from fellow educators about current ideas and practices in the field. Most national organizations also have state affiliates, so interested individuals can attend more local conferences. Learned societies serve as a means of professional development and growth for their members. The professional organizations with a specific focus on literacy are listed first followed by organizations that deal with a wider range of literacy-related topics.

International Reading Association (www.reading.org)

For more than 50 years, the International Reading Association (IRA) has served as a membership organization for literacy professionals. Worldwide literacy issues are among the mission of IRA. IRA holds an annual conference in late April/early May and a worldwide conference in a country outside the United States every other year. IRA publishes four journals. Of particular interest for information on students in grades kindergarten to 8th grade are the following publications:

The Reading Teacher: This journal focuses on literacy with children up to age 12. This journal offers monthly articles about literacy teaching.

Journal of Adolescent and Adult Literacy: This journal focuses on teaching *middle grade* students (generally ages 8–14), *adolescents* (generally ages 14–18), and *adults*.

Reading Research Quarterly: This is a research journal reporting on current scholarship about literacy teaching.

Lectura y Vida: IRA also offers a quarterly journal that is written in Spanish.

IRA also offers Web resources providing visitors with information related to issues in literacy and teaching tools to use in classroom practice. In addition, IRA publishes *Reading Today*, a bimonthly newspaper, addressing current issues in education around the country. IRA offers an electronic journal, *Reading Online*, addressing issues of literacy for students ages 5 to 18. Also available are books, videos, and other materials for purchase. The IRA Web site has much to offer to inform the public and policy makers concerned with literacy.

National Council of Teachers of English (www.ncte.org)

Since 1911, the National Council of Teachers of English (NCTE), a learned society of educators, has worked toward advancing English language arts education and is open to anyone interested in that mission, which includes all matters related to reading, writing, language learning, English language teaching, and public policy. NCTE holds an annual conference in November and publishes 12 journals. Of particular interest to those involved in literacy

issues for children in grades kindergarten through 8th grade are the following publications:

Language Arts: This journal offers peer-reviewed articles targeting English language arts-related topics spanning from elementary to middle school.

Voices from the Middle: This quarterly journal is devoted to issues related to the teaching of English-language arts in middle school.

Research in the Teaching of English: This journal is also published four times a year. It accepts original research about English-language arts and focuses on a preschool-adult audience.

NCTE also publishes *School Talk*, a quarterly newsletter focusing on a particular topic, and the quarterly *Classroom Notes Plus* written by teachers for teachers, aimed at teachers of middle, junior, and senior high school students. *Talking Points* is a subsection's online journal for members particularly interested in holistic instruction. Members can receive an e-newsletter, *NCTE Inbox*, providing links to important articles. Updates about the organization are available from *The Council Chronicle monthly newspaper*. NCTE also publishes professional books and teacher resource materials.

National Writing Project (www.writingproject.org)

The National Writing Project (NWP) founded in 1974, is a professional organization devoted to improving writing instruction at all levels of schooling and offers summer institutes for teachers of students in grades kindergarten through grade 12. *The Quarterly*, once a print publication of NWP, is now offered as an online journal. This journal addresses exemplary teaching practices and cutting-edge issues in the teaching of writing. NWP also offers *The Voice*, the project's newsletter, and *E-Voice*, an e-mail newsletter. NWP offers many books and additional publications on its Web site.

College Reading Association (www.collegereadingassociation.org)

Founded in 1958, the College Reading Association (CRA) is another scholarly organization, primarily of reading researchers and professors. CRA publishes a bimonthly research journal, *Reading Research and Instruction*, and also publishes the *College Reading Association Yearbook*, a book of conference proceedings, along with a newsletter twice a year.

National Reading Conference (www.nrconline.org)

Primarily made up of literacy professors and researchers, members of the National Reading Conference (NRC) have a primary interest in literacy research. NRC sponsors an annual conference in December and publishes the quarterly *Journal of Literacy Research*, dedicated to sharing original research and scholarly papers. NRC also publishes the *Yearbook of the National Reading*

Conference. Its Web site has information available to teachers and other interested individuals.

American Library Association (www.ala.org)

The American Library Association (ALA) was founded in 1876 with a goal of promoting library quality and public access to information. Its membership is open to persons and organizations interested in library service. ALA offers an annual conference in the summer. Its Web site offers books, posters, bookmarks, and pamphlets. Visitors can access professional papers on a variety of topics and can engage in online discussions. ALA offers several journals. Of particular interest is *Booklinks: Connecting Books, Libraries, and Classrooms*. This publication helps inform teachers, parents, and other individuals about high-quality books for children and provides interviews with authors and illustrators and annotated booklists on a wide variety of topics.

Association for Childhood Education International (www.acei.org)

Since 1892, this veteran organization and learned society of the Association for Childhood Education International (ACEI) has been devoted to issues related to the improvement of instruction for teachers and others who provide educational services for young children through adolescence. ACEI publishes two journals.

Childhood Education: This journal focuses on school and home-related issues.

Journal of Research in Childhood Education: This journal offers an exchange of research ideas.

In addition, ACEI offers an international conference and several quarterly publications that focus on specific age ranges. ACEI also offers books and various resources for parents and teachers on its Web site.

National Association for the Education of Young Children (www.naeyc.org)

Since 1926, the National Association for the Education of Young Children (NAEYC) has been concerned with the education and care of younger learners. NAEYC offers an annual conference in November and has state affiliate organizations. Of particular interest are the following publications:

Young Children: This journal highlights topics of importance in the field of early childhood education.

Early Childhood Research Quarterly: This is a journal devoted to the dissemination of scholarly work in the field of early childhood development.

NAEYC publishes *Beyond the Journal*, an online journal that features materials not included in the print issues of *Young Children*. It sponsors publications and training materials and offers books, brochures, DVDs, and CDs.

Association for Supervision and Curriculum Development (www.ascd.org)

Founded in 1943, the Association for Supervision and Curriculum Development (ASCD) has been a community of educators with interest in all areas of the curriculum. ASCD offers an annual conference, various events, on-site training, online resources, and various products, including films and DVDs related to professional development in a wide variety of specialties. ASCD includes state affiliate organizations. ASCD publishes *Educational Leadership*, a journal focusing on teaching and learning from prekindergarten through higher education.

SELECT LITERACY TOPICS

Childhood literacy is a vast field with many specialties within it. What follows here are selected topics under the umbrella of literacy. Included are action research, reading and language arts, children's literature, vocabulary and word study, writing, and diversity issues.

RESOURCES FOR ACTION RESEARCH

Professional development is the term for lifelong learning in a profession. All those that enter teaching are expected, by virtue of their professional affiliation, to continue to learn and grow throughout their career. The resources that follow assist teachers of literacy in doing this in general as opposed to one specific area of literacy by supporting and enabling teachers to form and inquire into their own questions unique to their setting or practice. Listed here are some useful resources for those interested in action research:

Best Picks in Books

Holly, M. L., Arhar, J. A., & Kasten, W. C. (2005). *Action research for teachers: Traveling the Yellow Brick Road*. Columbus, OH: Pearson Education.

With a basis of literacy examples, this text takes the reader through some history of research, and then acts as a practical guide through the action research process by enabling teachers to design simple studies in their classrooms to solve or illuminate unique problems. Five different cases are developed through the book, addressing a variety of age ranges and issues.

Mills, G. (2007). *Action research: A guide for the teacher-researcher* (3rd ed.). Columbus, OH: Pearson Education.

This is another concise guide that takes readers through steps in the process to complete the action research experience.

Moore, R. A. (2004). *Classroom research for teachers: A practical guide*. Norwood, MA: Christopher-Gordon Publishers.

This is a slim volume of essentials that takes the reader through the major steps and trials of an action research study.

Patterson, L., Santa, C. M., Short, K. G., & Smith, K. (Eds.). (1993). *Teachers are researchers: Reflection and action*. Newark, DE: International Reading Association.

This book frames teaching as opportunities for inquiry and tells the stories of successful and often inspiring studies conducted by teachers in their own classroom settings. Teachers of all age groups are included.

Online Resources

<http://literacy.kent.edu/>—This State of Ohio funded site features articles for families and teachers, pathways toward getting a GED, various programs available, and much more (note: Most states have their own literacy resource Web site).

<http://www.nelrc.org/>—Similar to the Ohio Literacy Resource Center, this site is a collaborative of all New England states, offering classroom ideas, articles, the ability to find expertise in a niche area, and announcements of regional literacy events.

Periodicals

Action Research—This is a refereed journal published in the United Kingdom that showcases action research, and is sponsored by Sage publications. It is available at: <http://arj.sagepub.com>

Action Research International Journal—This is an online refereed journal of action research with Australian sponsorship. It is available at: <http://www.scu.edu.au/schools/gcm/ar/ari/arihome.html>

Action Research Journal—This is another refereed journal devoted to action research sponsored by Montana State University. It is available at: <http://www.montana.edu/arexpeditions/index.php>

Educational Action Research—This journal was introduced in 2006, and is published by Taylor & Francis, and supported by C.A.R.N. (Collaborative Action Research Network) an organization in the United Kingdom and is available at: <http://www.tandf.co.uk/journals/titles/09650792.asp>

RESOURCES FOR READING AND LANGUAGE ARTS

There are numerous books on various aspects of literacy instruction. These resources help to provide an understanding of both theory and practice.

Best Picks in Books

Braunger, J., & Lewis, J. (2006). *Building a knowledge base in reading* (2nd ed.). Portland, OR: Northwest Regional Education Laboratory's Curriculum and Instruction Services and International Reading Association and National Council of Teachers of English.

Every discipline needs to compile and acknowledge its own body of science that informs further work, research, policy, & practice. This concise volume does just that.

Codell, E. R. (2003). *How to get your child to love reading*. New York: Algonquin Books of Chapel Hill.

In this 474-page book, Codell provides books grouped by different categories of possible interest, ranging from books that have a baking theme, books that deal with sleep, to more traditional grouping of books that are about the Civil War.

Fountas, I. C., & Pinnell, G. S. (1996). *Guided reading: Good first teaching for all children*. Portsmouth, NH: Heinemann.

Fountas and Pinnell focus on guided reading and aspects related to instruction, such as grouping for instruction, selecting, and introducing books.

Fox, M. (2001). *Reading magic: Why reading aloud to our children will change their lives forever*. San Diego, CA: Harcourt.

In this quick, easy-to-read book, Fox speaks to the power of reading aloud to children frequently and with passion. She details what children learn from a simple read-aloud encounter.

Harvey, S., & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding*. York, ME: Stenhouse.

Well described in the title, this book explicates successful strategies that are consistent with theory and research in a teacher-friendly format.

Keene, E. O., & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a reader's workshop*. Portsmouth, NH: Heinemann.

This favorite book of teachers handles comprehension in ways that develop depth with readers and addresses critical thinking about texts.

New Zealand Ministry of Education. (1991). *Reading in junior classes*. Wellington, NZ. (distributed by Richard C. Owen, Katonah, NY).

This is a concise, reader-friendly guide to implementing major reading strategies. It appeals even to the most novice teacher. Graphics contribute to the appeal.

Routman, R. (2003). *Reading essentials: The specifics you need to teach reading well*. Portsmouth, NH: Heinemann.

Routman has written many books; this most recent one details the different kinds of instructional experiences students need to progress to as readers.

Taberski, S. (2000). *On solid ground: Strategies for teaching reading K-3*. Portsmouth, NH: Heinemann.

Taberski discusses in detail her daily instruction in reading. She paints a clear picture of what she does, providing her rationale and research to support her decisions.

Weaver, C. (2002). *Reading process and practice: From socio-psycholinguistics to whole language* (3rd ed.). Portsmouth, NH: Heinemann.

This is a most comprehensive and readable text to help teachers and others understand the process of reading and the practice that applies that understanding.

Online Resources

www.readwritethink.org—This joint venture between the IRA and NCTE provides instructional practices and resources for teachers.

Periodicals

Reading and Writing Quarterly: Overcoming Learning Difficulties. This quarterly specializes in issues and topics related to struggling readers or those who need more

help than is typical. It is available at: (<http://www.tandf.co.uk/journals/authors/urwlauth.asp>).

RESOURCES FOR CHILDREN'S LITERATURE

The backbone of an effective learning environment is high-quality books of all kinds that support curriculum in every way. Resources for Children's Literature are resources to locate and use high-quality books in fiction, poetry, nonfiction, traditional literature, reference, etc.

Best Picks in Books

Gambrell, L. B., & Almasi, J. F. (Eds.). (1996). *Lively discussions! Fostering engaged reading*. Newark, DE: IRA Publications.

This is one of several excellent and popular books on teaching literature with age-appropriate novels. This book has chapters written by various people, including classroom teachers who share successful practices.

Harris, V. J. (Ed.). (1993). *Teaching multicultural literature in grades K-8*. Norwood, MA: Christopher-Gordon Publishers.

One of the leading experts on this topic, Harris offers chapters by most of the well-known professionals in multicultural literature and promotes teaching toward a wealth of understanding and appreciation of multicultural issues.

Hill, B. C., Johnson, N. J., & Schlick-Noe, K. L. (1995). *Literature circles and response*. Norwood, MA: Christopher-Gordon Publishers.

This is a well-organized book for teachers to implement literature circles, a popular strategy in literature teaching using heterogeneous student-led groups reading age-appropriate novels. This book includes strategies for use with students in responding to literature.

Huck, C. S., Hepler, S., Hickman, J., & Kiefer, B. Z. (2006). *Children's literature in the elementary school* (9th ed.). Boston, MA: McGraw-Hill.

This tome has been the mainstay of texts for courses in many children's literature courses, as Charlotte Huck pioneered and advocated knowledge and attention to children's literature in the United States. The book is a comprehensive look at literature for children by genre.

Kasten, W. C., Kristo, J. V., & McClure, A. A. (2005). *Living literature: Using children's literature to support reading and language arts*. Columbus, OH: Pearson Education.

Unlike most other literature resources, this book focuses on teaching literature. Genre information is included, but concise. A database of 13,000 titles is included, as well as other resources on the accompanying CD and a companion Web site.

Kristo, J. V., & Bamford, R. A. (2004). *Nonfiction in focus: A comprehensive framework for helping students become independent readers and writers of nonfiction, K-6*. New York: Scholastic.

In this book, Kristo and Bamford provide an in-depth analysis of nonfiction literature and how this genre can be used throughout the instructional day.

Laminack, L. L., & Wadsworth, R. M. (2006). *Learning under the influence of language and literacy: Making the most of read-alouds across the day*. Portsmouth, NH: Heinemann.

This book is filled with read aloud suggestions and provides a vast collection of book titles with annotations, pointing out subtle nuances in art or language that a teacher or parent might want to share with students.

McClure, A. A., & Kristo, J. V. (Eds). (2002). *Adventuring with books: A booklist for pre-K-grade 6* (13th ed.). Urbana, IL: National Council of Teachers of English.

An NCTE initiative conducted every two years, this book is a compilation of newer titles; annotations are included by categories as a resource for teachers.

Wilhelm, J. D. (1997). *"You gotta BE the book:" Teaching engaged and reflective reading with adolescents*. New York, NY: Teachers College Press/NCTE.

Wilhelm's contributions are substantial to the teaching of children's literature by motivating students to become highly involved with drama and other sorts of deep engagement with texts.

Online Resources

www.childslit.com—This commercial Web site includes book reviews, interviews with authors, links to authors' Web sites, and bestsellers.

www.ucalgary.ca/~dkbrown—This Web site has been around a while. It is well maintained by a Canadian university with an extensive database.

www.carolhurst.com—This is an example of a known literature expert sponsoring a Web site that offers lesson plans, book reviews, activity ideas, a free newsletter, and more.

www.bookhive.org—This library-sponsored Web site offers read alouds of stories and book reviews, recommendations, and more.

www.falcon.jmu.edu—This university-sponsored Web site isn't fancy, but it has lots of information packed into it, including extensive booklists, organized by content topics, and a database.

Periodicals

Dragon Lode—This quarterly scholarly journal is sponsored by the Children's Literature Special Interest Group of the International Reading Association and is available at: www.reading.ccsu.edu/TheDragonLode/default.html

Horn Book—This journal offers articles, editorials, and reviews of children's and young adult's literature and is available at: www.hbook.com

Journal of Children's Literature—This scholarly journal is offered by the Children's Literature Assembly of the National Council of Teachers of English and is available at: www.childrensliteratureassembly.org

Organizations

There are several professional organizations devoted to children's literature and instruction in literacy.

Children's Literature Assembly (CLA)—This is a special-interest group within the NCTE devoted to literature in K-8 classrooms.

Society for Children's Book Writers and Illustrators (SCBWI)—This is a society of writers and illustrators for children's literature and those interested in writing,

illustrating, and publishing. National and local conferences and issues about writing and publishing are addressed. It is available at: www.scbwi.org

RESOURCES FOR VOCABULARY AND WORD STUDY

A popular and important area of literacy is the world of words. Learning about words, decoding them, finding about their origins, learning their meanings—all of these contribute to word study. Here is a list of books devoted to vocabulary.

Best Picks in Books

Bear, D. R., Invernizzi, M., Templeton, S., & Johnston, F. (2003). *Words their way: Word study for phonics, vocabulary, and spelling instruction* (3rd ed.). Columbus, OH: Pearson Education.

This attractive book is popular with teachers, guides orthographic assessment, and identifying patterns in learners. The various chapters recommend word learning strategies for learners in different categories according to these assessments.

Blachowicz, C., & Fisher, P. (2006). *Teaching vocabulary in all classrooms* (3rd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

This research-based book includes strategies, ideas, and Web sites for developing vocabulary in all content areas. Many of the techniques explored in this book have the broader goal of enhancing the acquisition of content knowledge within vocabulary instruction.

Nagy, W. E. (1988). *Teaching vocabulary to improve reading instruction*. Urbana, IL: Eric Clearinghouse on Reading and Communication Skills, and National Council of Teachers of English, and International Reading Association.

In this slim book, Nagy discusses vocabulary's link to reading comprehension and then presents effective and efficient methods of vocabulary instruction.

Rasinski, T., & Padak, N. (2001). *From phonics to fluency: Effective teaching of decoding and reading fluency in the elementary school*. New York: Longman.

These former editors of *The Reading Teacher* include issues such as fluency and using authentic texts, as well as practical strategies like word sorts, language experience, spelling, and teaching advanced word patterns.

Tompkins, G., & Blachfield, C. L. (2004). *Teaching vocabulary: 50 creative strategies, grades k-12*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

This book addresses specific learning needs. The strategies included are time-tested and classroom proven, according to the authors, and include students K-12, and ESL suggestions as well.

Wilde, S. (1997). *What's a schwa sound, anyway?: A holistic guide to phonetics, phonics, and spelling*. Portsmouth, NH: Heinemann.

This is a book about phonics that situates phonics within the linguistic framework including language history and origin. With delightful examples and a bit of humor, this book is popular with teachers and teacher education students, as it has a great deal of substance and is presented attractively.

Online Resources

<http://www.vocabulary.com/VUcrosswordS139L1.html>—Although a commercial Web site, a fair amount of workbook-type activities are offered for free and can

be printed, such as fill-in-the-blank and matching activities. This resource is suitable for students in intermediate and higher grades.

<http://wordsurfing.co.uk>—This is an impressive Web site suitable for English language learners or other language learning. Among other features, an audio pictorial lists many categories of words and each is pronounced when the mouse is placed on the picture. This feature is offered in 11 different languages.

<http://wordorigins.org>—This site is used like a dictionary, alphabetically tabbed on the side, so that users can select a word of their interest and find facts about its origin, including the family of languages from which it evolved.

Organizations

One major resource is the International Reading Association Special Interest Group (SIG) on Phonics. See www.reading.org for links.

RESOURCES FOR WRITING

The teaching of writing has changed since the 1980s with what is termed a more “process approach.” Teachers today want students to write with confidence and develop a way to study well-known authors to better develop their own writing. The following resources approach the teaching of writing as described here.

Best Picks in Books

Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning*. (2nd ed.). Portsmouth, NH: Heinemann.

In this classic book, Atwell takes readers into her classroom as she uses a workshop approach to teaching writing (and reading).

Fletcher, R., & Portalupi, J. (2001). *Writing workshop: The essential guide*. Portsmouth, NH: Heinemann.

This book provides an overview of writing workshop and how to get it started in the classroom in an easy, no-fuss manner.

Graves, D. H. (1994). *A fresh look at writing*. Portsmouth, NH: Heinemann.

Graves, considered one of the pioneers in implementing writing workshops in elementary classrooms, offers a collection of actions for teachers to take to support their teaching of writing.

Noden, H. (1999). *Image grammar: Using grammatical structures to teach writing*. Portsmouth, NH: Heinemann.

This is a book about writing that looks at grammar as a tool for the artistic expression of language. Noden includes lessons that he used in his own classroom.

Ray, K. W. (2006). *Study driven: A framework for planning units of study in the writing workshop*. Portsmouth, NH: Heinemann.

In this book, Ray describes a predictable approach or structure for studying any genre to support students in learning from authors who write those genres well.

Short, K. G., Harste, J. C., & Burke, C. (1996). *Creating classrooms for authors and inquirers*. Portsmouth, NH: Heinemann.

In this lengthy book, the process of writing is integrated with other areas of learning and presents writing as a cycle as it relates to inquiry and the learning community.

Turbill, J. (Ed). (1982). *No better way to teach writing*. Rozelle, Australia.: Primary English Teaching Association.

A logical description of writing in a teacher-friendly format. This book has been a favorite of teachers because it is theoretically sound and practical.

RESOURCES FOR DIVERSITY EDUCATIONAL ISSUES

Educators recognize that today's students vary greatly in their backgrounds, ethnicity, heritage, culture, and learning abilities. The job of educators is to do what's best to meet the needs of all learners. Meeting all learners' needs is dynamically challenging and works only with knowledge about the myriad issues involved. Below are some resources that can help.

Best Picks in Books

Au, K. (2006). *Multicultural issues and literacy achievement*. Mahwah, NJ: Erlbaum.

Au is a leader in multicultural literacy, and this book synthesizes the author's knowledge about diverse cultures in a way that other educators can benefit.

Brown, D. (2002). *Becoming a successful urban teacher*. Portsmouth, NH: Heinemann.

Urban schools in the United States typically have students with diverse backgrounds. African American teachers who have used this book have stated that all urban teachers and their administrators should read this book because Brown does a remarkable and honest treatment of urban issues.

Delpit, L. (1995). *Other peoples' children: Cultural conflict in the classroom*. New York: The New Press.

This book deals with the frequent mismatch between students of African American, Hispanic, Asian American, and Native American cultures and their experiences in schools. Delpit argues that culture matters in school, because schooling practices often collide with students' values and beliefs.

Freeman, D. E., & Freeman, Y. (2001). *Between worlds: Access to second language acquisition*. (2nd ed.). Portsmouth, NH: Heinemann.

Probably the gurus of bilingual education issues, the Freemans offer this and other books of theirs that explain, lead, and evaluate programs and issues related to bilingual or dual language education.

Gilliland, H. (1988). *Teaching the Native American*. New York: Kendall/Hunt.

Of all minority cultures in the United States, Native American children are the ones who are least likely to succeed in schools. Although this is an older book, it's still the best single source of understanding for some very complex cultural issues that impact students' learning.

Minami, M., & Kennedy, B. (Eds.). (1991). *Language issues in literacy and bilingual/multicultural education*. Cambridge, MA: Harvard Educational Review.

This book contains 18 chapters by leading authors in diversity topics. These chapters all previously appeared as papers in the prestigious *Harvard Educational Review* journal and address a wide range of critical topics.

Nieto, S. (2002). *Language, culture, and teaching: Critical perspectives for a new century*. Mahwah, NJ: Erlbaum.

This book by a leader in diversity issues does exactly what it says—it educates the reader about issues of language and culture and why these issues cannot be ignored in schools.

Shor, I. (Ed.). (1987). *Freire for the classroom: A sourcebook for liberatory teaching*. Portsmouth, NH: Heinemann.

Based on the ideals of the late Paulo Freire, a South American educator and thinker, the chapters within address some stunning ideas that raise questions about the status quo in many schools and the issues that are rarely addressed or questioned, especially where minority voices are concerned.

Periodicals

Bilingual Research Journal—This is a quarterly scholarly journal of the National Association of Bilingual Educators and is available at: <http://www.nabe.org>

Rethinking Schools—This is a monthly journal for teachers, which dares to be different and bold with teaching ideas, raising important critical issues and providing material for thinking about topics and teaching differently. It is available at: www.rethinkingschools.org

Teaching Tolerance—This is a magazine that is free to teachers and is published by the Southern Poverty Law Center. It includes books, articles, and ideas to assist teachers who include issues of tolerance and diversity in their teaching. It is available at: www.teachingtolerance.org

Online Resources

Edchange—This is a nonprofit and online source for book titles, and teaching resources promoting multicultural understanding. It is available at: <http://www.edchange.org/multicultural>.

Oyate.org—This Web site is managed by Native American women who review children's literature with American Indian/ Native American topics or images and provide their candid opinions of those books. This site is also a clearinghouse for purchasing books on Native American issues and topics. It is available at: www.oyate.org.

North Central regional educational library—This is a nonprofit resource of papers and resources related to multicultural awareness and practices. It is available at: <http://www.ncrel.org/sdrs/areas/issues/educatrs/presrvce/pe3lk1.htm>

Organizations

The National Association of Bilingual Educators—This professional organization is a learned society dedicated to bilingual education. It is available at: <http://www.nabe.org>

National Association of Multicultural Education—This is an organization that coordinates issues, resources, hot topics, articles, and conferences around multicultural issues anywhere on the globe. It is available at: <http://www.nameorg.org>

International Reading Association Special Interest Group (SIG) on Concerned Educators of Black Students. It is available at: www.reading.org/association/about/sigs_concerned_educators.html

There are a vast number of resources that are related to literacy. The resources listed in this chapter should serve as a quick overview of some of the materials available.

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SET PREFACE

This set of four volumes—*Literacy for the New Millennium: Early Literacy*; *Literacy for the New Millennium: Childhood Literacy*; *Literacy for the New Millennium: Adolescent Literacy*; and *Literacy for the New Millennium: Adult Literacy*—presents a current and comprehensive overview of literacy assessment, instruction, practice, and issues across the life span. Each volume presents contemporary issues and trends, as well as classic topics associated with the ages and stages of literacy development and practice represented in that text. The chapters in each volume provide the reader with insights into policies and issues that influence literacy development and practice. Together, these volumes represent an informative and timely discussion of the broad field of literacy.

The definition of literacy on which each of these volumes is grounded is a current and expanded one. Literacy is defined in this set in a broad way by encompassing both traditional notions of literacy, such as reading, writing, listening, and speaking, and the consumption and production of nonprint texts, such as media and computer texts. Chapters on technology and popular culture in particular reflect this expanded definition of literacy to literacies that represents current trends in the field. This emphasis sets this set apart from other more traditional texts on literacy.

The authors who contributed to this set represent a combination of well-known researchers and educators in literacy, as well as those relatively new to the profession of literacy education and scholarship. Contributors to the set represent university professors, senior scientists at research institutions, practitioners or consultants in the field, teacher educators, and researchers in literacy.

Although the authors are experts in the field of literacy, they have written their chapters to be reader friendly by defining and explaining any professional jargon and by writing in an unpretentious and comprehensible style.

Each of the four volumes shaped by these authors has common features. Each of the texts is divided into three parts, with the first part devoted to recent trends and issues affecting the field of literacy for that age range. The second part addresses issues in assessment and instruction. The final part presents issues beyond the classroom that affect literacy development and practice at that level. Each of the texts concludes with a chapter on literacy resources appropriate for the age group that the volume addresses. These include resources and materials from professional organizations, and a brief bibliography for further reading.

Each of the volumes has common topics, as well as a common structure. All the volumes address issues of federal legislation, funding, and policies that affect literacy assessment instruction and practice. Each volume addresses assessment issues in literacy for each age range represented in that text. As a result of the growing importance of technology for instruction, recreation, information acquisition, communication, and participation in a global economy, each book addresses some aspect of literacy in the digital age. Because of the importance of motivating students in literacy and bridging the gap between students' in-school literacy instruction and their out-of-school literacy practices, each text that addresses literacy for school-age children discusses the influence and incorporation of youth and popular culture in literacy instruction.

In short, these volumes are crafted to address the salient issues, policies, practices, and procedures in literacy that affect literacy development and practice. These texts provide a succinct yet inclusive overview of the field of literacy in a way that is easily accessible to readers with little or no prior knowledge of the field. Preservice teachers, educators, teacher trainers, librarians, policy makers, researchers, and the public will find a useful resource and reference guide in this set.

In conclusion, I would like to acknowledge the many people who have contributed to the creation of this set. First, I recognize the outstanding contributions of the authors. Their writings not only reflect the most informative current trends and classic topics in the field but also present their subjects in ways that take bold stances. In doing so, they provide exciting future directions for the field.

Second, I acknowledge the contributions to the production of this set by staff at Arizona State University in the College of Education. My appreciation goes to Don Hutchins, director of computer support, for his organizational skills and assistance in the electronic production of this set. In addition, I extend my appreciation to my research assistant, Thomas Leyba, for his help in organizing the clerical aspects of the project.

Finally, I would like to thank the staff and editors at Praeger Publishers, who have provided guidance and support throughout the process of producing this set. In particular, I would like to thank Marie Ellen Larcada, who has since left the project but shared the conception of the set with me and supported me through the initial stages of production. My appreciation also goes to Elizabeth Potenza, who has guided this set into its final production, and without whose support this set would not have been possible. My kudos extend to you all.

Barbara J. Guzzetti

PREFACE

LITERACY FOR THE NEW MILLENNIUM: ADOLESCENT LITERACY

This book, the third in the set, is designed around recent reconceptualizations of and positions on adolescent literacy. Until recent funding was given by the U.S. Department of Education for research on adolescent readers, this population of middle school, junior high school, and high school students has been underresearched and neglected in favor of early literacy research and programs. Therefore professional organizations, such as the International Reading Association (IRA) and the National Council of Teachers of English (NCTE), issued formal statements and directives designed to refocus attention on the upper end of the K–12 continuum of students. IRA's report from their commission on adolescent literacy, *Adolescent Literacy: A Position Statement* (1999), provided seven directives for guiding the growth of adolescents into independent readers. NCTE issued a similar document, *A Call to Action: What We Know about Adolescent Literacy and Ways to Support Teachers in Meeting Students' Needs* (2004), authored by NCTE's Commission on Reading. This report outlined the unique needs of adolescents and the characteristics of adolescent literacy. It also provided directives from current research for appropriate approaches to instruction and for fostering literacy for preteens and teens.

The term *adolescent literacy* reflects a refocus that encompasses not only middle school, junior high school, and high school literacy, but also the myriad practices in which adolescents engage that reflect the new literacies. These include adolescents' informal or out-of-school literacy practices such as their engagement with digital literacies and texts; media; indie, or independent,

media; and popular culture. The field recognizes that adolescents engage in multiple literacies. Researchers now often refer to so-called adolescent literacies to signal this shift.

This book reflects this paradigm shift. Three parts focus on issues and trends, best practices in assessment and instruction, and literacy outside the classroom. Each part, ranging from four to eight chapters per part, provides an overview of current trends as well as classic topics in adolescent literacies.

The first part, *Issues and Trends in Adolescent Literacy*, contains chapters whose authors define and explain the new language that signals these changes in the field. This part provides the larger context surrounding adolescent literacy, including the changing nature of adolescents' literacy practices, which calls for the reconceptualization of adolescent literacy in a global and digital world; issues of assessment of adolescent literacy; and the educational policies and legislation that impact young people's literacy development.

The first chapter in this part, by Donna E. Alvermann and Amy Alexandra Wilson, outlines key tenets of the new literacy studies (NLS), a sociocultural approach to literacy based on the theory that reading and writing exist within social contexts and are not simply autonomous and neutral skills. The authors describe the criticisms of NLS and the shifts in researchers' focus from print to media and digital texts, and a focus on how multimodal texts are used in particular situations. This chapter concludes with a synthesis of the history, critiques, and changes surrounding NLS and the implications of these studies for literacy instruction.

The second chapter, authored by Katherine Schultz, Lalitha Vasudevan, and Rachel Throop, situates adolescent literacy within global citizenship. The authors ask how the literacy practices of today's youth assist in reconceptualizing literacy education for global citizenship. They pose the question of how new understandings of adolescent literacy practices help dissolve the boundaries between in- and out-of-school and local and global contexts. They argue for recognition of adolescents as constructors of their own identities, who position themselves as members of multiple and imagined communities in the interplay between the local and the global in their lives online and offline. The authors conclude by considering how education might respond to the global by replacing the nation as a framework for social life and consider new conceptualizations of citizenship.

The third chapter complements the second as it provides a context for adolescent literacy within federal legislation and policy. Bob Fecho, Christine A. Mallozzi, and Katherine Schultz describe how federal educational policy relates to adolescents and the ways in which they read and write. The authors provide the history of federal involvement in educational policy, and literacy policy in particular, and provide a critical reaction to those policies. As an example, they focus on the literacy education policy of the George W. Bush

administration and call into question the apparent lack of local input into that policy. This chapter concludes by describing possibilities for accommodating local involvement in policy formation and implementation.

The fourth chapter, by Terry Salinger, discusses issues of assessment of adolescent literacy. Salinger provides an overview of the different types of reading tests that can be administered to students in middle and high schools. She uses the test specifications and format of the reading tests required in one state to illustrate what students actually encounter on these tests. The chapter pays particular attention to the proactive use of tests scores to identify students who are at risk for failure in content classes due to their weak reading skills.

Part II, *Best Practices in Adolescent Literacy Instruction*, focuses on recent trends in adolescent literacy within classrooms. These include such topics as reconfiguring adolescent literacy instruction and settings in secondary schools to connect to students' in-school instruction and out-of-school literacy interest and practices. This part addresses issues of motivating adolescents in literacy through exemplary young adult literature and examines instructional approaches and materials for literacy instruction in middle and high schools. The final chapters in this part provide an overview of social justice issues, such as gender bias and critical literacy, for the deconstruction of texts.

The first chapter in this part, by Barbara J. Guzzetti and Leslie S. Rush, reviews eight instructional programs designed to improve secondary students' literacy skills, strategies, and abilities. These programs are commercially produced to address students' skills in reading; some include writing and spelling instruction and practice. The authors provide a brief overview of each program, the research support for the efficacy of the program, and the strengths and limitations of each. The chapter concludes with guiding questions for selection of effective literacy programs for adolescents.

The second chapter complements the first by describing literacy labs and instruction for adolescents. David O'Brien discusses considerations for reconfiguring these from two broad perspectives: one based on traditional approaches, focusing on skills and strategies in instruction, and the other based on engagement with print and media texts and the social and cultural dimensions of these practices. After discussing these perspectives, the author provides examples from his current work with programs and labs and offers frameworks for designing reconfigured literacy instruction and literacy labs.

The following chapter describes the unique needs of preadolescents and early adolescents in middle school and defines middle school literacy. K. Denise Muth, Diana J. Durbin, and Shawn M. Glynn provide an overview of the developmental characteristics of young adolescents and the components of successful middle schools and middle school literacy programs. They identify the important roles that middle school teachers and literacy coaches play in successful literacy programs. Their chapter ends with a discussion of how to

assess and revise middle school literacy programs and how to involve all stakeholders in the assessment process.

In the next chapter, David W. Moore illustrates, through a fictional account of a classroom, how instruction in subject matter and literacy can be brought together. Moore defines content literacy and provides a bit of history on how it was recognized as a field. In doing so, he relates the field to assessment and policy and provides a rationale and direction for content literacy instruction.

Following this chapter, James Blasingame Jr. makes the point that young adult books speak to teenagers about the issues that frame their lives. He describes the best young adult literature as genres of all types that provide adolescent readers with characters with whom they can identify, situations that are authentic and recognizable as their own, diverse characters and settings, and accessible language. In doing so, he provides recent examples of the best in adolescent literature and lists the top books and authors in various categories, including short stories, poetry, and realistic fiction.

The next chapter, by Jeannie Swafford, answers the question of what motivates adolescents to engage in literacy-related activities. Swafford describes both intrinsic and extrinsic motivation, the attributes that adolescents ascribe to success or failure, and the achievement and social goals that motivate young people. She examines the relationship between motivation and engagement as it relates to literacy and explains how teachers can create engaging literacy activities and environments built on adolescents' literacy practices outside school.

In the next chapter, James R. King, Steven Hart, and Deborah Kozdras define critical literacy and the importance of teaching students to question and deconstruct the texts around them in multiple ways. They review and analyze the literature on critical literacy and in doing so, they identify six themes that characterize critical literacy for adolescents in school settings. These themes are interrelated in the ways that they describe and delimit what teachers often mean when they are doing critical literacy.

In the final chapter in this part, Heather Blair describes the realities of gender in classrooms and the many complexities of gender and literacy. Blair points out the need for awareness of the realities and myths of gender and offers ways to think about addressing the complexities of boys' and girls' literacy practices. In doing so, she cautions against putting children into rigid categories in performing gender through literacy and challenges past constructions of masculine and feminine literacy practices.

Part III, *Adolescent Literacy beyond the Classroom*, focuses on adolescents' informal literacy practices outside school. This part describes youth culture and young people's engagement with the new literacies such as instant messaging, online journaling, and media texts. This part contains chapters that address home-school connections, support systems, and available resources

for bridging the gap between adolescents' out-of-school literacy practices and their in-school instruction.

In the first chapter of this part, Cynthia Lewis, Kevin Leander, and Xiqiao Wang describe literacy practices associated with digital literacies and literacy practices that youth self-select and find highly engaging. The authors identify four dimensions of these practices that make a compelling case for reconsidering teaching, learning, and engaging in reading and writing in a digital age. Lewis, Leander, and Wang explore the ways in which young people's digital practices inform and extend our knowledge about out-of-school literacies and provide implications for reconceptualizing literacy learning and teaching.

The next chapter provides an overview of young people's engagement in popular culture and links to school literacy and literacy standards. Margaret C. Hagood illustrates how connecting literacy learning to students' social worlds is not a new idea or practice. In doing so, she provides an example from a preservice teacher's analysis of students' interest in popular culture that illustrates the connections between adolescents' out-of-school and in-school literacy learning.

In the next chapter, Eliane Rubinstein-Avila describes the power of after-school literacy programs for youth that broaden our conceptions of literacy as a social practice. Rubinstein-Avila provides a glimpse into four programs across the country that provide urban youth with the opportunities and support to express their concerns and fears and to inquire into issues of importance to them, their peers, and communities and to share those concerns with a broad audience of listeners, readers, and viewers.

In the following chapter, Sharon Kane relates her experiences with her teenage sons in the context of what experts in the field say about family literacy and adolescent literacy. Kane suggests ways to keep literacy alive in the home during a time when children are separating from their parents to find and assert their own identities. She concludes her chapter with a bibliography of books that can bridge differences between the generations and connect adults and teens in innovative ways.

This part and this book conclude with a chapter by Thomas W. Bean and Jennifer Wimmer. These authors discuss adolescent literacy in new times and new literacies and discuss what it means to be literate in the twenty-first century. They offer recommended readings that help advance adolescents' critical literacy through the use of young adult literature and nonprint texts. This chapter concludes with a bibliography of books for adolescents, journals, organizations, Web sites, funding sources for adolescent literacy, policy documents, and more.

Part One

ISSUES AND TRENDS IN ADOLESCENT LITERACY

Chapter One

REDEFINING ADOLESCENT LITERACY INSTRUCTION

Donna E. Alvermann and Amy Alexandra Wilson

Adolescents today live in a world characterized by a vast array of media available at their fingertips and by unprecedented migration between places and peoples, qualities of the modern age made possible by advances in technology. Consequently, an adolescent may speak a heritage language at home, converse in English with friends, receive text messages on a cellular phone, write an analytical essay in school, and peruse multimodal Web sites, all in the same day. The field of new literacy studies (NLS; Gee, 1990; Street, 1995) provides researchers and teachers with a theoretical framework to discuss these diverse communicative practices. Rather than viewing literacy as a set of cognitive skills that reside largely within people's heads, proponents of NLS assert that reading, writing, speaking, and various other modes of meaning making are always inextricably situated within social practices. Accordingly, adolescents' ways of communicating vary from context to context—and rightfully so—depending on the social practices and groupings that comprise the different parts of their lives.

Many school-based reading programs, in contrast, are predicated on a more decontextualized model of literacy, which Street (1984) has termed the *autonomous model*. Instead of viewing reading and writing as being embedded in specific social settings, adherents to the autonomous model define literacy as a set of objective skills that can be generalized across various contexts. According to this view, there exists an all-purpose Literacy with a big *L* and a single *y* (Street, 1995), indicating both its universality and importance. Historically, Literacy was introduced to so-called illiterate societies with the idea that it

would enhance people's cognitive development and contribute to their economic growth, regardless of their current social practices and interests (Goody, 1986). When applied to contemporary education, this model has several ramifications. Students are expected to acquire Literacy in school, oftentimes in settings that are decontextualized, or, in other words, those may not relate to the reading and writing that adolescents do as part of their personal lives and aspirations. In fact, students' individual backgrounds and interests may not matter under this model since Literacy is a general skill that can be applied to everybody. Acquiring this skill will not only help students further themselves as individuals, but it will also advance the societies in which they live, an idea taken from an earlier debate that divided the world into oral and literate societies (Goody, 1986). In short, according to the autonomous model of literacy, the technical aspects of reading and writing can be taught independently of social context, to the benefit of all learners.

Street (1995) challenged the autonomous model of literacy and asserted that this model is not as beneficent and objective as it presents itself to be. In its place, Street proposed an *ideological model* of literacy, under the assumption that all reading and writing occur within larger societal structures of power that position people in different ways. As Luke and Freebody (1997) subsequently noted,

there is no neutral position from which a text can be read or written. All language, all text, all discourse thus "refracts" the world; bending, shaping, constructing particular versions and visions of the social and natural world that act in the interests of particular class, gender, and cultural groups. (p. 193)

Thus, while Literacy may seem as though it is a useful set of skills that transcend specific social contexts, in reality, it reflects the reading and writing practices of a schooled culture, and it positions these practices as being superior to others.

FROM LITERACY TO LITERACIES

In recognition that the so-called superior forms of academic reading and writing cannot meet the communicative needs of all social groups, Street (1995) recommended a conceptual shift from *Literacy* to *literacies*. With this change in terminology, he acknowledged that one Literacy, often associated with the academic literacy of a dominant cultural group, cannot encompass the purposes and methods for communicating that can be found in various social groups. The term *literacies* recognizes that different ways of communicating are equally valid, depending on social contexts: academic literacy becomes just one type of literacy (not the only Literacy), useful in particular situations, while the ability to compose and perform rap music or text message a friend,

for instance, may be equally legitimate types of literacy in other situations and social groups.

While different literacies may be used within different social groups, not all types of reading and writing are accorded the same value within a given society. After conducting an ethnography of people's reading and writing in Lancaster, England, Barton and Hamilton (1998) asserted that dominant literacies, such as those found within schools, are often more legally and culturally valued than vernacular literacies, or those "which exist in people's everyday lives" (p. 10). The researchers further distinguished between the two types of literacy, explaining that dominant literacies were often standardized and associated with formal institutions (usually schools), whereas vernacular literacies were less formalized and were based on the shifting purposes of individuals. While the former required experts who controlled novices' access to knowledge, the latter allowed novices to explore and discover knowledge for themselves. Although Barton and Hamilton's research was conducted before Lancastrians became heavily involved with the Internet, the same principles apply to adolescents' computer use today. Kress (2003), too, has noted the discrepancy between the dominant, favored literacies at school, such as print-based texts, whose medium is the page, and the vernacular literacies of adolescents, such as multimodal texts, whose medium is now the computer screen. Students who read and write on the computer often do so without an adult expert to guide them, under conditions that may be fairly unregulated, while pursuing a host of individual purposes—all criteria that meet Barton and Hamilton's (1998) definition of vernacular literacy.

Lankshear and Knobel (2003) claimed that NLS would not be complete without a consideration of the new literacies made available through information and communication technologies (ICTs). They contended that although one definition of NLS may be a new sociocultural approach to literacy, the field of NLS should also encompass the study of new forms of literacy themselves. The authors asserted that several types of ICTs—such as blogging, for example—enable youth to become active makers, rather than passive consumers, of culture. In effect, adolescents can design and publish the types of texts comparable to those they read, unlike some school contexts, wherein students may only read and process canonized texts in the company of a limited audience. Furthermore, Lankshear and Knobel (2003) challenged the dominance of school literacy, suggesting that new abilities to communicate digitally will become "the literacies against which the validity of school education will be assessed" (p. 31), rather than taking Barton and Hamilton's (1998) position that school-based literacy is the standard by which other literacies are evaluated. Lankshear and Knobel (2003) concluded, therefore, that ICTs should not only be incorporated into the classroom, but they should be done so in such a way that challenges

the so-called deep grammar of teaching practices. For example, rather than using blogs as a way for teachers to post questions and the class to respond with so-called correct answers, students should be able to take advantage of ICTs' multimedia and communicative capacities.

FURTHER CHALLENGES TO THE AUTONOMOUS MODEL

Hull and Schultz (2002), also theorists and researchers working within the framework of NLS, later challenged this categorization between the dominant literacies of school and the vernacular literacies of home life. Although they noted in their case studies that some school settings did not, in fact, validate the multimodal and oral literacies of students from various ethnic backgrounds, Hull and Schultz cautioned against conceiving of school and home literacies as opposing categories. They warned that schools should not be seen as repressive contexts that marginalize students' vernacular literacies, while at the same time, these literacies should not be viewed as frivolous, deviant, or incidental. Hull and Schultz proposed that "rather than setting formal and informal education systems and contexts in opposition to each other, we might do well to look for overlap or complementarity" (p. 3). Accordingly, teachers must familiarize themselves with their students' interests and their communities so that these can be integrated into academic curricula.

In his explanation of Discourses, Gee (1996) also implicitly questioned the notion that school and home are two clear-cut categories within which adolescent literacy must be understood. Gee defined *Discourses* as "ways of being in the world, or forms of life which integrate words, acts, values, beliefs, attitudes, and social identities, as well as gestures, glances, body positions, and clothes" (p. 125). For example, some adolescents may be part of a Discourse of video gamers, which would require them to associate with other gamers online (and perhaps offline), to enact identities in which they appeared knowledgeable about a given game and to communicate using certain language to other people who were also part of that video game's Discourse. Adolescents who failed to do so would not be recognized by others as belonging to the gaming Discourse. Schools, too, are Discourses: they often require students to use certain gestures, such as raising their hands; wear certain clothes, such as those approved by district policies; use certain types of literacy, such as answering textbook-based questions; and enact certain social identities in relation to their peers and teachers.

While playing video games and reading textbooks in school may seem to some to be two oppositional categories of adolescent literacy, Gee (1996) did not recommend viewing literacy in terms of this dichotomy between school and home. Instead, Gee posited that adolescents may participate in a multiplicity of Discourses on any given day, enacting identities that are

not necessarily dictated by school boundaries. For example, they may enact identities as aspiring scientists by wearing goggles and writing hypotheses for chemistry labs in school; by replicating experiments performed on the TV show *MythBusters* at home with their siblings; and by playing the computer game based on *CSI: Crime Scene Investigation*, a popular TV series involving forensic evidence. As this example suggests, school, digital media, popular culture, and family life can be interwoven for adolescents as they enact different identities as part of different Discourses. Furthermore, academic literacy is not one universal skill. Thus, though home literacies and school literacies may be useful heuristics to think about students' reading and writing, this distinction between them may be overly simplistic. Adolescents participate in multiple Discourses, requiring different literacies, with varying degrees of success while they are at school as well as when they leave for the day. In sum, home and school Discourses overlap and compete in complex ways that vary according to the individual.

Street (1995) maintained that robust theories of literacy must conceive of reading and writing as inhering within these Discourses. To illustrate this contextual nature of literacy, he introduced a distinction between literacy events and literacy practices, claiming that both are essential to understanding reading and writing. According to Street, a literacy event is an observable interaction around written language, whereas literacy practices encompass the invisible ideological underpinnings behind why people would participate in the observable event. Street (2001) clarified, "The concept of *literacy practices* attempts to both handle the events and the patterns around literacy and to *link* them to something broader of a cultural and social kind" (p. 11). Thus literacy practices may only be understood as they occur within Discourses; researchers must understand people's values, types of interactions, and ways of enacting identities within a Discourse before they can understand the meaning that any text holds within a social group.

An example may illustrate the difference between literacy events and literacy practices as they relate to the lives of adolescents. Copying notes from the board may be a common literacy event for many young people since this event is an observable interaction around a piece of written language. Simply watching a teacher write on the whiteboard while students take notes may not allow a researcher to understand what this event means to those who are participating in it, however. A teacher may explain this literacy event as a reaction to societal pressures: she must give students as much content knowledge as possible so that they can perform well on standardized tests and so that her school can make so-called adequate yearly progress (AYP), as defined by national guidelines.

To this hypothetical teacher, this literacy event was situated within a political context such as federally mandated testing. In turn, the meaning that the

teacher ascribes to this literacy event is also situated within her beliefs about the nature of knowledge and learning—she believes that knowledge can be transmitted—and these beliefs are themselves situated within the historical traditions of schooling within a particular culture. Thus even an event as simple as writing on a whiteboard is imbued with historical, personal, political, and cultural ideologies. Street (2001) concluded that literacy researchers must therefore use ethnographic methodologies, such as interviewing participants and becoming familiar with communities, to unpack some of the hidden meanings that lie behind observable literacy events.

While these literacy events have previously been defined as interactions around texts with “written language” (Heath, 1982, p. 50), the field of NLS has recently expanded to account for how multimodal texts are used among social groups as well (Pahl & Rowsell, 2006). Working within the NLS framework, Pahl and Rowsell (2006) contended that proponents of NLS should broaden their notions of text to align more with the definition of text proposed by Kress (2003): namely, a text is “any instance of communication in any mode or in any combination of modes” (p. 48). Working from this definition, Pahl and Rowsell (2006) asserted that gestures, images, films, Web sites, music, sculpture, written texts, and various combinations of them should now be vital focal points as NLS researchers continue their sociocultural studies of literacy.

This emphasis on multimodal texts brings with it a renewed interest in the characteristics of texts themselves. Whereas previous NLS researchers focused on the uses of texts and the social models that underlay them, the recent interest in multimodality now draws attention to the features within texts. Indeed, Kress and van Leeuwen (2006) outlined a whole so-called grammar of the image, in which they speculated on how specific components of images can be read so that viewers can ascertain the relations of power that inhere within them. Thus the field of NLS has expanded to include a closer inspection of the properties of texts—including multimodal ones—while still maintaining its emphasis on how these texts are used in social settings.

ANOTHER WRINKLE IN THE REDEFINITION OF ADOLESCENT LITERACY

The social semiotic theory of multimodality that guides the work of Kress and colleagues (e.g., Kress & van Leeuwen, 2006) is concerned primarily with communication in its widest sense—gestural, oral, linguistic, digital, visual, kinesthetic, and so on. Unlike studies of these multimodal texts that attempt to redress the literacy field’s emphasis on written and spoken texts, scholars in NLS (Gee, 1990; Street, 1984) tend to focus on what people in interaction with each other are doing with texts. Underlying NLS is a theory of literacy as social practice that varies across cultures and contexts. In his keynote address

at the National Reading Conference in 2005, which was based partially on his newly published book *Literacies across Educational Contexts: Mediating Learning and Teaching*, Street (2005) provided a rationale for considering the complementarity that underlies both NLS and multimodality. Later, in the foreword that he and Kress coauthored (Kress & Street, 2006) for *Travel Notes from the New Literacy Studies* (Pahl & Rowsell, 2006), both stressed the need for the two approaches to speak to each other:

[While] both approaches look at broadly the same field, from each of the two positions the field has a distinctive look: one that tries to understand what people acting together are doing, the other that tries to understand about the tools with which these same people do what they are doing. Each has defined its objects of study—practices, events, participants on the one hand, semiosis, modes and affordances, genres, signmakers and signs on the other. (p. ix)

To illustrate how these two approaches complement each other, consider the following example. Angel, a pseudonym for one of the several young people with whom Lalitha Vasudevan (2006–2007) worked as a new teacher in an alternative education program in a northeastern U.S. city, was hardly the nonreader (or worse yet, the low literate) that school-sanctioned literacy assessments had labeled him. Indeed, Angel engaged in a variety of literacy practices that made use of different modalities, print being just one of them. Through images (e.g., graffiti tags, photographs, magazine ads), narration, music, Internet searches, and chatting online, Angel and his friends communicated in meaningful ways that were all but invisible to their teachers. Only when Lalitha tapped into Angel's interest in Kawasaki motorcycles was she able to appreciate the orchestration, care, and effort that he showed in compiling a literate profile of himself as a motorcycle enthusiast for the portfolio she required as evidence of his growth academically as a reader and writer. In Angel's case, it was not simply a matter of understanding how he and his friends, acting together, communicated in ways that made use of multiple forms of texts—each with its own affordances and limitations—but also how those social practices shaped (and were shaped by) the very texts that these young people produced.

But cases such as Angel's do not tell the whole story. Indeed, NLS and multimodality are not without their critics, a fact that creates a new wrinkle in redefining adolescent literacy instruction—one worth examining on at least two fronts, the first of which involves the seminal article "Limits of the Local: Expanding Perspectives on Literacy As a Social Practice." Its authors, Brandt and Clinton (2002), while self-acknowledged admirers of the NLS framework, claimed nonetheless that support for this model has gone too far. According to Brandt and Clinton, in rejecting literacy as a deterministic force, critics of the autonomous model of literacy have overreacted to the point of virtually ignoring the material dimensions of literacy. In other words, situated social

practices aside, there are real-world consequences for people (including Angel and his teacher) if they fail to take into account that what often passes as local practice may in fact have its origin in distant decisions fueled by unequal power relations.

For example, consider the possibility that by overemphasizing or exaggerating the influence of local literacy practices, teachers and researchers alike may be reifying a view of adolescents and their literacies that positions them in potentially harmful ways—one instance being practices that do not provide ready access to the cultural capital (something that confers power and status, including rigorous academic training) necessary for succeeding in today's highly competitive job market. Literate and economic pathways that lead ultimately to low-paying jobs and limited upward social mobility may be globally driven (Luke & Carrington, 2002), yet they carry local consequences. As Brandt and Clinton (2002) pointed out,

literate practices are not typically invented by their practitioners. Nor are they independently chosen or sustained by them. Literacy in use more often than not serves multiple interests, incorporating individual agents and their locales into larger enterprises that play out away from the immediate scene. (p. 338)

In warning that “when we use literacy, we also get used,” Brandt and Clinton (2002, p. 350) draw on Latour's (1993) work to argue for treating literacy not simply as an outcome of local practices but as a thing—an actor, a participant in those practices. Treating literacy in this manner does not assume a dichotomy between local and global literacies—quite the opposite, in fact. As Brandt and Clinton (2002) emphatically stated, “No larger forces or larger social structures sit out somewhere in space bearing down on us: All is made of local interactions” (p. 347). Viewing literacy as a participant in those interactions, however, eliminates the notion of human agency being the sole determiner of what transpires in any literacy event.

A second front to the wrinkle on redefining adolescent literacy instruction involves a critique of multimodal texts. Sometimes erroneously viewed “as a threat to or impoverishment of the print-based canon or traditional means of composing” (Hull & Nelson, 2005, p. 226), these texts figure prominently in the research on teaching and learning of literacy in today's digitally mediated landscape. For example, Lewis and Fabos (2005) drew on a richly nuanced data set that included audiotaped semistructured interviews and videotaped instant messaging (IM) sessions in which seven youths ranging in age from 14 to 17 talked about the everyday functions that IM served in their lives. The researchers wanted to understand how young people's social identities shaped and were shaped by IM, an online literacy practice that their review of the literature showed to be inherently multimodal. Described as talk digitally written and performed, IM, like other forms of chat, is thought to blur differences between

writing and speaking as two distinctive modes of communication. It is perhaps the performance of this multimodal text that concerns educators the most. Acknowledging that this seemed to be the case, Lewis and Fabos (2005) called for a refocusing to take in the forest as well as the trees:

We have provided a detailed account of our participants' uses of IM and have described the changing epistemologies and attendant practices associated with IM use (multivocality, performativity, resourcefulness, hybrid textuality, and new forms of circulation and surveillance). As a community of literacy educators and researchers, if we let our "generational anxiety over new forms of adolescent and childhood identity and life pathways" (Luke & Luke, 2004, p. 105) get the best of us, if we mourn the loss of print literacy as we think we once knew it, then we may find ourselves schooling young people in literacy practices that disregard the vitality of their literate lives and the needs they will have for their literate and social futures at home, at work, and in their communities. (p. 498)

Other researchers, too, have found reasons to conclude that while multimodal texts present a way of making different kinds of meaning, they are not the threat to print-based composition or traditional means of schooling that some critics might have imagined. A case in point is a study in which three female high school zinesters used multimodal texts to teach an adult in that study about various social realities and literate practices in the world of punk rock at the same time that they designed a print-based brochure and arranged tutorial seminars that closely resembled traditional classroom learning. Recalling one particular tutorial given by Saundra (a pseudonym), Guzzetti (2004) wrote,

Saundra created a brochure for us, which she referred to as "a sort of *Punk Rock for Dummies*," in which she defined and explained the various genres, bands, and artists of punk rock, complete with a quiz to test our knowledge. She invited me to her apartment, where she had set up a seminar format at her kitchen table, with handouts of lyrics of punk rock songs, liner notes from CDs, and tape recordings she had made of various styles of punk rock. She had her stereo handy so that she could demonstrate the different genres as she explained them. . . . As a long-time member of a punk rock band, Saundra is particularly knowledgeable about the various genres of this music, including Oi!, hardcore, grindcore, and street punk, each of which she painstakingly illustrated with excerpts from audiotapes she created and CDs she possessed. (p. 10)

In sum, as just illustrated, multiple modes of representing and making meaning are proliferating in these new times, but there seems little justification for generational anxiety about the status of more traditional forms of reading and writing. If anything, as Hull and Nelson (2005) noted, today's youth, by participating in the design of multimodal texts, could well be invigorating a literate tradition that has stood the test of time and shows no sign of abatement simply because the available means of signification are multiplying.

THE TIMES THEY ARE A-CHANGIN' (OR ARE THEY?)

Although Bob Dylan's (1963/1991) lyrics remind us that being critical of what one does not understand about new literacies and multimodality is insufficient reason for standing in the way of their implementation, it is also the case that efforts to redefine adolescent literacy will be in vain if its roots are ignored. More than two decades ago, in tracing an historical exploration of content area reading instruction, Moore, Readence, and Rickelman (1983) identified five issues that confronted educators at the start of the 1980s but that were rooted in earlier times. These issues included questions concerning the following: (1) locus of instruction, (2) reading demands of various subjects, (3) approaches for helping students acquire information, (4) types of reading material, and (5) age level at which content area reading instruction should be the focus.

Nearly 25 years later, those same questions are being asked, but this time largely as a result of a federal mandate for closing the literacy achievement gap by the year 2014. Whether one agrees or disagrees with the No Child Left Behind (NCLB) Act (2001) and its several stipulations for closing that gap—including the controversial AYP guideline—the fact remains that a chapter on redefining adolescent literacy instruction would be incomplete without giving due consideration to NCLB. Therefore what follows is a reexamination of the issues that Moore et al. (1983) raised, this time through the lens of NLS as mediated by the work on multimodality and the NCLB guidelines.

Locus of Instruction

Oddly enough, where responsibility for content area reading instruction rests is an issue that still lacks resolution. Although from an NCLB perspective, such responsibility would seem to rest with classroom teachers, whose training in the core disciplines (e.g., the sciences, social sciences, mathematics, and English language arts) makes them knowledgeable about the content that adolescents need to learn to meet state standards and pass high-stakes tests (two common measures of AYP), in reality, too few content area teachers at the middle and high school levels are sufficiently prepared to teach students the reading and writing skills necessary for comprehending their subject matter texts. Despite numerous studies and reports calling for functional, content-centered classroom instruction to assist adolescents in learning from (and with) their assigned texts, research has demonstrated time and again the difficulty of infusing such instruction into secondary school classrooms (O'Brien, Stewart, & Moje, 1995). Pull-out programs taught by reading specialists—although these are even rare in most secondary schools—are limited in what they can offer learners due to the decontextualized nature of skills instruction.

Theoretically, from a NLS perspective, the appropriate locus of instruction would also seem to be the content area classroom, primarily because the teacher in that classroom would need to take into account various linguistic, sociocultural, and situation-specific aspects of instruction intended for a diverse group of students. Integrating language, culture, and content means being able to adjust lessons so that instructional decisions reflect both subject matter expertise and knowledge about students' language and culture. Because content area teachers are expected to manage whole-class and small-group instruction as part of their daily routines, they would seem to have more opportunities than reading specialists (working in tutorial settings) to act instructionally on the NLS assertion that reading, writing, speaking, and various other modes of meaning making are embedded in, and enabled by, shared social group experiences.

Finally, the new literacies are making it imperative that content area teachers guide students' navigation of, and learning from and with, the Internet and other information and communication technologies. Because these technologies present their own sets of challenges quite separate from those associated with print media, becoming adept at orchestrating complex learning opportunities is but one skill classroom teachers will need in a world that is fast becoming so knowledge driven that students who have access to the same resources as teachers may know as much if not more than their teachers about particular topics and subject areas of study (Leu, Kinzer, Coiro, & Cammack, 2004).

Reading Demands of Various Subjects

Of particular note are the numerous studies in the first half of the 1900s that investigated the perceived reading demands of various academic disciplines. These were largely reports of research on eye movement analyses, vocabulary frequency counts, and correlations among reading achievement tests aimed at determining whether differences in reading demands were content-specific or generic (Moore et al., 1983). Later, with the emergence of a model for designing and interpreting research that hypothesized differences due more to the nature of text, task, learner characteristics, and learner strategies than to subject matter areas per se, interest in the variation of reading demands across disciplines lessened. That remains the case, perhaps because there are few, if any, formal opportunities for communicating across the content areas. Writing metaphorically about the separation of subject matter in a typical U.S. high school curriculum, Rothstein and Rothstein (2007) noted the following:

Traditional academic disciplines in high schools often resemble silos. The grain stored in one never interacts with the grain stored in another. The discrete [disciplinary curriculum] that frequently define[s] the day of high school students resembles

no known line of work other than teaching in high schools themselves. Once out of high school, students must quickly adapt to a world where the boundaries that defined their high school experience barely exist. (p. 21)

Ironically, both a NLS perspective and studies focusing on multimodal learning would seem to suggest that different academic disciplines might indeed offer variations in social contexts and concomitant literacy practices, to say nothing of the different affordances potentially available when one looks to texts used in disciplines outside those that privilege spoken or written modes of communication. Adolescents living in what Hull and Nelson (2005) described as an “age of digitally afforded multimodality” (p. 224) have at their disposal multiple modes for meaning making—modes that transcend any single academic discipline and that combine gesturing, speaking, writing, music, sound, images, and movement. Given such an array, it is not difficult to imagine a time in the very near future when literacy practices devoid of these multimodal representations will seem as antiquated as the black-and-white, silent movies of yesteryear. Certainly no serious attempt to describe ways in which adolescent literacy instruction is being redefined by digital media should omit speculation about potentially different reading demands for different academic disciplines. For if content determines process, as we believe it does, then no end of “semiotic relationships [may exist] between and among different, copresent modes” (Hull & Nelson, 2005, p. 224).

Finally, as any proficient reader knows, the structures of academic disciplines (e.g., history, science, mathematics, literature) differ greatly, as do ways of representing such structures in the content area textbooks a student reads. Ways of talking about science, engaging in science experiments, and being recognized as a scientist are vastly different from ways of talking about history, writing a history book, and being recognized as a historian. Discourses associated with different academic disciplines make it imperative that a reader approach any given text by asking critical questions about whose message is being conveyed (or silenced), by what means, and for what purposes.

Approaches for Helping Students Acquire Information

NCLB launched the most sweeping changes in federal education policy since the landmark Elementary and Secondary Education Act of 1965. Although public attention has focused most often on the law’s implications for elementary and middle schools, NCLB also provides a framework and needed resources for improving overall proficiency and closing persistent achievement gaps among high school students of different races, ethnicities (including language backgrounds), and family incomes as well as gaps between students with disabilities and their peers. Under NCLB, every high school in every

state, regardless of whether it receives federal funds, must establish yearly progress measures and publicly report its progress in meeting them. Attention must also be given to educational practices that are rooted in research-based methods (Office of Vocational and Adult Education [OVAE], 2006).

Despite the high priority given to research-based instructional methods, it is largely unclear, with the exception of a handful of comprehension strategies approved in the year 2000 by the National Reading Panel (NRP), what practices can be authoritatively labeled as “effective.” Nonetheless, according to a regularly updated U.S. government–sponsored Web site (OVAE, 2006), “schools nationwide are exercising innovative and noteworthy practices in responding to the challenge set forth under NCLB, and addressing the needs of striving students.” With this level of assurance, which is weak at best, and knowing that the database underlying the NRP-approved comprehension strategies systematically omitted studies involving second language learners as well as all qualitative research studies, it goes without saying that any opportunity for understanding the social contexts in which the strategies were tested has been lost. This fact alone makes it virtually impossible to assess the relevance of a NLS approach for addressing issues related to effective instructional approaches in the content areas. The same can be said for assessing the relevance of a multimodal approach to literacy teaching and learning. The studies on which the NRP-approved comprehension strategies are based were all designed with written language as the single mode for representing the content tested therein.

Types of Reading Material

From their historical exploration of content area reading instruction, Moore et al. (1983) concluded that teachers regularly confronted two main stumbling blocks related to reading material: namely, the difficulty of balancing the type of material (literary vs. informational text) and the amount of reading required (a single textbook vs. multiple texts). We find it encouraging that on this issue at least, NLS and studies of multimodal learning are seemingly having an impact on how adolescent literacy teaching and learning is being defined currently. As Alvermann (2001) reported in a review of the literature on effective adolescent literacy instruction commissioned by the National Reading Conference, many adolescents of the so-called Net Generation are finding their own reasons for becoming literate—reasons that go beyond reading to acquire school knowledge of academic texts. This is not to say that academic literacy is unimportant; rather, it is to emphasize the need to address the implications of youth’s multiple literacies for classroom instruction. Adolescents’ interests in the Internet, digital media, and various ICTs (e.g., chat rooms, where people can take on various identities unbeknown to others) suggest the need to teach

youth to read with a critical eye toward how writers, illustrators, and the like represent people and their ideas—in short, how individuals who create texts make those texts work, regardless of the mode and medium.

At the same time, a multimodal approach supports teaching adolescents that all texts, including their textbooks, routinely promote or silence particular views. This, in turn, suggests the importance of teaching youth to think more critically about what they read, write, view, or hear than is possible within a transmission model of teaching, with its emphasis on skill and drill, teacher-centered instruction, and passive learning. Alternatives to a transmission model include participatory approaches that actively engage students in their own learning (individually and in small groups) and that treat texts as tools for learning rather than as repositories of information to be memorized and then all too quickly forgotten. Because NCLB guidelines do not currently specify—at least not at the middle and high school levels—a preference for types of reading materials or the number of texts used (single text vs. multiple, supplementary texts), it is impossible to analyze NCLB's impact on this particular aspect of adolescent literacy instruction.

Content Area Reading Instruction Age Level

Questions regarding whether students in grades lower than the middle and high school levels are being neglected in terms of the instruction they receive in content area reading—while an issue during the time in which Moore et al. (1983) reviewed the literature—are less prevalent today, possibly for two reasons. First, the NCLB guidelines clearly require regularly scheduled assessments of all students' content knowledge in the core academic areas (English language arts, mathematics, science, and social studies). They also require the establishment of state standards for teaching and learning in the content areas across grade levels. Second, age differences are becoming less of a dividing line than they have been in the past. For example, Lesko's (2001) work on the cultural construction of adolescence has largely contradicted much of the earlier writings on biological determinism as it relates to young people's conceptual and social development. Arguing that sociohistorically informed cultural practices better illuminate how age categorization is achieved, Lesko's thinking would seem to resonate with that of scholars working in NLS who stress social context over cognitive and biological determinism. In sum, given both a practical and theoretical impetus for redefining adolescent literacy instruction, it would seem pointless to dwell further on issues related to age.

SOME LINGERING REFLECTIONS

Increasingly, scholars whose work has implications for redefining adolescent literacy instruction have demonstrated that changes in textual form and

function, such as those associated with multimodal teaching and learning, can lead to new literacy practices (Lankshear & Knobel, 2003). What has not been centrally recognized, however, is the challenge that such changes present to teachers and researchers alike. Literacies that are in constant flux require new epistemologies as well as new methods (Leu et al., 2004). When literacies are considered within the framework of multimodality and NLS, researchers and teachers must recognize the legitimacy and importance of multiple modes of communication as they are used in different social settings. No longer can one academic Literacy, based on reading and writing certain types of printed texts that are associated with certain social groups, suffice to prepare students for a world that is increasingly characterized by shifting populations and technological advances, for accompanying these worldwide changes (at least in some corners of education) is an epistemological change: a shift from believing that knowledge is communicated through one Literacy to believing that because literacies are socially situated and highly contextualized, written and spoken language should no longer be privileged over other modes of communicating.

This epistemological change is not as transparent as it might seem on first glance, and it brings with it opportunities for pouring new wine into old bottles. For example, although teachers may incorporate a multimodal approach into their instructional repertoires by encouraging students to include images as part of an assignment, they may only grade and comment on the print component of the text. As a field, literacy educators, teacher educators, and researchers alike simply do not have adequate training in interpreting modes outside writing and speaking. Work in NLS charges all educators to seriously consider the various modes in which students make meaning, to take note of the relationship between these modes, and to incorporate the principle of *design*, or the ability to communicate aptly in modes that fit the situation, into existing curricula. Furthermore, because NLS researchers challenge the notion that literacy can occur in decontextualized settings, these multimodal texts must be incorporated across the curricula in ways that are authentic to each respective discipline.

In short, when multimodality and NLS are coupled, they call for a toppling of the exclusive privileging of print in schools. To be sure, the academic reading and writing of printed texts are a vital component of school curricula, and students who acquire this Literacy may be better prepared to communicate and participate in elite social groups than those who are not skilled in this Literacy. Redefining adolescent literacy instruction in a digital age, however, entails an acknowledgment that print is only one means of communication connected with a dominant social group and that multimodal texts may be more apt for different audiences. Teachers who take this stance toward adolescent literacy instruction will not be content with preparing students for print-based, multiple-choice tests; instead, they will insist on designing, reading,

challenging, and questioning multimodal texts with their students under the expectation that their students in turn will be better equipped to continuing learning in an increasingly complex and diverse world.

Moreover, for teachers who assume that different types of texts are valid in different contexts, classroom instruction can no longer entail advocating academic literacy at the expense of students' vernacular or everyday literacies. Rather than marginalizing some students' oral traditions or expertise in digital technologies—or worse, considering these literacies as being antithetical to school—these teachers will seek ways to draw from adolescents' multiple literacies and connect them with classroom learning. In fact, rather than viewing home literacy and school literacy as being competitive in nature, teachers will view them as complementary and supportive of students' literacy growth overall.

The onus of preparing students for a rapidly changing world cannot rest on teachers and schools alone, however. It is not enough simply to issue complaints or mandates for them to start validating new literacies and new ways of thinking about what constitutes a text. On the contrary, teachers deserve up-to-date information in their literacy education courses. They also deserve ongoing quality professional development, with ample support for incorporating the new literacies and multimodal designs into their curricula. Teachers may understandably hesitate to begin a serious study of nonprint texts in their classrooms if these texts are not fully championed by district or state curriculum guidelines. Furthermore, in the era of NCLB, in which schools are required to meet AYP based on more stringent standards, teachers may feel unduly pressured to prepare students for pen-and-pencil tests, to the point of neglecting what they learned in their professional development courses. Thus, while teachers are absolutely essential to the quality of students' learning experiences, they should not be forced to shoulder sole responsibility for their students' literacy or alleged lack thereof. Instead, policy makers, legislators, curriculum writers, administrators, researchers, and teacher educators all play a role in supporting teachers as they work through the complexities associated with redefining adolescent literacy instruction.

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Chapter Two

ADOLESCENT LITERACY TOWARD GLOBAL CITIZENSHIP

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Historically, literacy has been used both to deny and promote citizenship. The privileges associated with literacy, including citizenship, have often been defined as rights for only certain kinds of people, including certain adolescents. For instance, black slaves in the United States were explicitly kept from learning to read and write to prevent them from participating as full citizens. Stories abound of children, adolescents, and adults secretly learning to read and write to gain freedom. In response, activists found ways to teach literacy to disenfranchised groups so that they could fully participate as citizens. For instance, Paulo Freire's (1970) literacy work with peasants in Brazil has been inspirational to educational movements around the world.

A vivid illustration of an educational response to the denial of literacy and citizenship is the Highlander Folk School in Tennessee, founded by Miles Horton in 1932. Begun as a center for training labor leaders in the southern United States, the school developed citizenship schools in response to the U.S. civil rights movement in the 1950s and 1960s and the passage of the National Voting Rights Act of 1965 (Horton, 1998). These citizenship schools spread quickly throughout the South, drawing in civil rights leaders such as Martin Luther King Jr. and Rosa Parks. Among their goals was the commitment to teach blacks to read and write so that they could vote and participate fully as citizens in U.S. society. Horton and others—such as the organizers of the Southern Christian Leadership Council, the organization that eventually took over the work to establish citizenship schools in the southern United States)—defined literacy broadly; they understood the importance of using critical literacy practices to

raise questions about social, political, and economic arrangements. This response was one of many that connected literacy to citizenship and participation in democratic processes at the local and nation-state level.

In comparison to the civil rights era, today, we live in a world where our local contexts are increasingly influenced by global networks of relationships (Suaréz-Orozco & Qin-Hilliard, 2004). As a global society, we come into contact with ideas, objects, and people from outside our local contexts far more frequently than we ever have in the past (Appiah, 1998). Generally, this phenomenon is described as globalization, and it is often connected to the notion that the global is replacing the nation-state as a framework for social life (Rizvi, 2000). World migration and the political and economic components of globalization are challenging conceptions of citizenship around the world (Banks, 2004). The recognition that we live in a global society suggests that we think about education more broadly and, specifically, that we address adolescent literacy learning in schools and beyond.

While the citizenship schools during the civil rights movement helped conceptualize the literacy practices needed for citizenship of blacks in the southern United States, in this chapter, we approach the question of citizenship from another angle, asking, How can the literacy practices of today's youth help us reconceptualize literacy education for global citizenship? Furthermore, how can new understandings of adolescent literacy practices help dissolve the boundaries between in- and out-of-school and local and global contexts? Learning from youth practices to reconceptualize literacy offers promise for reimagining schools and educational spaces.

Globalization has led scholars to reexamine the relationship between citizenship, identity, and education and to reconceptualize the role of schools in our increasingly global world (e.g., Torres, 2006). We join this conversation through a consideration of the role of schools, and particularly the role of literacy, in producing a global citizenry. While youth are central to many of the processes of globalization, analyses of youth and youth culture are conspicuously missing from discussions of globalization (Maira, 2004). We argue for the importance of placing youth's global literacy practices at the center of reclaiming and redefining the role of schools, especially in an age when media is increasingly connected to youth identity formation (Kenway & Bullen, 2006). We begin with an exploration of the relationships between literacy, citizenship, and education. Next, we consider current literacy practices of adolescents as a basis for reimagining schooling in a globalized world.

RECONCEPTUALIZING EDUCATION IN A GLOBAL SOCIETY

Schools have traditionally been viewed as places for socialization and the production of citizens for the nation-state (Ladson-Billings, 2004). In our

increasingly global world, educators can no longer afford to pursue the narrow vision of education as preparation of citizens for a single country or locality. In the United States, the events of September 11, 2001, have been identified as a clarion call for a different kind of education as well as the creation of international political, legal, and economic systems (Noddings, 2005). Now more than ever, it is clear that we need to rethink schooling, notions of citizenship, and, especially, what it means to be a citizen in a global society.

As citizenship is increasingly conceptualized on a global scale, we wonder, What are the possibilities that exist in schools for preparing adolescents for global citizenship? As Reid (2005) explains,

public schools represent the only spaces in our society where young people from a wide range of cultures, experiences, and backgrounds can learn with and from one another on a systematic basis, developing the understanding, respect, and tolerance that is the lifeblood of a cosmopolitan democracy. (p. 291)

Certainly much possibility for learning tolerance and respect exists in public schools. This possibility, however, is too often exchanged for the goal of assimilation when schools focus solely on the preparation of citizens for a single nation-state. In an ideal world, classrooms would be the diverse sites that Reid describes, offering possibilities for envisioning education toward global citizenship. Realistically, this may not always be the case. The Internet and the global practices of youth outside of school can serve as a rich resource for democratic education when public schools themselves fail to provide this opportunity.

Up until recently, people were born, grew up, went to school, worked, and died in the same geographical location, with little contact with outside communities (Suaréz-Orozco & Qin-Hilliard, 2004). Today, local contexts are increasingly part of and influenced by global networks of relationships, making it difficult to separate the local from the global. According to Suárez-Orozco and Qin-Hilliard (2004),

the lives and experiences of youth growing up today will be linked to economic realities, social processes, technological and media innovations, and cultural flows that traverse national boundaries with ever greater momentum. These global transformations . . . will require youth to develop new skills that are far ahead of what most educational systems can now deliver. (p. 2)

Put simply, we must rethink schools and schooling. Many have argued for placing youth and their practices at the center of reenvisioning schools, suggesting that we develop pedagogies based on the resources, interests, and knowledge that youth bring to school. Through their participation in global networks, youth have found multiple ways to take on various identities and define themselves as global citizens outside of school. Just as the work of

Highlander and the Southern Christian Leadership Council citizenship schools occurred largely outside of formal educational settings, today, youth's literacy practices outside of school are increasingly shaping their citizenship identities. A critical question is how these new literacies, initiated by youth, can help educators rethink the role of schools in preparing youth for global citizenry.

Recent discussions of youth as participants in a global society (Skellton & Valentine, 1998) suggest that the texts youth have access to, refer to, and produce are situated in global discourses. Video games are designed by adolescents who communicate through instant messaging in a multitude of languages (Leander, 2005). Youth are spending copious amounts of time in online virtual world gaming environments, such as *Second Life* and *World of Warcraft*, where the online community represents a plurality of ages, backgrounds, affiliations, and practices. The last few years have seen a growth in youth-produced media and texts, both nationally and internationally, including zines and e-zines or students' self-publications, podcasts, digital stories, and documentaries. Much of this work occurs outside of schools, however, and within organizations that are expressly concerned with fostering the arts (Heath, 1998) or that provide opportunities for young people who have been marginalized by the traditional educational system (Kincade & Macy, 2003). If youth are engaged in literacy practices and media production that are simultaneously local and global, and that span in- and out-of-school contexts, we need to ask, How can schools and educational spaces be reconceptualized to recognize and build on the multispatial nature of youth practices?

When adolescents play games on computers located in the local space of an Internet café and engage peers in global conversations using what is now being called global English (A. Luke, Luke, & Graham, in press), they are locating their literacy practices in both local and global contexts. Documenting a Chinese immigrant youth's participation in an Internet site that included a transnational group of peers led Lam (2000) to raise questions about literacies, transnational identities, and "cultural belonging" (p. 457). Lam described how this immigrant youth used the Internet to develop a range of discourse practices and online identities with a transborder network of peers. Although the English spoken in his classroom seemed to contribute to his sense of marginalization, the English he acquired through the Internet was a global English of adolescents' popular culture and contributed to a sense of belonging. The textual and semiotic tools of the Internet contributed to his development of literacy practices that could be transferred to school tasks, while affording him new identities. His success in a global online community stands in stark contrast to his struggles in school.

We wonder about the implications of this and other stories of adolescent accomplishments out of school for reimagining schools and educational

contexts (Hull & Schultz, 2002). This work suggests a broader and critical conception of literacies in and out of school that reflects students' relationships to multiple target languages and communities (Lam, 2000). It highlights youth involvement with literacy practices that are simultaneously local and global. It also emphasizes the ways that school literacies are too often removed from the everyday lives and passions of today's youth. Finally, it demonstrates the way adolescents can claim agency through their central roles in the global circulation of media (Jenkins, 2004). While youth may lack traditional forms of power in shaping their own educations, through their literacy and communicative practices, today's youth are claiming a new power: a power of presence (Sassen, 1998).

This story further demonstrates that while youth are developing global Englishes to communicate across traditional borders through the Internet and new media, these variations are developing outside of the confined spaces of classrooms. The interplay of the local and the global "makes possible plural or hybrid identities, challenging the assumption that people must identify with a single imagined community" (Block & Cameron, 2002, p. 7). This has implications not only for reimagining schools, but also for rethinking literacy research. In response, Blackburn and Clark (2007) called for a more grounded approach to the examination of the relationship between the local and global by looking toward educational contexts that include, but are not limited to, schools. Educators and researchers working in and out of schools might take into account youth's hybridized identities and their literacy practices that are simultaneously local and global to reimagine education to address the new demands of our globalized society.

CONCEPTUALIZING EDUCATION FOR A GLOBAL CITIZENRY

We have argued that adolescents today often construct their identities as hybrid and position themselves as members of multiple imagined communities, largely due to the interplay between the local and the global in their daily lives. We have also pointed out the ways in which schools are necessarily concerned with the production of citizens, and that as the global replaces the nation-state as a framework for social life, new conceptualizations of citizenship become necessary. We turn now to a consideration of the ways in which education, and literacy in particular, might respond to these conditions. Historically, membership in a society has always involved some commitment to agreed on values. But what does this mean in the context of a *global* citizenry? Are there globally agreed on values educators might use to design programs that prepare adolescents for global citizenry? Can global citizenry for adolescents be constructed without agreed on values? What might hold us together as a global society, and what is the role of education for adolescents in

achieving this goal? Starting to construct an understanding of what it means to use education to prepare adolescents for global citizenry is a critical, yet daunting, task. As a starting point, we present a case that highlights the intersections of citizenship, adolescent literacy, and identity.

Gonzalez-Ventura (1996) described the limited opportunities for attaining written literacies in her Mixtec indigenous community in southern Mexico. Since the language spoken in her community was an oral language, written texts were limited. Gonzalez-Ventura stated that only through the production of these texts would her people have the chance to become literate. As in the case of the Highlander School, literacy in this context was intimately tied to claiming citizenship. In learning to read and write their native language, community members gained the opportunity to exercise greater control over the education of their youth since literacy provided “the potential of promoting the content of indigenous cultures and of producing published text in native languages—two of the most strategic needs in bilingual education” (p. 166). Gonzalez-Ventura argued that this was especially important since most youth were forced to leave the community after middle school to seek work in larger cities or in the United States. These youth found themselves surrounded by new ways of living, in environments where the customs and ways of being they learned in the village were often threatened. By producing written texts, community members both preserved and furthered their customs. Written texts served as tools for bilingual schooling that could offer youth more opportunities and incentives to claim Mixtec traditions and language as integral to their evolving identities. Gonzalez-Ventura thus concluded by arguing that her community needed access to the most advanced technologies available to make text production and native language literacy possible. She stated emphatically that her people “must be endowed . . . with the instruments that make them part of the universal process of learning and study of reality” (p. 166).

How, then, might we consider what it means to educate adolescents toward global citizenry? As suggested by the case of Mixtec literacy, we propose as a modest starting point Gonzalez-Ventura’s (1996) call for engagement in the “universal process of learning” (p. 166) as an agreed on value to which a global citizenry might ascribe. We further take from this case the importance of literacy in constructing a global citizenry that is inclusive. Finally, we resonate with the importance Gonzalez-Ventura places on creating conditions where groups can produce their own texts and tell their own stories, conditions that resonate with adolescents’ literacy engagement on the Internet and through media production.

We turn now to the way in which youth in the current U.S. context are using the Internet and other forms of literacy in authoring their own version of citizenship, shaping their own citizen identities through venues where “cultural

work becomes political play” (Kenway & Bullen, 2006, p. 534). We consider the texts students use in this cultural work and the ways in which they navigate these texts to construct their own forms of global citizenship. We contend that schools have much to learn from the way that youth construct these identities, and furthermore, that schools have a role to play in teaching critical literacy practices to support learning in and out of schools. We explore how out-of-school spaces recognize youth as global citizens, asking, How are these spaces generative of texts, practices, and communities that build on youth’s resources and provide opportunities for youth to engage these resources in a variety of ways?

SITUATING ADOLESCENT LITERACIES IN GLOBAL CONTEXTS

To open our discussion about adolescents, literacy, and global citizenship, we begin with an example drawn from a longitudinal research project on multimedia storytelling (Vasudevan, Schultz, & Bateman, in press). This example introduces the three themes of this section by providing an example of multimodal literacy; describing the ways in which youth’s literacy practices can be simultaneously local and global, crossing space and time; and displaying the practices of so-called millennial youth. This project, located in a 5th-grade urban public school classroom, was designed to provide students with additional resources for writing and telling stories that go beyond the typical media provided in their classrooms. Researchers introduced photography, music, and technologies as a way to reinforce skills from the mandated curriculum, while also providing additional avenues for participation in school literacy practices. For many students, such as Saima, a recent Bengali immigrant, the combination of visual, auditory, and written texts provided an opportunity to become more actively engaged in school.

Saima was a shy and physically small girl who wore a traditional Islamic headscarf. A recent immigrant, she had arrived in the United States during her 4th-grade year and had only been in the country for several months when she started as a new 5th grader in this class. From the beginning, it was clear that Saima strove to perform well in her academic work. As her teacher observed, Saima showed tremendous improvement in her reading and writing as she rapidly learned a new language and a new way of being a student. Seen by others as quiet, Saima’s work in the various multimedia projects throughout the year illustrates how she was able to make herself heard and establish her voice in the classroom through modes other than talk (Schultz, 2007).

As a part of our research project, Saima produced a multimedia story rich with images of Bengali culture, traditional music, and her own narration. Combining poetry, visual images—including photographs from home—and

narration, the multimedia story gave Saima the chance to make her story public. When she entered into the storytelling process through the modes of image and sound, Saima broke the silence that had characterized her typical participation in the classroom and produced a loud, articulate statement of her dreams and goals.

In our description of the goals of this project, we use the phrase *breaking the frame* (Vasudevan et al., in press) to indicate how we purposefully changed the norms of school to open up new possibilities. Extending the process of composing outside the classroom and to other media allowed students like Saima to participate through a range of media and modalities, replacing silence with pictures, sounds, and spoken words. Access to a range of literacy practices allowed Saima to reconfigure and articulate her new understandings of citizenship and identity. She chose a map of Bangladesh to display as she read these words: “No one can take away from me my name, for it is mine. Bengali am I.” Concluding her poem, Saima narrated, “My country lives in me. I am the cry of liberty. No matter what they take from me. They can’t take my name away or my dignity. Bengali am I.” As the story ended, an American flag in the shape of the United States appeared. Saima used the literacy practices involved in creating a digital story with iMovie software to articulate her hybrid identities.

Literacy As Multimodal

In and outside of school contexts, adolescents’ communicative landscapes have become increasingly multimodal through their communication across linguistic, visual, and aural modes (Kress & Jewitt, 2003). Understanding literacy as multimodal allows literacy educators and researchers to pay attention to how adolescents like Saima orchestrate multiple modes in their text productions, including digital stories, avatars in virtual worlds, and instant messages. These new texts are reflective of the changes in literacy “as new technologies require new literacies to effectively exploit their potentials” (Leu, Kinzer, Coiro, & Cammack, 2004, p. 1570). The growing diversity of digital multimodal texts is due, in part, to the proliferation of technologies available to youth and accessed by them through various means and in a variety of locations, including out-of-school settings.

Hull and colleagues (e.g., Hull & James, in press) connect recent research on literacy with theoretical understandings of semiotics and geographies in their university-community-based organization Digital Underground Storytelling for Youth (DUSTY). A centerpiece of this work is the creation of new texts through spoken word performances, written narratives, photo collections, storyboards, musical compositions, animations, and digital stories. Projects like DUSTY extend definitions of literacy to include the visual and

the performative. In *DUSTY*, youth are provided with tools and supportive social practices to construct new worlds and identities through multimedia and multimodalities.

Literacy Practices As Situated Across Space and Time

Youth's multimodal and multispatial literacies afford them entry into global communities and engagement with global texts. Saima's multimodal story, for example, simultaneously located her with her family in Bangladesh and as a U.S. citizen in her 5th-grade classroom. Saima was able to represent the range of spaces (e.g., home, school, Web sites, blogs) and times (her childhood, the present, her future) that held meaning for her through this hybrid text.

Recent studies of adolescents' social identities and digital literacy practices (e.g., Lewis & Fabos, 2005) document the movement of adolescents' literacies and identities across space and time. Duncan and Leander (2000, sec. 4, para. 2) described "online literacy practices" as "glocalized" and, in doing so, highlighted how "global and local spaces and identities form complex hybrids." In other words, these literacy practices are multispatial because they are never simply global or local; rather, they are simultaneously global *and* local. We would add to this argument that an understanding of new literacies as both global and local extends beyond the online realm to include the ways in which global and local spaces traverse offline and online contexts and the dynamic space in between.

Furthermore, literacy researchers have pointed out how youth's literacies cannot be separated into in- and out-of-school practices (Leander & Sheehy, 2004). Leander (2005) offered an example of a high school student, Mia, who navigated multiple locations—her biology classroom, an online reference page, and her blog—from the physical site of her seat in her classroom. The possibility of being in multiple locations, real and virtual, underscores our understanding of global as more than just a geographic concept; that is, to recognize youth as being situated globally in their daily lives is to locate an understanding of global within the everyday practices and experiences of youth. Mia, and numerous other adolescents like her, are taking advantage of the spatial and temporal maneuvering that new technologies afford. These tools include Web browsers, online chat environments, video publishing sites, and social networking portals. This movement across both real and virtual digitally enhanced geographies contributes to the construction of literacy landscapes that are fluid; online and offline spaces are not merely sites, but spaces in which new literacies are being formed, practiced, shared, and manipulated.

Educators and scholars have begun to experiment with ways to recognize the multispatial nature of youth's practices and connect youth literacy practices out of school to in-school learning (Hull & Schultz, 2002). For instance, in

her study of the popular genre of anime, Mahar (2003) found that instead of separating in- and out-of-school literacy practices, teachers led youth to use in-school tools to read out-of-school texts. She suggested that by learning about adolescents' worlds, teachers can help them develop critical strategies for reading and assessing the truth of their texts. Knobel and Lankshear (2006) urged teachers to investigate youth blogs and their practice of blogging to gain access to the words and worlds of youth. They suggested that this is "powerful writing" and that it should prompt educators to move from an individual to a collective understanding of accomplishment, and a conceptualization of literacy as global rather than simply a local practice. Finally, educators have usefully brought youth music (e.g., hip hop, beats) and youth media into classrooms, hoping to capture student attention and interest in learning school material by paying respectful attention to youth cultural practices (Morrell, 2004).

Heath (2000) developed a new conception of schools based on her close study of learning outside of school contexts. This conception built on the idea that youth's literacies are multiple and shift across time and space. Heath's proposal was to envision schools as an integrated system of learning environments, explaining that schools should be "central nodes" within a web of learning contexts for children that might include museums, playgrounds, and libraries that are open all day and all year. She wrote,

An ecology of learning environments would be the focus, rather than schools alone. In this way, societal members would reconceive young people as learners and resources for the learning of others rather than as passive students. (p. 128)

This vision of what is possible suggests what we can—and indeed should—learn from looking across in- and out-of-school contexts to understand the possibilities for literacy and learning. It further emphasizes the importance of not only recognizing adolescents' hybrid, multispatial, and multimodal literacies practices, but using these practices as resources that both inform and transform our own conceptions of literacy and schooling.

Literacy Practices of Millennial Youth

Youth's discourses have become markers of global identification and affiliation. Instead of constructing their citizenship around allegiance to a single nation-state, youth today are "more likely to attribute a sense of citizenship to the brands and media they consume rather than to abstract rules of democracy or to participation in conventional civic institutions" (Soep, 2006, p. 1). New understandings of democracy, participation, identity, and citizenship can be found in adolescents' literacy practices. These reimagined concepts might serve as guideposts to educational practices in a globalized world. Saima's willingness

to engage in public storytelling about her transnational identities and dreams through her digital text provides one example of these possibilities.

Youth are part of the so-called Net Generation (Tapscott, 1997) and traverse communicative pathways that reflect their global savvy. They engage in what Lam (2006) calls *transcultural flows*, performing new social practices and taking on new cultural identities. For example, Chandler-Olcott and Mahar (2003) discussed the digital literacy practices that adolescent girls in the United States draw on to communicate online about their interest in anime and manga, two genres of hybrid texts that originated in Japanese culture. Similarly, Nayak (2003) illustrated how the global discourses of sports, music, and fashion are manifested in the local spaces of British youth such as “the basketball court, the Hip-Hop venue, playground and local music scenes” (p. 176). She asserted that globally informed identities and practices are performed in local and immediate contexts.

Growing up in an age of increased digitization, millennial youth are performing and publishing with increasing frequency on the global stage. This pattern of global participation is readily apparent in the burgeoning area of youth media production, where texts take the form of documentaries, digital stories, podcasts, and digital poetry, then travel across time and space. This movement is made possible by the advent of increased opportunities for youth to publish, including YouTube.com and MySpace.com. These outlets are signifiers of a changing pattern in adolescents’ purposes and uses of literacies as well as the geographic trajectories of adolescents’ texts (Alvermann, 2002). The texts can be seen as artifacts that illustrate the story of shifting patterns of citizenship. Through their literacy practices, adolescents contribute to, participate in, and interact with hybrid geographies, marking their affiliations on a global scale.

Through their collective purpose “to contribute insights and challeng[e] perspectives to a mainstream media that too often ignores the experience and intelligence of youth” (Soep, 2006, p. 8), youth media organizations provide spaces for new composing practices and are also living examples of a shared pedagogical ethos between adolescents and adults. Youth Radio, an after-school program where youth produce stories that are broadcast on the radio, television, and Internet, is one space where the multimodal communicative affordances of new technologies intersect with the growing presence of a new cosmopolitan citizenship that has emerged across youth cultures. Adolescents attending Youth Radio bring their concerns about the local and global worlds around them and are central in the production of media texts.

PREPARING YOUTH FOR GLOBAL CITIZENSHIP

As classrooms around the world become increasingly multilingual and multiethnic, the task of envisioning schools that educate *all* students becomes

more and more pressing. Furthermore, as the global contexts in which young people engage in literacy practices become increasingly present in their daily lives, the role of schooling in the production of citizens for a nation-state must necessarily be reconsidered. However, rather than diversifying pedagogy and curriculum to respond to new students and new practices, schools across the world have become more rigid. In fact, there has been a steady narrowing of learning and literacy in schools. For instance, in response to pressures to meet mandated test levels, such as the metric adequate yearly progress imposed by the federal No Child Left Behind legislation in the United States, schools and districts have replaced learning that draws on students' interests and knowledge with test preparation. Comparable legislation and state-regulated curricula have caused similar trends in countries around the world. As a result, national and state-mandated curricula have moved further away from adolescents' lives so vividly displayed in out-of-school spaces. This creates a wide gulf between school pedagogies and what we know and have learned through the documentation of youth literacy practices. As C. Luke (2003) explains,

when learning is no longer geographically tied to a desk, the school library, the book, or the teacher who demands "all eyes up front," then old-style transmission and surveillance pedagogy becomes less stable and less defensible but complementary to the out-of-school pedagogies and practices in households, communities and workplaces. (p. 398)

As a result, although individual educators might recognize adolescents' literacy practices and technologies, this new knowledge has not fundamentally changed the structure of educational institutions. If youth are educated in and out of school, what are the implications for the socializing goals of schools, including the production of citizens? In the schools of today, curriculum and content continue to be delivered in predictable ways, and school knowledge and literacy practices tend to be valued over those used in everyday life. Furthermore, out-of-school literacy practices often are used in service of school knowledge, to engage students in academic learning, rather than to transform teaching, learning, and schooling. What would it mean to begin with these practices as tools for reimagining teaching and learning, rather than simply assimilating them into traditional school structures and practices?

Moss (2001) explained that school knowledge and curricula belong to a different age. School contexts tend to be vertical discourses that are ordered, explicit, and hierarchically organized, while everyday discourses are often local, context-dependent, and multilayered. This makes the transfer from one context to another difficult at best. Furthermore, regulatory agencies at the national, state, and local levels are strengthening the boundaries between

school and community, tightening control over what is taught in school. English Only initiatives provide one such example. For instance, in Arizona, Proposition 203 eliminates the possibility of building on the dual Spanish/English literacies many students bring to the classroom, despite evidence that doing so can significantly bolster student achievement on standardized tests in English (Menken, 2006). Mandates such as these bar adolescents' literacies and knowledge from the classroom. Beginning with what adolescents know and can do, building on their discourses and passions provides a completely different starting place for literacy learning. The demand for narrowly defined academic achievement has led to the disappearance of experimentation inside of school, marginalizing the opportunities to build on students' interests and knowledge based on their out-of-school practices. Kenway and Bullen (2006) explained that rather than moving toward understanding how to engage youth in schooling, educational systems have adopted "a form of educational fundamentalism that shows an almost complete disregard for who the young are and might become" (p. 532).

Calls for reimagining schools and classroom practices in a globalized world rarely take into account the ways in which many adolescents are already deeply engaged in learning in global communities outside of school. Rather than simply appropriating adolescents' literacy practices and bringing them into classrooms, however, we urge educators to acknowledge adolescents' engagement in out-of-school communities to gain a broader understanding of what students know and can do. In other words, teachers' understandings of adolescents' engagement in literacy on a global scale outside of school can help them reframe their understanding of what students bring to school and their identities as readers and writers.

While many adolescents are engaged in literacy practices outside of school, schools have a special responsibility to provide access to an equitable education, which includes recognition of the global communities in which adolescents are active citizens. Furthermore, schools have the responsibility to create opportunities for critical conversations between and among adults and adolescents around literacy and technology use and provide students with frameworks for exploring the power and limitations of new tools and forms of expression. At the same time, educators working in and out of school settings must rethink citizenship in a global community and the role of literacy in producing global citizens. A. Luke and Carrington (2001) argued for a "critical literacy that envisions literacy as a tool for remediating one's relation to the global flows of capital and information, bodies and images" (p. 62). Perhaps schools and adolescent literacy practices are not robust enough to provide a response to the need to redefine citizenship in a globalized world. That said, they are certainly places to begin.

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Chapter Three

POLICY AND ADOLESCENT LITERACY

Bob Fecho, Christine A. Mallozzi, and Katherine Schultz

Chanel Mason, at the time of our writing, was teaching 9th-grade English in a small urban high school in the state of Georgia in the United States. In accordance with her newly opened school's mission, she was attempting to implement more inquiry-based teaching—an approach that encourages students' explorations into and meaning making of subject matter. Despite juggling a fair amount of change, Chanel had started to gain a handle on her inquiry-based teaching, becoming more accomplished at connecting daily inquiry activities into larger explorations driven by questions and capped by performance-based projects. Moreover, she was beginning to feel confident that she, her school administration, and her district were all on the same page in terms of this inquiry focus.

The school had opened in the fall of 2005 with a mandate from the superintendent's office to offer inquiry-based instruction to students within the limits and possibilities of a high school that, in four years, would comprise no more than 400 students. That mandate was supported by structural requirements—25 or fewer students in classes, daily preparation periods with enough time for common planning, a new physical plant, and 100-minute classes meeting every other day—as well as the outside support of a private foundation that provided instructional coaches, professional learning institutes, and other curricular, instructional, and assessment services. In addition, Georgia had adopted performance standards (Georgia Department of Education [GDE], 2005b) that seemed to be user friendly for inquiry-based teachers.

Unlike many teachers, who have to slip inquiry-based instruction into an overstructured curriculum, Chanel sensed that she had the full support of her principal and school district to pursue inquiry teaching. As such, she developed an inquiry unit based on *Romeo and Juliet* and had students delve into Shakespeare's language to consider the possibilities and complications of updating it. Students responded to her challenge with energy and enthusiasm by negotiating several collaborative writing projects that had them rewriting Shakespeare's poetry in the language of hip-hop culture.

However, as she and her students were initiating the exploration, they were faced with the task of preparing for the End-of-Course-Test (EOCT). According to the Georgia Department of Education's Web site (GDE, 2005a), the EOCTs are given

to improve student achievement through effective instruction and assessment of the standards in the eight EOCT core high school courses. The EOCT program helps to ensure that all Georgia students have access to a rigorous curriculum that meets high performance standards. The purpose of the EOCT is to provide diagnostic data that can be used to enhance instructional programs.

Bowing somewhat to district pressure, the school administration expected class lessons three weeks prior to the test be devoted to preparing students for this traditionally formatted, standardized, multiple-choice examination. Even though the Shakespeare project was developing energy and excitement among her students, Chanel felt pressured to end the inquiry and pursue three weeks of test preparation. Despite her efforts to keep the review inquiry based and critical—for example, she had students write about why they felt they were required to take the EOCTs—she admitted that instructional time would have been better served pursuing the inquiry into the language and themes of *Romeo and Juliet*. Expressing her frustration, she felt caught among conflicting positions: her own inclination to teach from an inquiry stance, her administration's seeming support for such a stance, the fact-based minutiae of the EOCTs, and the political weight her district placed on assessments.

Although the Georgia EOCTs are state and not federally mandated, they are part of the culture of assessment that has been initiated by local and state governments primarily in response to federal educational policy efforts to hold schools and school districts more accountable. Chanel's dilemma—to continue her enthusiastic and district-supported inquiry into language via Shakespeare or to abandon that work to pursue district and state policy that required review and a fact-based, rather than performance-based, assessment—is far too common. Across the state of Georgia and throughout the United States, teachers who are the local implementers of policy frequently sift through contradictory values, support systems, and requirements as they try to put into action what legislators, the distant makers of policy, legislate. Local teachers' voices,

students' voices, and parents' voices have been eliminated from discussions of policy; these stakeholders are the experts on the needs of their school community, but their input typically has not been solicited in making policy.

Hence this chapter seeks to discuss what happens and what it means when federal educational policy on literacy leaves no room for local creation and interpretation of policy. We address how policy relates to adolescents and the ways they read and write. In doing so, we discuss the history of federal involvement in education policy, with particular emphasis on literacy policy. We focus on the literacy education policy of the George W. Bush administration, citing critical reaction to that policy and calling into question the apparent lack of local input into that policy. Finally, we suggest ways that current federal policy—indeed, all educational policy—can be more inclusive in construction and implementation.

DEFINING OUR STANCE

It is our belief that healthy policy grows from an ongoing dialogue between centering forces that attempt to unify and standardize public action and outward-tugging forces that seek to individualize and diversify those same public actions. This belief springs from our understanding that language—the medium through which all policy is created—undergoes similar tensions (Bakhtin, 1981). These opposing tensions can be likened to an outdoor tug-of-war game. On one side, the rope is unified and pulled by a composite of government and corporate bodies seeking to standardize language and behavior. On the other side, the rope has frayed into any number of single fibers, each pulled by individuals and communities seeking to use the language and policy in ways that reflect their local needs. Somewhere above, a cosmic mud puddle, the middle-marker ribbon of policy, flutters, pulled more to this side, then tugged more to the other. However, the object of the game is not to pull either side into the mud; instead, it is to keep up enough tension to run the game in perpetuity.

Fair and inclusive policy negotiates that middle ground between the opposing forces. Shifting too far to either extreme creates policy that either ignores the needs of local stakeholders or becomes so subject to those needs that it has no unified core to provide stability. Policy, to be effective, must maintain that ongoing dialogue between standardization and diversification. In this chapter, we take this stance on policy making and implementation and apply it to current federal policy on literacy education, with the intent of calling that policy into question.

A BRIEF HISTORY OF FEDERAL INVOLVEMENT IN EDUCATION

Federal involvement in education is not a new phenomenon. National government and monies have influenced the operations of local schools for

decades. Our interest in federal attachment to education stems from what we see as changes in breadth, depth, and intensity of involvement over recent decades. As these policies have widened in scope, the aim seems to have changed from helping local educators with their goal of delivering a satisfactory education to their local constituents to a more top-down approach, in which national mandates are laid on local operations. Current mandates do not simply create an overlay on local affairs, coloring how education looks on the surface, but seep into every minute decision, until the local impetus of decision making is often muffled by the more powerful and better-funded federal initiatives. These trends represent the current state of education and are the most recent manifestations of federal involvement that span time, party lines, political groups, and contexts.

Many policy analyses (e.g., Edmonson, 2000, 2004; Wirt & Kirst, 1997) cite the Elementary and Secondary Education Act (ESEA) of 1965 as one of the first, if not the first, significant legislation of federal policy for education. The path of the ESEA can be traced from the 14th Amendment of the U.S. Constitution (ratified 1868), guaranteeing all citizens equal protection under law; through the U.S. Supreme Court decision for *Brown v. Board of Education*, ruling racial segregation of schoolchildren as illegal; to the attention boost of education in the 1960s Race to Space with the Russians; to the signing of the Civil Rights Act (1964). As part of Lyndon B. Johnson's (D) war on poverty, the ESEA was purported as a guarantee of equal opportunity for students in U.S. public schools. This legislation created special programs, such as Title I and Head Start, two efforts that concentrated on early education to help students in economically disadvantaged areas increase their likelihood of school success. Some criticized the ESEA for playing such an active and specific governmental role in education, but this policy remained a cornerstone of federal education policy, despite the revisions made by several administrations through eight reauthorizations.

In the late 1960s and 1970s, the federal government's focus on addressing domestic poverty and educational opportunities took a backseat to the Vietnam War. The Johnson administration changed its tactic from quality education solving societal problems to increasing job training services, assuming well-paying jobs would come to hardworking people (Edmonson, 2004). This pull-yourself-up-by-your-bootstraps approach lasted as Richard Nixon's (R) and Gerald Ford's (R) administrations moved to disconnect federal legislation and finances from schools by allowing state governments to make decisions on the distributions of federal monies to local districts. The changes continued as Jimmy Carter (D) established the U.S. Department of Education in 1980. Ronald Reagan's (R) reauthorization of the ESEA emphasized less federal control over funds for local education but was paired with a decrease in funds for programs such as Title I (a.k.a. Chapter I). Conversely, the U.S.

Department of Education's National Commission on Excellence in Education (1983) called for more stringent student and teacher standards in the federal report *A Nation at Risk*. A panel during George H. W. Bush's (R) administration, America 2000/Goals 2000, proposed state incentives for students reaching higher standards and achievement by the year 2000.

The role of the federal government was becoming increasingly complex, with a decreased role in funding and decision making, but a strong presence in proposing recommendations and standards. The 1994 reauthorization of the ESEA Improving America's Schools Act during Bill Clinton's (D) administration emphasized Title I, family literacy, professional development for teachers, technology, bilingual education, and provisions for charter schools. In 1996, the federal administration focused on reading by issuing the America Reads Challenge, an initiative with the aim that all children read independently by the end of 3rd grade. The Clinton administration believed that this "big government" vision of a universally literate U.S. workforce [was] possible through a broad federal policy supported by local community efforts" (Edmonson, 2000, pp. 19–20). A private, conservative think tank, composed of members from the Center for Education Reform, Empower America, the Heritage Foundation, and the Thomas B. Fordham Foundation, but not commissioned or approved by the federal government, wrote a 1998 follow-up report called *A Nation "Still" at Risk* (Thomas B. Fordham Foundation, 1998). Linked to the original 1983 *A Nation at Risk* report in name only, the report contained similar findings and recommendations as the 15-year-old report and fueled a panicked rhetoric of failing U.S. schools.

Although the Clinton administration had planned to pass another authorization of the ESEA, the last major educational legislation under this administration was the Reading Excellence Act of 1998, an amendment to Title II of the Elementary and Secondary Education Act (1965). The four major goals of this act were (1) teaching children to read by no later than 3rd grade, (2) improving the skills of students and teachers using replicable research in reading, (3) expanding family literacy programs, and (4) reducing inappropriate referrals to special education. The bulk of these themes and an increasingly narrow definition of reading would continue into the next millennium due to the "Report of the National Reading Panel" (National Institute of Child Health and Human Development, 2000) and the No Child Left Behind Act (NCLB) of 2001.

Much of the current K–12 federal literacy policy had its basis in reports published by the National Institute of Child Health and Human Development (2000), culminating in a report by the National Reading Panel (NRP). The NRP developed a review of existing reading using a standard of experimental studies, or studies that randomly assigned students to treatment groups, as the only research that qualified as scientifically based reading research (SBRR). The

limited description of research named as scientifically based led to a heavily critiqued and narrow definition of reading instruction and assessment, valuing only phonemic awareness, phonics, fluency, vocabulary, and comprehension instruction. Thus the NRP dubbed silent, sustained reading, or periods of time in which students practiced the act of independent reading, as an unsanctioned instructional practice. George W. Bush's administration relied on the "Report of the National Reading Panel" for the most recent reauthorization of ESEA, the NCLB. Emphasizing standardized testing and highly qualified teachers, this legislation was initially enacted at the primary level with Reading First, a grant initiative based on SBRR materials and professional development, with a target of all children reading by 3rd grade by 2014. Currently, the act continues to influence higher grade levels with the Striving Readers initiative (U.S. Department of Education [DOE], 2005a, 2006d, 2006e).

A DISCUSSION OF RECENT FEDERAL POLICY ON LITERACY

As the previous section indicated, federal involvement in education over the last 40 years has fluctuated in terms of constraints and funding. Most of the ESEA reauthorizations, however, maintained or even increased local interpretation and implementation of those policies. The NCLB, the latest reauthorization of ESEA, marked a major shift by eliminating most, if not all, opportunities for local constituencies either to have input into or later interpret the policy. NCLB made an initial impact on education with the Reading First initiative, which set one of its goals as showing all children at the kindergarten through 3rd grades as reading on target grade level by the year 2014. Because it seemed that students who were beginning and developing in literacy were at the forefront, NCLB had erroneously become synonymous with younger learners. The act, which was passed by a bipartisan congressional effort, was in reality crafted from the start to affect schooling in the United States from preschool to postsecondary education and beyond as students entered the workforce (NCLB, 2001; DOE, 2005c). Only recently has interest been pointed toward and dollars been spent on implementing adolescent literacy provisions of the NCLB, making the impact on secondary schools more visible in the public and educational spheres.

President George W. Bush had requested almost \$1.5 billion (fiscal year 2007 budget) for what is currently being termed the High School Reform initiative (DOE, 2006b). If granted, this allocation would have surpassed any budgeted money for the Reading First initiative in any given year in its history (DOE, 2006a, 2006c). Although this initiative appeared to be new in the 2007 fiscal year, its roots existed in efforts termed the Preparing America's Future High School Initiative, or simply the High School Initiative (DOE, 2005a, 2005c). In October 2003, at the launch of the High School Initiative,

education and policy leaders joined at the National High School Summit in Washington, D.C., to discuss ways to improve the country's secondary schools. Subsequent national and regional summits in 2003 and 2004 provided a setting for the creation of reform plans that met "the vision of the No Child Left Behind Act" (DOE, 2005c), which served as a framework for transforming high schools through intervention, assessment, and literacy instruction.

The profile and history of the High School Reform initiative indicated that the largest portion of requested money was planned for the intervention proposal (DOE, 2005a). The intervention portion of the initiative centers on designs to increase achievement of all high school students and help ensure that students are able to succeed in postsecondary education and in jobs in a global economy. Grants would be distributed to states for the academic improvement of students at risk of not meeting state academic standards and for narrowing the achievement gap between more advantaged and less advantaged students. Although the intervention programs may appear different, the states would still be bound by the narrow definition of scientifically based research education and accountability through evaluation.

The assessment effort marks another major thrust of the High School Reform initiative. This effort calls for expanded assessment in high schools; students would take three annual statewide tests in reading and mathematics during their high school years, instead of the one state test that students are currently required to take between their 10th- and 12th-grade years. Considering that many high schools are four-year institutions, this proposal would result in students being tested three out of four years, in addition to any other national, state, and local assessments. This assessment schedule would be required to be in place for the 2009–2010 school year. Although these assessments could be used to help meet the needs of students, this assessment requirement seems more apt to "strengthen school accountability at the secondary level" (DOE, 2006b).

Issues of accountability have greatly influenced the implementation of NCLB. All states are now required to show student performance through state assessments and make those results available to the public. All states are also required to participate in the National Assessment of Educational Progress (NAEP), periodic assessments conducted by the U.S. Department of Education designed to ascertain what students across the country know and are able to do in terms of school subjects such as math, reading, writing, and the like. After the act's signature into law, a new section 1503 was added to Title I, Part E of NCLB (DOE, 2005b) that required an independent study of state assessments by a research organization to evaluate state accountability systems. The independent researcher would be chosen through a review process of federally chosen peers.

Regardless of the outcome of the independent research on the quality of state accountability systems, the state measures seemed already to be under

scrutiny in the public forum. Although many believe that state assessments and the federal NAEP assessment are incomparable, the secretary of the U.S. Department of Education, Margaret Spellings, encouraged the media to look to the discrepancies in percentages of students' state proficiency performances with the percentages of students performing at the basic level on the NAEP (Dillon, 2005). Perhaps unexpected by Spellings, investigations that considered student assessment percentages within the politicized context found important contradictions. Those states that have kept their assessment standards close to the higher federal bar have not been congratulated for their rigor when their students do not achieve required benchmarks. Conversely, those states with lower standards and thus higher assessment scores have been accused of what the Bush administration has termed "the soft bigotry of low expectations" (DOE, 2003). Many legislators and lobbyists have used these comparisons of state and federal tests to show the inadequacies of state standards, laying the groundwork for national standards with national assessments.

A different effort, separate but related to the High School Reform initiative, is the Striving Readers initiative. In 2005 and 2006, the Striving Readers initiative was budgeted \$24.8 million and \$29.7 million, respectively (DOE, 2006b). The fiscal year 2007 budget included a request for \$100 million to support the Striving Readers initiative. This over \$70 million increase, one that far outstripped any increase requested at the elementary level, indicated the emphases held in the president's agenda for this effort, which could be termed "Reading First for the Older Grades" (grades 6–12). The \$35 million actually approved for this budget, although short of what President Bush requested, still represents a 17.8 percent increase from the previous year (DOE, 2006a). The money from the Striving Readers initiative is granted to school districts and local organizations, sometimes in conjunction with state agencies of education, to implement and evaluate scientifically based researched reading interventions for students reading below grade level (DOE, 2006d, 2006e).

To this point, we have sketched a history of federal policy in terms of literacy education over the last half of the previous century and focused on the ways most recent federal policy prescribed how literacy was to be taught and assessed at the start of the current century. The next section is a critique of that policy, calling into question its needs to standardize and control what formally had been left to state and local districts to manage.

THE IMPACT OF FEDERAL POLICY ON LITERACY, TEACHING, AND LEARNING

One concern with current federal policy on adolescent literacy is that it remains skewed toward forces of standardization and allows for little, if any, local input and interpretation. It is policy intended to narrow definitions, limit

critique and interpretation, and constrain the range of resources. The language is one of authority that seeks to monitor content and pedagogy in literacy classrooms through pervasive testing and restriction of resources. Although it purports to give more flexibility to local districts, in fact, that flexibility is dependent on raising test scores to unattainable levels, especially knowing the broad diversity of students and their needs being served by most schools and districts. As McCombs, Kirby, Barney, Darilek, and Magee (2005) indicated, the goal of 100 percent proficiency in reading, using either state tests or the NAEP, seems far-fetched given that few states are even above the 50 percent mark on either form of assessment.

In this section, we discuss the ways that NCLB created a limited view of literacy education, resulting in a range of responses, some disturbing and some proactive, on the part of parents, students, and educators in local districts. We argue that the standardizing pull of NCLB allows little room for a range of individualized, diversifying responses. As such, it prevents teachers, parents, and school districts from finding ways to accommodate local needs and infuse local critique. In short, NCLB provides no room for dialogue. In turn, we're seeing literacy education become less inclusive of diverse perspectives, public schools having their supports diminished, literacy teaching being driven by the narrow confines of state tests, and interested stakeholders suing the federal government for their voices to be heard.

The Politics of Exclusion

As noted earlier, the NRP report of 1998 was seen as a foundation for NCLB. According to Coles (2003) and also Edmonson (2004), the NRP was composed of educational stakeholders, most of whom held the narrow views of literacy education supported by National Institute of Child Health and Development leadership. Only one reading teacher was represented on the panel. Coles (2003) reported that even though public hearings were held, and much testimony was given by local and national educators as to the need to take wider sociocultural and anthropological views of the teaching of reading, the focus of the NRP going into the hearings—phonemic awareness, phonics, fluency, comprehension, and computer technology—remained the same after the hearings, and NCLB contains little in the way of literacy policy that has expanded that base.

An additional concern to us is that the provision that allows parents to remove their children from poorly performing schools and place them into schools that have higher performance indicators is both underfunded and without legal support. The better-performing schools are under no obligation to accept students from the struggling schools and often refuse to do so (Sunderland & Kim, 2004). Constructed primarily by governmental policy

makers working within a narrow literacy paradigm, NCLB has a voice and tone that denies the complexities of the lives of those who are poor and disenfranchised.

Undermining Public Schools

Despite a mission that purports to be about supporting all children in their explorations of reading, NCLB routinely undermines schools serving students who are in the most need of support (Darling-Hammond, 2004). Although schools attended by children of the working poor, whether urban or rural, often draw on inadequate tax bases for funding and, consequently, are also resource-poor, few if any provisions in NCLB provide for equity in funding. As reported on National Public Radio (Allen, 2006), a Dade County, Florida, teachers' union spokesperson indicated that tying financial support for schools to test performance undermined the reform efforts of the testing policy. Stripped of resources and autonomy, struggling schools become mired in their inability to attract both human and financial resources to combat their struggles. When such schools performed poorly on standardized tests, their label of "failing school," along with prevailing stereotypes of working in such schools and the rigidity of structures put into place to restructure the school, make it difficult to attract creative, high-quality teachers, who frequently seek placements where a balanced degree of instructional autonomy and a range of resources support their efforts. Darling-Hammond (2004) cited a study by Clotfelter, Ladd, Vigdor, and Diaz (2003) that indicated ways in which the state of North Carolina was encountering difficulties attracting innovative teachers to struggling schools due to the state's labeling schools as not making average yearly progress.

Frequently, the mandates of policy have "potential to put our public schools into a state of chaos and crisis" (Holley-Walker, 2006). This potential for chaos lies in the growing number of schools that are being designated for restructuring, with some estimates as high as 10,000 schools needing restructuring by the year 2011. The consequences of so many schools undergoing major reform or closing are a logistical nightmare and show a deep lack of compassion for the needs of families. For many parents, the thought of their children being bussed from local neighborhoods is abhorrent and seems counter to traditional notions of community and neighborhood. In addition, all too often in the case of rural schools, there are no alternative schools ("Transfers and Tutoring," 2003).

In addition, cultural values differ as to how best to deal with struggling schools. A report by the Pew Hispanic Center (2004) indicated that although Latino families generally tended to support NCLB, they were also more likely to desire keeping struggling schools and their current populations intact and

providing resources to those schools. This stance is in contrast to the inclination of many whites and the agenda of NCLB to move children elsewhere. Nothing in NCLB, as it is currently construed, provides for local interpretation of how best to contend with schools whose contexts present overwhelming obstacles to quick-fix reform.

Better Readers or Better Test-Takers?

As the vignette describing Chanel's quandary illustrated, teachers struggle with how to deliver instruction in this era of high-stakes accountability. Frequently, the choice comes down to a dichotomy: do educators teach in ways that will make students better readers, or do they teach in ways that will make students better test-takers? The two results do not necessarily occur through the same means or simultaneously.

An example of this dichotomy is exemplified through an examination of what was originally labeled the "Texas miracle" but, on closer examination, now might be called the "Texas myth" (Coles, 2003, pp. 116–118). As Coles noted, "If students pass a literacy test (e.g. the [Texas Assessment of Academic Skills]), that does not necessarily reveal their reading abilities" (p. 117). Work by Haney (2000) indicated that although TAAS scores had gone up dramatically, 4th-grade and 8th-grade NAEP scores for Texas had remained at the national average, showing virtually no gains. Five years after the Haney study, a report to the Carnegie Corporation (McCombs et al., 2005) raised similar questions. These researchers argued that differences in rigor and definitions of what counts as proficiency between state tests and the NAEP resulted in wildly divergent scores. For instance, Texas 8th graders passed the 2003 TAAS at a rate of 80 percent, although their NAEP scores indicated only 26 percent proficiency.

Aside from variances in rigor and expectations for the two tests, what mostly accounts for such wide divergences is that teachers, when faced with testing that can determine their futures, their schools' futures, and/or their students' futures, teach to the test, frequently to the exclusion of other subject matter (Coles, 2003). Although test-taking skills are important, a little instruction in this area goes a long way. Moreover, rather than a literacy education rich in text, story, and ideas, students are fed a steady diet of decontextualized, short readings for which little engagement is fostered. These activities tend to limit students' abilities to delve into longer, more complex text (Wood, 2004). Teachers like Chanel, who sense that their teaching of language and literacy needs to move students into complex interpretation, application, and synthesis of information, instead feel constrained by policy-initiated pressures to teach the narrow literacy skills measured by most standardized tests. To do otherwise, at least to their perception, puts teachers at jeopardy of losing their positions.

A perhaps more insidious way that schools raise scores is through exclusion of students who might not do well on the tests (Darling-Hammond, 2004). Since the rise of high-stakes testing, school administrations have committed such questionable practices as purging rolls of struggling students who might live outside district boundaries, adding more students to special education classes to gain dispensations that range from test exemptions to lowered benchmarks, holding students back to keep them out of test-taking grades, and encouraging struggling students to drop out of school. All these actions have been done in the name of raising test scores.

A Rise in Critical Response

A growing number of lawsuits by states and educational interest groups against NCLB are one indicator of frustration exhibited by local stakeholders regarding their inability to be heard by federal policy makers. Calling NCLB “the most sweeping intrusions into state and local control of education in the history of the United States,” the Republican-controlled Virginia House of Representatives voted 98–1 to ignore NCLB policy, even at the cost of loss of revenues (Becker & Helderman, 2004, p. A1) This lawmaking body felt that NCLB negated or obstructed their own statewide efforts to advance literacy education. The National Education Association (NEA), in concert with six states and the District of Columbia, initiated a civil suit against the U.S. Department of Education with the intent of forcing the federal government not only to fund their mandates, but to reallocate such funding to allow for greater local control of those monies. As the NEA stated, “local communities are simply asking the Bush administration to allow parents to spend hard-earned tax dollars on their children’s classrooms—not bureaucracy, paperwork and testing companies” (National Education Association, 2006, p. 2).

Organizations like the National Association for the Advancement of Colored People and the National Council of La Raza, groups representing parents whose children have frequently been left behind in the past, have raised concerns about the effectiveness of NCLB regarding their constituencies and the lack of funding to support the work (National Association for the Advancement of Colored People, 2003; National Council of La Raza, 2002). Simultaneously, professional teaching organizations, such as the National Council of Teachers of English and the International Reading Association, whose rich and broad body of research has largely been ignored by federal policy makers, have raised questions about of the narrowness of NCLB (International Reading Association, 2001; National Council of Teachers of English, 2002).

In addition, there is an ever-growing body of research that indicates that educational reform must take local stakeholders into account (Allington, 2002). For example, a policy brief by a nonprofit research organization

described a study that they conducted of recent and tumultuous reform in the Philadelphia School District (Research for Action, 2002). The report cited five lessons learned from that experience, four of which specifically speak to the problems caused when policy makers are unwilling to include a means for dialogue with local stakeholders when making policy (Christman & Rhodes, 2002). The researchers argued that school reform should be forged in the spirit of collaboration, particularly with the intent for reform leaders to value the input of principals, teachers, and parents. Without such invited dialogue, local stakeholders have little substantive access through which to shape policy.

CONCLUSION

Our analysis of current federal literacy policy, particularly as it manifests in the No Child Left Behind Act, leads us to several guidelines for constructing literacy policies for adolescents. First, local, state, and national discussions of educational policy that seek inclusion of the greatest number of diverse voices can produce substantive dialogue that enables the enactment of reflective policy that opens itself to future reconsideration. We envision effective policy as a framework from which all stakeholders continually build new iterations of policy.

Second, policies must be forward looking. They should be responsive to adolescents of the moment, yet contain provisions to address the educational needs of the future. We must stop educating children living in the twenty-first century for contexts and conditions that were operative in the mid-twentieth century. Instead, we should embrace a sense of literacy as a practice that allows all students, particularly students who are marginalized by social and cultural conditions, to use literacy as a means for making meaning of an ever more complex, diverse, technological, and globalized world.

Third, adolescent literacy policies must begin with a careful consideration of the developmental and learning needs of this age group. Policies must resonate with youth's literacy practices both in and out of school. Policy should reflect and prompt young people's interest in new forms of literacy across multiple modalities and a range of new media. Current literacy theory provides a critical knowledge base for conceptualizing the practices and content of this policy.

Finally, policy should create opportunities for dialogue with local stakeholders. We believe that the further the authority is from the constituency it serves, and the greater that constituency is in number, the more general and open-ended the educational policy needs to be. Policy written in Washington, D.C., to serve schools as diverse as those in Patagonia, Arizona, and Philadelphia needs to serve as a discussion point from which local policy can be evolved, rather than as a mandate that all must follow.

In the end, we acknowledge one simple belief: ignoring local voice in the creation, implementation, and refinement of policy does not mean that such voices are stilled. Teachers like Chanel—strong, creative, intelligent teachers who are professionally active and see their classrooms as places of reflection and negotiation—have engaged, do engage, and will continue to engage in dialogue with and locally interpret national policy, even though policy makers may turn a deaf ear to such dialogue. The parents of the students in Chanel's classroom as well as those students themselves will regard or disregard policy as they see fit. The informality of this process—frequently falling off the radar of policy makers—does not negate its existence and eventual impact. Policy that addresses adolescents' literacy learning and their teachers' practices should be responsive to students' and educators' needs as well as to the needs of other local stakeholders. It is incumbent on legislators to reach out to the teachers, students, and parents who embody the life of those schools, embracing their complexities and incorporating their needs and desires into policy that remains ever in dialogue.

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Chapter Four

READING ASSESSMENT FOR ADOLESCENTS

Terry Saling

There is no shortage of criticism for the amount of testing students experience as they progress through school and for the instruments used to measure their achievement. One need only access the Web site of the National Center for Fair and Open Testing, or FairTest (see <http://www.fairtest.org>), to find what educators, policy makers, and parents have to say. Rather than enter into the debate about the appropriateness of testing, this chapter strives for objectivity by providing information that may be useful for understanding the most common forms of reading tests students encounter during the middle and high school period. To that end, the chapter discusses the different kinds of tests students in middle and high schools most commonly take, how the tests define reading for adolescents, what the tests measure, why they are administered, and how their data can be used. Details from the state board of education Web site of a southeastern state are used for illustrative purposes, as are the hypothetical experiences of one student in this state. The chapter does not state whether this adolescent student, referred to as Amanda, has taken too many tests, but it does present the case that at least some of her reading tests have played a significant role in her life as a middle and high school student.

For this chapter, adolescence is defined as the grade 5–12 span. Even though this range may seem a wide range to use as the boundaries of adolescence, there are solid reasons for thinking about assessment across this span. In a 2002 workshop on adolescent literacy sponsored by the National Institute of Child Health and Human Development (2002), participants agreed that extending the term *adolescent* down to 4th or 5th grade made sense, in part because it is

at this point in students' progression through school that they must transition to more sophisticated uses of reading and writing as their classes require them to read texts that cover many different topics, vary in readability level, and actually may not be well written (Caldwell & Leslie, 2004).

There is further support for this span of grades in the idea of the so-called 4th-grade slump, which Chall (1967) introduced to the educational vernacular nearly four decades ago. She pointed out that it is at this point that students must move from learning to read to reading to learn. Many students are prepared well enough to avoid this slump and make the transition to more sophisticated reading with ease, but others begin to struggle both in their content work and on the large number of tests that will continue to mark them as poor readers.

DEFINITIONS OF READING FOR ASSESSMENTS

Knowing the underlying definition of reading that guided the development of a test is an important component of understanding what the test actually measures. At the same time, figuring out how to define reading for this age group can be challenging because adolescents read in many different contexts, both in and out of school, and for many different purposes. Adolescents' out-of-school reading may be widely different from in-school reading: they surf the Web, send and receive e-mails, and immerse themselves in comics and graphic novels. The personal relevance of this reading motivates and engages students in ways that textbooks and literature anthologies rarely do. The extent to which these activities strengthen adolescents' skills and enable them to continue to grow as readers, however, is probably idiosyncratic because they may not encourage students to use or develop the entire range of reading strategies that constitute a full reading repertoire.

The fuller repertoire that defines reading for this age group includes skills and strategies that enable adolescents to read complex, extended narrative and expository texts. Strong readers comprehend these texts by understanding the nuances of language and text structure, identifying relationships within and across texts; making generalizations and drawing conclusions; judging authenticity and accuracy; analyzing and evaluating content; and engaging in other sophisticated interactions with text. Indeed, ACT Inc., publisher of the placement and selection tests that many adolescents take, found that this repertoire of reading behaviors is essential if students are going to be ready for the reading demands not just of postsecondary education, but also of the workplace (ACT Inc., 2006). ACT Inc. reached this conclusion after comparing the reading American College Test (ACT) scores of many thousands of students and their levels of success in postsecondary endeavors, including both college study and the workplace. Being ready, according to ACT Inc., means

being able to read complex texts, ones that exhibit subtle, involved relationships among ideas or characters; rich and sophisticated information; elaborate structural elements and intricate stylistic elements; and demanding vocabulary. Being able to read texts of this sort in many different content areas is often referred to as academic literacy, to distinguish it from much of the reading students do out of school (Fielding, Schoenbach, & Jordan, 2003).

Academic literacy is the broad construct that most reading tests for adolescents purport to measure, but by no means are all reading tests interchangeable (National Research Council, 1999). Test developers differ widely in how they operationalize this construct through selection of the stimulus materials students will read, the formats and difficulty of items they will answer, and the interpretation that can be made from students' scores on the tests. Furthermore, test users, such as state boards of education, differ in their own interpretation of what adolescent reading means and what level of achievement constitutes reading on grade level or at more broadly defined levels such as basic, proficient, and advanced. These are the levels used on the National Assessment of Educational Progress (NAEP), and even though states may employ this terminology, they do not necessarily adopt the same rigorous expectations for achievement that NAEP uses. States routinely engage teachers and others in a so-called standard setting process that determines how many items students need to get right to pass a test and to score within certain score ranges, and there is a vast difference in how rigorous the standards are (National Research Council, 1999).

As discussed elsewhere in these volumes (see Salinger & Kapinus, 2007), the NAEP in Reading is in many ways the gold standard of reading tests. One important aspect of this model is the rigor of the definition of reading that underpins the NAEP reading tests at grades 4, 8, and 12. Even at grade 4, students are assessed on their ability to make sense of text by inferring, evaluating, analyzing, critiquing author's craft, using information from several parts of a text, and even making comparisons across two texts on the same topic or theme. Certainly there are relatively easy items on each NAEP reading test, but the specifications for the test direct test developers to include lengthy, intact passages and to construct items to measure high levels of thinking.

Many states and commercial test developers have adopted the NAEP model of test development by using fairly long, authentic passages and asking multiple choice and open-ended questions that target different levels of comprehension. However, even though a reading test may superficially seem similar to the NAEP model, there is wide variety in the way in which the construct *reading comprehension* is interpreted (National Research Council, 1999). Depending on what test users want, test developers may take a constructivist stance toward reading and include questions that ask students to think of personal reactions or connections to what they read. Others are more cognitively grounded, even to the extent of basing items on the hierarchy of Bloom's taxonomy of the

cognitive domain (knowledge, understanding, application, analysis, synthesis, and evaluation; Bloom, 1956; Krathwohl, Bloom, & Bertram, 1973).

The reading test in the state used for illustrative purposes is aligned to the state standards for reading and consists of items that measure four aspects of reading: cognition, interpretation, critical stance, and connections. Table 4.1 shows how each aspect of reading is described and its percentage of representation on the tests administered in the state at grades 5–8 (North Carolina State Board of Education [NCSBE], 2006c). The descriptions of the aspects of reading are very similar to those included the 1992–2008 National Assessment of Educational Progress in Reading (Council of Chief State School Officers, 1992; Salinger & Kapinus, 2007), suggesting that the test has a constructivist foundation. The reading items are also aligned to the state's thinking skills framework to affirm the value placed on critical thinking and reasoning. The items then reflect both the NAEP constructivist perspective and also a cognitive interpretation of reading.

This state undertook its own test development effort and involved educators in creating a test that would operationalize the standards that tell what students should know and be able to do in reading at each grade level. The tests are criterion-referenced; that is, students' scores are compared against an established list of learning objectives derived from the standards. Criterion-reference tests state a mastery level, that is, a percentage of items that an individual must get correct to indicate mastery of the material assessed. Data derived from the tests help state and local education agencies, teachers, parents, students, and others understand how well students are progressing along a developmental continuum of reading growth.

Other states opt to use a commercial test that has been normed against a nationally representative sample. With such a test, administrators can compare their students' scores against those of students in the same grade who have taken the test nationwide. Commercial testing programs will often tailor a norm-reference test like the Stanford Achievement Test or the Iowa Test of Basic Skills (ITBS) by including sets of items that have been developed by state educators to measure their state standards or by carefully demonstrating the link between items on the test and the state reading standards.

PURPOSES FOR ASSESSING STUDENTS' READING

As stated earlier, many critics oppose any testing at all, and others assert quite appropriately that students are tested far too often. The current emphasis on testing, especially as required by the No Child Left Behind (NCLB) Act of 2001, has meant that many teachers spend a disproportionate amount of time teaching students the specific skills included on a test, rather than teaching them the content, skills, and strategies that will not only prepare them for the test, but will also generalize to other learning situations. Critics and teaching

Table 4.1
Descriptive Information for Grade 7 End-of-Year Reading Test

Category	Description of category	Percent of test items by grade			
		5th	6th	7th	8th
Cognition	Refers to the initial strategies a reader uses to understand the selection. It considers the text as a whole or in a broad perspective. Cognition includes strategies like context clues to determine meaning or summarizing the main points.	35	29	26	29
Interpretation	Requires the student to develop a more complex understanding. It may ask a student to clarify, to explain the significance of, or to extend and/or adapt ideas/concepts.	39	40	42	40
Critical stance	Refers to tasks that ask student to stand apart from the selection and consider it objectively. It involves processes like comparing/contrasting and understanding the impact of literary elements.	20	25	26	25
Connections	Refers to connecting knowledge from the selection with other information and experiences. It involves the student being able to relate the selection to events beyond/outside the selection. In addition, the student will make associations outside the selection and between selections.	6	6	6	6

Source: North Carolina State Board of Education. (2006). *North Carolina end-of-grade test of reading comprehension—Grade 7*. Retrieved October 28, 2006, from <http://www.dpi.state.nc.us/docs/accountability/testing/eog/TISG7-2.pdf>

to the test aside, there are several important reasons for measuring students' academic literacy. Among the most important is to determine accountability and diagnose reading difficulties. Many adolescents take another kind of reading test, one that is used for selection purposes. These forms of testing are discussed next.

ACCOUNTABILITY TESTING

The state reading assessments whose contents are discussed in Table 4.1 are used to take a measure of how well individual students and groups of students within schools, districts, and the state as a whole are doing in reading. The tests

are part of the state's mechanisms for holding districts and schools accountable for teaching students the content included on the state standards. Data from accountability tests, which are often administered near the end of the school year, as in this state, are also reported to the federal government as a measure of schools' adequate yearly progress (AYP). Accountability data can usually be disaggregated to allow for comparisons of different focal groups, for example, according to gender, disability, language status, race/ethnicity, or size of school.

In addition to showing how well individual students are actually learning to read, these comparisons suggest where resources, such as professional development for teachers or provision of intervention or remedial help for students, should be provided. For example, if data from administration of the reading test at the end of the school year show that the lowest-scoring students in a district are the ones for whom English is a second language, additional professional development might be provided to help teachers improve their skills for working with these students. Likewise, gaps in scores between students in rural or urban areas might motivate policy makers at the state level to expend extra resources to address the differentials.

Accountability tests can be used to generate comparisons of individual students, most appropriately at the school level, and to identify students who might benefit from supplemental services such as attendance in a gifted program or in an intervention class to improve skills. Provision of an intervention class is especially warranted if test scores carry specific consequences with them, as reading test scores often do. Consequences include promotion or retention in grade or even conferral or withholding of a high school diploma.

To illustrate at a more personal level how accountability testing can be used, let us consider the hypothetical case of Amanda, a 7th grader in a middle school in the illustrative state. By the time Amanda reached grade 7, she had taken reading tests aligned to the state standards at the end of grades 3–6. The reading test she needed to take at the end of grade 7 was aligned to the following reading standards:

Seventh grade students use oral language, written language, and media and technology for expressive, informational, argumentative, critical, and literary purposes. Students also explore the structure of language and study grammatical rules in order to speak and write effectively. While emphasis in seventh grade is placed on argument, students also:

- Express individual perspectives in response to personal, social, cultural, and historical issues.
- Interpret and synthesize information.
- Critically analyze print and non-print communication.

- Use effective sentence construction and edit for improvements in sentence formation, usage, mechanics, and spelling.
- Interpret and evaluate a wide range of literature. (NCSBE, 2006d)

The reading test takes 115 minutes to complete and includes nine fairly long reading selections—six literary and three informational. The test includes 56 multiple-choice items that are written to assess four different purposes for reading: reading to experience literature, to gain information, to perform a task, and to apply critical analysis and evaluation.

Scores on grade C reading tests in this state are reported on the state's developmental continuum of reading growth; the grade 7 slots on the scale fall between 228 and 287. The grade-specific points on the scale are further divided to show four achievement levels. Table 4.2 presents the levels, the state's description of performance at each level, and the score range for each level on the grade 7 reading test (NCSBE, 2006a). The reference to the next grade in the descriptor for levels 1, 2, and 3 reflect that the test is given at the end of the school year, but even more importantly suggest that results of the test are expected to provide some prediction of how students will do in the next grade.

To get to know Amanda better, let us also say that her reading test scores prior to grade 7 were not outstanding but did not place her at the bottom of the cohort of her peers. The scores fluctuated between the highest end of the level 2 band and the very bottom of the level 3 band on the developmental scale for each grade (see Table 4.2). Even when test data are produced with

Table 4.2
Descriptors of Achievement Levels on State Reading Test

Level	Description of behavior	Point span for grade 7
1	Students do not have sufficient mastery of knowledge and skills to be successful at the next grade.	228–242
2	Students have inconsistent mastery of knowledge and skills and are minimally prepared for the next grade.	243–251
3	Students consistently demonstrate mastery of grade-level subject matter, and skills are well developed.	252–263
4	Students consistently perform in a superior manner, clearly beyond that required to be proficient at grade-level work.	264–287

Source: North Carolina State Board of Education. (2006). *Grade 7 reading comprehension sample selections and items test information document*. Retrieved October 28, 2006, from <http://www.dpi.state.nc.us/docs/accountability/testing/eog/g7/ReadingSamples/eogsurroundg7w.pdf>

utmost psychometric skill and care, scores that hover around the upper or lower ends of a scale are subject to statistical error and need to be interpreted in conjunction with other information about students' performance. Amanda's pattern of scores, however, seemed to have confirmed her teachers' assessment that she struggled as a reader. Her course grades were below average, but not failing, and teachers often said that she "lacks motivation" or "doesn't apply herself."

Since she entered middle school, Amanda's scores on the state reading tests have provided her teachers and parents with an indication of her reading as she transitioned into the reading to learn phase of her academic life. A poor score on the grade 7 test would not have immediate personal consequences for Amanda, but a low score—even one near the bottom of the grade 3 band—should be considered a red flag, suggesting that her academic literacy skills were not developing fully. Paying attention to the grade 7 test score was particularly important because grade 8 is considered one of the state's so-called gateways, that is, a critical decision point in the K–12 cycle. If Amanda's score on the grade 8 test was in the level 2 or the level 1 band—that is, if her scores continued their downward trend—she could be retained in grade. Students must also take a mathematics test with equally rigorous standards for passing.

Before students who score low on this test are actually retained, they are given an opportunity to take an alternate form of the test. Additionally, their parents are allowed to petition for a review of the retention recommendation. If the petition is granted, teachers will be asked to review the students' work more fully before determining whether the students should actually be promoted. Students who are retained in grade 8 are given intensive intervention to improve their skills before they take the test again.

Amanda and her fellow students will not be tested in grade 9, but they face another reading test and a writing test in grade 10 and the state's high school exit examination in grade 11. The high school exit exam is considered another gateway test that students must pass to graduate and receive a diploma. Students may take the exit exam several times until they pass—or decide to leave the school system. It is interesting to note that over one-third of the 20,000 students who dropped out of high school in the 2005–2006 school year did so during grade 9, when they did not have to take any state tests at all.

By the time Amanda reaches grade 11, her reading will have been tested at the end of grades 3–8 and in grade 10—seven accountability checkpoints. Her scores, aggregated with her fellow students, will have been sent to the state board of education and to the federal government as part of her schools' accounting for AYP. If Amanda's scores were satisfactory, it is likely that no one paid much attention to them and focused instead on her course grades as the best measure of her actual school performance. If the scores were very low, school administrators and guidance counselors should have been alerted to her

reading difficulties prior to the critical grade 8 gateway test, with its potential for personal consequences. If they were really low, but she made it to grade 9, she might well have dropped out of school.

But Amanda's reading test scores always hovered right around the criterion for passing—sometimes at the top of the second achievement band and sometimes at the bottom of the third band. This performance came into even sharper profile when she entered middle school, and her course grades, never really high, began to slip as well. It is entirely possible that no one noticed the trend in Amanda's reading scores as an important warning that her academic reading skills were insufficient for the requirements of middle school work. Amanda might have been able to pass her courses, but it was unlikely that she would develop the readiness reading skills that ACT Inc. found essential for college and the workplace.

Data from accountability tests in reading provide a longitudinal record to monitor students' progress in this important academic domain. Accomplishing this monitoring requires that districts and states invest in assigning each student a distinct identification number and that a district or state database exist to serve as a repository for test scores. This is especially important after students leave elementary school because students no longer receive a grade—or instruction—in reading per se, and it can be invaluable information about struggling readers. Content area teachers often have no idea how poorly developed students' literacy skills actually are, and in their efforts to cover the content in their courses, they assume that all students have the necessary reading and writing skills to marshal when needed to meet course requirements (O'Brien, Moje, & Stewart, 2001).

State accountability tests for reading can provide important data points to measure reading achievement, and they can also suggest when more finely grained testing is needed. Students like Amanda, whose state reading test data have shown her to be a weaker performer than many others, often receive little or no help along their way toward a test like the state's grade 8 reading test, with its high personal consequences. As discussed next, this does not have to be the situation at all.

GROUP-ADMINISTERED DIAGNOSTIC TESTING FOR READING

Determining accountability—documenting whether students are learning and schools are doing a good job encouraging this learning—is arguably the most prevalent purpose for testing in this country, but it is by no means the only one. Diagnosing academic difficulties is another important purpose. Diagnostic testing is especially important when students' reading skills do not seem to be developing adequately to meet their academic needs and also to allow them

to use reading as part of their out-of-school activities. Use of a diagnostic test may be predicated by lower-than-expected scores on an accountability test of reading achievement or by difficulties in English or other subjects in which strong academic literacy skills are required.

Think about Amanda again: let us place her in grade 8, and let us say that her score on the grade 7 reading test was 252, the very bottom of the level 3 test score band for the state (see Table 4.2). Every test score has some element of psychometric error associated with it, so depending on the standard deviation for the grade 7 test, her true score could be a bit higher, or even a bit lower.

When grade 7 reading test scores are returned to schools in late spring or summer, an administrator or guidance counselor can easily identify students who seem to be at risk for academic difficulties because of poor reading skills. Some students, possibly even Amanda, may have had a bad testing day, and their scores do not represent their real achievement; for others, however, low test scores may indicate a real literacy problem. Because Amanda's score hovered between inconsistent and consistent mastery of reading content according to the achievement descriptors shown in Table 4.2, the score should have alerted an administrator or guidance counselor in her school that she might have a reading problem that should bear further investigation.

With the grade 7 reading test scores in hand, the administrator wanted to find out how Amanda and other students with similar scores did in their content area course work, what their history of reading scores was, and whether they were English language learners or had any disabilities that might have influenced their scores. If Amanda's grades in content areas were dropping over her middle school years, and if her previous test scores were all near the bottom of the level 3 band or lower, the administrator might recommend that she and others with a similar pattern of scores and grades take a group-administered diagnostic reading test to obtain a better sense of the reading problems they might have experienced. This could be the first step toward providing the students with intervention to improve their reading during the 8th grade, before they took the end-of-year reading test that might have personal consequences for them. Even though students who repeat grade 8 are supposed to be given intense intervention, giving students help *before they are retained* makes academic, social, and fiscal sense.

Diagnostic tests are developed to include enough items and subtests to produce a reliable and valid profile of students' specific strengths or deficits. Most diagnostic batteries have multiple forms of their tests at each level, and many have distinct middle and high school tests. Group-administered tests can be given to large groups of students, are usually untimed, and can take up to 90 minutes to complete. The time is worthwhile if the administrator or counselor wants detailed information about what students can and cannot do when they read different kinds of materials.

Let us say that in Amanda's school, students with a history of weak performance on reading tests and declining grades are given one of the commonly used tests that produce a profile of strengths and weaknesses, the Group Reading Assessment and Diagnostic Evaluation (GRADE; American Guidance Service Inc., 2001). The GRADE yields not just a cumulative reading score, but also subscores on sentence comprehension, passage comprehension, vocabulary, and listening comprehension. It is untimed but estimated to take about an hour to administer. The GRADE was selected because it is somewhat shorter than some of the other group-administered tests, has upper elementary and middle school forms, has documentation of high validity and reliability, and is easy to administer. The passage comprehension subtest includes six passages, some of which are fairly long. The passages, although relatively short, are illustrative of literary, scientific, and social studies texts that students might encounter in school. There is software available to report students' scores, or the tests can be hand scored by the person who proctors the administration.

The profile from the GRADE of Amanda and her fellow students included a total comprehension score that was derived from the vocabulary and sentence and passage comprehension subtests, scores on the two comprehension subtests, and a vocabulary score. It also included a listening comprehension score derived from a subtest that included 17 exercises that assessed students' ability to understand spoken language and draw inferences about what they heard. For each item, the test read a sentence, and students decided which picture best represented the meaning of the sentence or answered a question. For example, one set of pictures showed a goat, a cow, a whale, and a deer. The text read to test-takers discussed the relative butterfat content of the milk produced by the four animals and asked which milk was the least rich. Other items depended on knowledge of multiple meaning words or fairly rare uses of certain terms. All required some level of inference, in addition to knowledge of English vocabulary. The listening comprehension subtest provided a good measure of the ability of struggling readers or English language learners to process fairly complex sentence structure and make sense of verbal input.

Amanda's scores on the GRADE gave more detailed information about her reading than the state reading test scores, and her school counselor was able to discuss her reading difficulties more accurately than before. Amanda's total composite score on the GRADE, when compared against grade equivalents, indicated a reading level of low 6th grade, approximately two years behind where she needed to be as she started grade 8. Amanda's score on the listening comprehension was higher than her other scores, attesting to her ability to make sense of language. Her vocabulary score, while not at grade level, suggested that she had little trouble actually decoding the words on the subtest but that she could still benefit from work to enhance her strategies for figuring out and remembering new words. Her sentence comprehension subtest score

was higher than that for passage comprehension, but cumulatively, they suggested that making sense out of diverse texts was her real weakness.

When Amanda and her counselor met to discuss her scores, she admitted that she actually had not finished the passage comprehension section at all. She said that she was a very slow reader and rarely finished the reading tests that she had been taking since elementary school or even some of the longer assignments that were made in her content area classes in middle school. She told her counselor that she liked reading “stories and chapter books” in English class and could keep track of what they said, especially when there was class discussion about the texts, but that she had had trouble “keeping up” in other subjects because she could not make sense of and remember what she was reading. Amanda was describing very clearly her difficulties with academic literacy, that is, her inability to transfer reading skills learned through the stories in core reading programs to the diverse requirements of content area reading. Her weak performance on reading tests and her declining grades were clear evidence of this, but as is often the case with adolescents, her teachers ascribed the downward trends to lack of motivation or teenage laziness, rather than delving more deeply into what was causing her seeming disinterest in school and declining grades.

Fortunately for Amanda, her school administrator and counselor thought that intervention should be available for students whose test scores and grades suggested a downward trend before administration of the grade 8 gateway test confirmed their problems, not just after they were retained per the state policy. As a result, Amanda was assigned to a supplemental literacy class developed by the district reading curriculum director and offered to all incoming students considered at risk for failure on the grade 8 test. Through the course, Amanda strengthened her vocabulary skills; learned about the differences in text structure and vocabulary in science, math, and social studies; learned study reading skills like previewing, skimming, and scanning so that she could actually read faster; and even learned test-taking skills that would enable her to get through the grade 8 and subsequent reading tests more quickly and with more confidence.

INDIVIDUAL DIAGNOSTIC TESTING OF READING

Not all the students who took the GRADE were as easy to diagnose as Amanda, and the counselor realized that some of the students required additional testing with one-on-one diagnostic reading tests, which would give an even finer-grained analysis of their reading skills.

There are many forms of diagnostic reading tests, some of which are easy to administer and others that require training in administration and data interpretation. Individual diagnostic tests include a full range of subtests to assess

very basic skills, such as phonemic awareness, phonics, and word attack skills, along with tests of word recognition; vocabulary, including synonyms and antonyms; sentence and passage comprehension; and oral fluency. Some are accompanied by specific information about how to address reading deficits that the tests identify. Most diagnostic tests are so comprehensive that they can be used for students at different grade/age levels, and even for adults. The entire assessment battery may be fairly long because it covers the full range of reading skills and strategies, but administration directions explain how to determine a point within the full battery at which to begin to administer the subtests. For example, a diagnostic test may include subtests on skills as fundamental as letter identification or letter-sound correspondence, which might not be needed with students in Amanda's school.

The first category of individual diagnostic tests is informal reading inventories (Johns, 2005). These tests, which are fairly easy to administer, consist of subtests of basic skills, fluency checks, word lists, short passages of increasing difficulty, and other subtests that cumulatively provide insight into students' strengths and weaknesses.

The counselor in Amanda's school decided to use one of the more comprehensive tests, the Woodcock Reading Mastery Tests—Revised (WRMT-R; Woodcock, 1998), which is appropriate for use with students in K–12 and with adults. Individual administrations will take approximately 45 minutes, but the resulting data will be very useful in identifying students' strengths and weaknesses and determining how extensive an intervention will be needed to remediate difficulties. The WRMT-R, like many diagnostic tests that are appropriate for use with adolescents, includes subtests on letter identification, visual-auditory learning, word identification, word attack, and vocabulary, in addition to tests of sentence and passage comprehension. There are four vocabulary subtests—general reading, science/mathematics, social studies, and humanities—to provide insight that can be especially useful in determining how to improve academic literacy skills. The test battery allows for testing of very low level readers or for moving more quickly if fundamental skills seem to be in place and assessment of higher-level comprehension strategies seem warranted.

Students whose individual profiles of strengths and deficits suggest the need for immediate attention deserve intense intervention that addresses their basic reading problems. Intervention may be offered through a specific program intended for use with very small groups of students or through a more personalized tutoring program designed to remediate the problems identified by the diagnostic test. Without such help, students will continue to be at risk for academic failure and for low scores on high-stakes tests like the grade 8 reading test.

The three types of tests discussed so far—accountability tests, group-administered diagnostic tests, and individual diagnostic tests—serve very differ-

ent purposes, produce different kinds of data, take different amounts of time to administer and score, and sample the domain of reading in different ways. Most adolescents will experience only the accountability tests developed to align to their states' reading and language arts standards and designed to give a global rating of their reading comprehension abilities; such data are enough to determine that they will achieve high enough readiness levels in literacy to do well in their course work and in postsecondary endeavors. Students like Amanda may hate to take reading tests because they feel frustrated by experience and anticipate the ramifications of doing poorly. But for Amanda and others like her, a diagnostic reading test can make all the difference between continued poor performance and identification of how to strengthen weak reading skills.

OTHER METHODS OF ASSESSING ADOLESCENTS' READING

Our illustrative student Amanda was fortunate to attend a school that took a proactive approach to low test scores on a reading test. Even though one year of intervention may not have been enough to compensate for previous inattention to her poor reading skills, let us suppose that Amanda did respond well, did improve her skills, and did increase her reading speed to the point where reading was no longer a frustrating, tedious task that she tried to avoid. She passed the grade 8 gateway reading test, perhaps not with flying colors, but with a score that placed her firmly in the middle of the level 3 score band: she can "consistently demonstrate mastery of grade level subject matter and [her] skills are well developed" (State Department of Education, 2006a). She was able to move forward to grade 9, the year without statewide testing.

CLASSROOM-BASED ASSESSMENT

Amanda's grade 9 English teacher felt little of the pressure that some teachers feel to teach to the test. Still, she wanted to track her students' progress, especially as they learned to use sophisticated skills for analyzing and critiquing what they read. She also wanted to evaluate their growth in writing. To accomplish these assessment goals, she and other English teachers in Amanda's school asked students to keep a portfolio of their work throughout the school year (Cohen & Wiener, 2003; Hewitt, 1995). Amanda and her peers used the portfolio to record their reactions to the assigned reading in the English class and also to write about the additional literary or informational books they had to self-select as part of their course requirements. Some of the written entries were informal reflections on their readings to tell the teacher what they liked or disliked in their reading, what they were finding difficult or frustrating, and what they were learning. Others were more formal, as students responded to specific questions that the teacher posed about the readings.

Amanda's teacher read the portfolio entries to monitor her students' progress, and periodically, she conducted conferences with the students about their reading. She also listened in as small groups of students talked with each other about their in-school and out-of-school reading, taking notes about what was discussed and how well students seemed to be keeping up with their reading. The teacher noticed that Amanda did not seem to be putting as many entries in her portfolio as other students and asked her about this in one of the conferences. Amanda admitted that she had never liked to read much, had taken a course in grade 8 to improve her skills, but was still struggling somewhat. This information, along with Amanda's answers to questions about what interested her, allowed the teacher to get a better sense of how she could help Amanda be successful in her class. Gathering this information and using it to make instructional decisions was a form of informal assessment that is used relatively frequently in elementary school classes but is less common in higher grades. As a result of her data gathering, the teacher provided some shorter, easier, and high-interest selections for Amanda. Reading these would help Amanda maintain the advances she made in the intervention class in 8th grade, and she would be able to participate in the group discussions and have something to write about in her portfolio.

Amanda's portfolio served as an ongoing assessment of her reading. The assessment process was low pressure, but the teacher's frequent checking of the portfolios and conferences built in personal accountability for Amanda. At the end of the year, the grade 9 English teachers met to discuss students' portfolios, using a rubric that they had developed to evaluate students' work over the year. If Amanda had actually been reading the books the teacher had helped her to find and had participated in the literacy activities in her class, her portfolio should have shown growth and achievement as well as signs of personal satisfaction as a reader.

As discussed previously, Amanda had to take an end-of-year test in English in grade 10, and her improved reading skills and better understanding of literature allowed her to pass at an acceptable level. The same was true for the grade 11 high school exit test, which she passed the first time she took it. Her score might not have been high, but it was a criterion-referenced test, and Amanda met the state-determined score for passing.

ASSESSMENTS FOR ADMISSION TO HIGH EDUCATION

If the GRADE test is counted, the high school exit test was the ninth test measuring reading and literacy skills that the state required Amanda to take. One can easily argue that the GRADE was the most important of all the tests because it provided information that led to her placement in an intervention class. One can also easily imagine that Amanda might not have wanted to look

at another reading test in her entire life, but her aspirations for higher education meant that another test was in the offing. Amanda had the choice of taking the ACT or the Scholastic Assessment Test (SAT), the most common tests that high school students take as part of their college enrollment processes. Post-secondary institutions use students' scores, along with other information, in the process of selecting students for admission. Both test batteries include a reading subtest that includes long passages followed by multiple-choice questions.

Amanda decided to take the SAT because colleges in Amanda's state required that test, rather than the ACT. Amanda's guidance counselor steered her toward the preliminary form of the test, the PSAT, which provides students an opportunity to practice for the SAT. Taking the PSAT helped Amanda understand that even though her reading had improved, she would still have to work very hard and read carefully and quickly to do well.

Administration of the SAT takes three hours and 45 minutes. The test consists of subtests in writing, critical reading, and mathematics and cumulatively is referred to as the SAT Reasoning Test to emphasize that it assesses thinking skills students are to have learned in high school and will need for college (College Board, 2006). The writing subtest includes a 25-minute essay and 10 minutes of multiple-choice items; the remaining subtests are entirely multiple choice. Amanda and her fellow test-takers took three sections of reading items to assess sentence completion and comprehension of paragraphs and extended pieces of text. The sentence completion items assessed word meaning and ability to understand how the parts of a sentence fit together logically, for example, by selecting a word that could replace an awkward expression so that a sentence more clearly communicated its meaning. The comprehension sections include items that assess vocabulary in context, literal comprehension, and extended reasoning as demonstrated through the ability to make inferences, synthesize, analyze, and evaluate what is read.

The SAT would not be an easy test for Amanda; she would have to read and understand difficult material and think carefully as she selected from among the five options in the multiple choice answers. But she had many opportunities to practice and prepare for the test: the PSAT in grade 10, an online course, books and study guides, and test-preparation courses offered by commercial companies. She took the SAT in grade 11 and again at the beginning of grade 12 to see if she could improve her scores. True to information on the College Board Web site (College Board, 2006), she did better the second time she took the test. SAT scores are reported on a scale from 200 to 800, and colleges determine the score range in which their students should fall, depending on how selective they are in their admissions processes.

So in her senior year of high school, Amanda sent her SAT scores, her transcript, and her letters of recommendation to colleges in her state. Since grade 3, she had taken eight state-required tests, the GRADE, the PSAT, and the

SAT twice—12 reading tests in all. There is a strong possibility that Amanda's reading will be tested again when she enters college because over 11 percent of all entering college freshmen enroll in remedial reading course work (National Center for Education Statistics, 2003).

CONCLUSION

It is little wonder that criticisms are raised about the number of tests students have to take, especially if test data are not used in intelligent and proactive ways. Amanda illustrates this point: her reading test scores as she entered middle school showed a steady downward trend that was mirrored in her course grades. Her academic literacy skills were not sufficient for the content area challenges that teachers put before her, and she was on what might have been a progressively downward spiral until she, like many people in her state, dropped out of school as soon as possible (Snow & Biancarosa, 2003).

This chapter presents a positive use of required testing in that school administrators and counselors in Amanda's hypothetical district used the grade 7 test scores as data with which to identify students who were becoming increasingly at risk for failure on the high-stakes grade 8 test and in their academic work. The district had the foresight to provide intervention services to try to change the downward trend in students' performance. In this case, the grade 7 test score proved meaningful in that it motivated the administration of the GRADE and action on the finer-grained information the diagnostic test provided. Furthermore, the 9th-grade English teacher used informal assessment means to get to know Amanda and her peers as students, as readers, and as individuals. Through the ongoing monitoring of the portfolio content and frequent one-on-one conferencing, the teacher helped Amanda maintain the advantages she had gained from the reading intervention class that she had taken the previous year.

Opponents of testing would probably argue that conscientious teachers should recognize students' downward trajectories without tests and provide intervention based on classroom-based informal diagnosis of students' needs. This is what happens in the best of self-contained elementary classrooms, but this model of assessment is unlikely to be effective in departmentalized programs. The objective data that tests provide allow for comparisons of students' progress, tracking of trends in students' performance, and identification of students who are at risk for failure.

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Part Two

BEST PRACTICES IN ADOLESCENT LITERACY INSTRUCTION

Chapter Five

AN OVERVIEW OF SECONDARY LITERACY PROGRAMS

Barbara J. Guzzetti and Leslie S. Rush

School districts, and, in particular, secondary school districts, face increasing pressure to improve students' literacy skills. These pressures can take the form of high school exit or graduation examinations such as those in Texas and California, which examine students in mathematics, reading, and writing skills. They also stem from recent legislation, such as the No Child Left Behind Act of 2001, which exacts high standards on schools for all subgroups of students, not just an overall average, to be successful. At the local, state, and federal levels, assessments are taking on new importance, and testing is growing to be a way of life in secondary schools.

Calls for improving secondary students' literacy abilities can also be heard from a variety of sources. The Alliance for Excellent Education, an advocacy group that pushes for excellence in high school education, is one such source. Their report on adolescent literacy, "Reading Next" (Biancarosa & Snow, 2004), calls on both public and private sectors to invest in adolescent literacy and advocate for the improvement of literacy research and instruction at the secondary level.

The National Assessment of Educational Progress (NAEP) "Reading 2005" report card (Perie, Donahue, & Grigg, 2005) shows little significant change in adolescents' reading skills over the last 25 years. Within those findings, however, gaps in reading achievement exist between students of color and white students; in addition, with 38 percent of students nationwide scoring at below basic and 33 percent scoring at basic, there is a problem in moving students toward proficiency in literacy in all areas of the United States. NAEP's

Trial Urban District Assessment (Lutkus, Rampey, & Donahue, 2006), which evaluates reading at grades 4 and 8 in selected large urban districts, found that average reading scores for 8th-grade students in urban districts was lower than that of 8th-grade students nationwide: 51 percent of students in urban districts scored at the below basic achievement level, as compared with 38 percent of 8th grade students nationwide.

To improve students' literacy skills, administrators and teachers in secondary school settings often turn to commercially published or packaged reading programs. These programs are designed for students who read below their grade levels, students who are often referred to as struggling readers and are considered at risk of dropping out of high school due to their low literacy skills and abilities. Many of these programs have variations suitable for primary, intermediate, middle school, junior high school, and high school students.

In this chapter, we describe some of these programs and review the available research on them. In doing so, we profile five widely used programs: Accelerated Reader, READ 180, Success for All's the Reading Edge, Strategic Literacy Initiative's Reading Apprenticeship, and Project CRISS. We also review two of the less well-known programs, Jamestown Reading Navigator and Essential Learning Systems. Owing to space constraints, we selected only these programs from those available. We selected those programs with which we had some familiarity and/or programs that were described enough from readily available sources to include in this overview.

We provide brief descriptions of these programs and a concise overview of the relevant and available research on instructional programs that are commercially published for secondary reading instruction or secondary literacy instruction. We distinguish between programs that focus solely on reading instruction versus those that are secondary literacy programs that also focus on writing and/or spelling instruction, in addition to reading instruction. Our review encompasses those commercial programs that are intended for use with junior high school, middle school, and high school students.

We examined these programs in light of findings from the National Reading Panel as well as from the Commission on Reading of the National Council of Teachers of English, the joint standards for English language arts of the International Reading Association (IRA), and the National Council of Teachers of English (NCTE). Together, these reports draw attention to the importance of reading comprehension, vocabulary, and fluency instruction as well as writing and spelling instruction. The strategies and skills that the IRA and NCTE joint standards emphasize include the following: encouraging students to read a wide variety of print and nonprint texts that reflect a range of classic and current literature; developing students' abilities to interpret, evaluate, and appreciate texts; developing students' word recognition and knowledge of language structures, conventions, and textual features; and

increasing students' abilities to employ a wide range of strategies for reading and writing.

In addition, effective programs at the junior high and high school levels should have other characteristics. Because upper-grade students of low ability often have poor attitudes toward reading, these programs should be motivating and engaging and appropriate for adolescents and their interests. They should be based on continuous assessment to meet the needs of individuals; their management systems should track and reflect individual progress and report this progress to students as well as to teachers. These programs should assist students in learning to make connections to their prior knowledge, encourage metacognition or reflection on reading processes, and connect skills and strategies instruction to reading and writing in content area classes. In conducting our review, we also noted if these programs included cooperative or collaborative learning and encouraged wide reading of classics and contemporary fiction and nonfiction and nonprint texts, and if they had a computer-assisted instructional component, assessment for placement and progress through the program, feedback to students and teachers, and a management system for teachers.

Because we believe that teachers are the most important factor in any learning environment or program, we also examined the teacher's role in these commercially published programs. We examined these programs for the extent to which the teacher's actions were scripted or prescribed. We also examined how much time teachers were allocated for direct instruction versus the amount of time that students would spend each day working independently or on computers for computer-assisted instruction and practice.

We also believe that these programs should have some established research support for their efficacy. Therefore we sought out any extant research, published or unpublished, that explored the impact of these programs on students' reading achievement or performance. In doing so, we critically examined the research base of the experimental studies by evaluating the design of those studies. For example, we examined these evaluations for bias by noting if the studies offered as evidence of program efficacy were conducted independently by an external researcher or evaluator and not by anyone connected with or paid by the publisher or developer. We also noted how well these studies were designed, including random assignment of individual students to the program, the use of a comparison group, and the numbers, ages, and types of students sampled. In cases where multiple studies were conducted on the intervention, we characterize those studies as a group and report details of a few of the most relevant studies.

We caution that this chapter is only an overview of some of the commercial reading/literacy programs available and is not all inclusive. There were several programs that we were not able to review due to space constraints (e.g., Failure

Free Reading, Auto and Skill Academy of Reading). We are also not able to provide a comprehensive review of each program due to space constraints. In addition, it may be that some of the programs described below have changed their content or formats or have gathered additional research evidence for their programs since the time of our writing this chapter.

Given these caveats, the following sections provide the results of our review of secondary literacy and reading programs and the related research or evaluations that demonstrated their impact on students' achievement. We begin by profiling those programs that are most popular in comparison to others; we finish our review by describing those programs that are not as well known. In doing so, we depict the salient features of these programs and their strengths and limitations.

ACCELERATED READER (RENAISSANCE LEARNING)

Accelerated Reader (AR) is a computerized program distributed by Renaissance Learning (Accelerated Reader, 2006). This program has been touted as both a comprehension program and a reading motivation program. The program reportedly has improved students' reading achievement and attitudes (Holmes & Brown, 2003). Renaissance Learning itself calls the program "reading management software" (Renaissance Learning, n.d.) and promises results, such as building an intrinsic love of reading, providing valuable data on students' reading abilities, keeping students challenged, improving classroom management, and helping every student master standards for reading/language arts. Often, this program is supplemented by other instruction such as sustained silent reading, textual analysis, phonics and decoding, or skills instruction.

Once a district has purchased the AR program, teachers are encouraged to develop instruction around key principles such as providing sufficient opportunities for reading practice, making opportunities for students to be successful in their reading, providing reading practice that is matched to students' abilities but also provides a challenge, and providing feedback to students on their reading. Establishing students' personal goals for reading and providing personalized instruction and assessments for students are essential to the program. Readability levels of books are analyzed using Renaissance Learning's trademarked ATOS Readability Formula, which is purported to be based on students' actual reading and full-text scans of books.

Teachers begin using the program by administering the Standardized Test for Assessment of Reading (STAR). STAR consists of questions about vocabulary terms used in the context of sentences and in larger pieces of text. This measure has been criticized for excluding oral reading comprehension or observations of students' actual reading behaviors (Biggers, 2001).

Once a reading level has been obtained for a student, the individual chooses a book from a computer-based data system of thousands of books by choosing one from the list that is appropriate for his or her reading level. The student then reads the book and takes a multiple-choice test consisting of 5–10 literal comprehension or factual recall questions based on the selection. Students progress through the levels of the books by passing the quizzes and therefore can see their progress accordingly.

A variety of reports are available to teachers on students' performance on this assessment. These include a diagnostic report that provides information on individual students' grade equivalency reading levels. Growth reports track students' progress in grade equivalency reading level over the school year. Summary reports and progress reports provide information on groups of students.

The teacher functions as a manager and oversees students' progression through the various levels of the program based on their test results. There is no direct instruction component to this program. This cycle of reading and taking quizzes under the direction of a teacher as described above continues as the teacher uses AR's computerized management system's reports to track students' progress. Students are reportedly motivated by external rewards as they are able to earn points that can be redeemed for prizes or other incentives as they read the books listed as appropriate for their reading ability level and pass a comprehension test on each. The Renaissance Learning Web site provides additional information on how AR works and how it can be purchased (<http://www.renlearn.com/ar/>).

Research on Accelerated Reader

A plethora of studies have been conducted on the impact of AR on students' reading attitudes, motivation for and proclivity to read, and/or their reading achievement. Seventeen of these studies were located and reviewed for this chapter (e.g., Barsema, Harms, & Pogue, 2002; Goodman, 1999; McGlinn & Parish, 2002; Kambrian, 2001; Toro, 2001). Two of these studies were conducted only with special populations of English language learners or students with learning disabilities (McGlinn & Parish, 2002; Scott, 1999), and two were conducted or funded by the publisher (Holmes & Brown, 2003; School Renaissance Institute, 2000). Most of these studies were conducted either with primary students (e.g., Cuddeback & Ceprano, 2002; Facemire, 2000) or intermediate-grade students (e.g., Mallette, Henk, & Melnick, 2004; Mathis, 1996) in elementary schools. A few were conducted with middle school students (e.g., Pavonetti, Brimmer, & Cipielewski, 2000; Scott, 1999). None of the extant research conducted by independent researchers focused exclusively on the impact of AR on high school students' reading achievement or attitudes.

One study (Batraw, 2002) investigated the impact of AR on junior high school students' reading interests and habits; however, this study was not an experimental study that compared a group using AR to another group; rather, it was based on interviews and surveys of students from a middle-class to low socioeconomic area. Results of self-reports showed that most of the students using AR did not improve their attitudes toward or expand their interests in reading. The majority of the students reported reading no books at all (18 percent) or few books (60 percent). Interviews showed that students perceived reading merely as a task to be done in school.

Other research that tested the efficacy of AR showed mixed results. For example, Milton and colleagues (2004) used a pretest-posttest design to explore any differences between growth in reading achievement of 5th-grade students who participated in AR and those who did not. Students who did not participate in the AR program showed a significant increase in reading achievement on the Terra Nova standardized test over those who did participate in AR.

Nunnery, Ross, and McDonald (2006) studied the relationship between AR implementation and the reading achievement of students in grades 3–6 and growth in reading for students with learning disabilities. Using the STAR reading test as a measure of reading achievement, these authors found that implementation of AR had positive effects for at-risk students in grades 3–6, although larger effects were found at the lower grades, and lower effects were found in the upper grades.

As these studies demonstrate, the research on AR provides inconclusive evidence to demonstrate the efficacy of the program, particularly for secondary students. The experimental studies were not well designed (e.g., there was no true random assignment of students to the intervention). In addition, independent investigators have not widely tested the impact of AR on high school students.

Accelerated Reader and Research on Motivation

Other studies investigated the use of external motivators, such as the ones AR uses on students' achievement. Although Renaissance Learning indicates that AR is a program that will motivate students, there is some evidence that extrinsic rewards—often used with AR—can work against students' motivation for reading. For example, a study by Pavonetti, Brimmer, and Cipielewski (2002) examined whether 7th graders who had used AR in elementary school tended to read more books than 7th graders who had not used AR. Their results do not support the claim that use of the AR program produces lifelong readers.

In a study supported by a grant from Renaissance Learning, Husman, Brem, and Duggan (2005) investigated the impact of AR's quizzes and point

systems on students' goal orientations. They found that over the course of one school year, students became less performance-approach oriented (i.e., seeking out challenges to establish themselves as students in the top echelon of their classmates) and less performance-avoid oriented (i.e., avoiding challenges to keep from failing). Students' mastery of goal orientation—focused on learning itself, for its own value—did not change significantly.

Strengths and Limitations of Accelerated Reader

Although there are several strengths in AR, there are several limitations or weaknesses as well. The strengths of AR are that the program is individualized, based on continuous self-assessment, and self-paced, and it provides immediate feedback to students on their progress and provides teachers with progress records. Students using the program are actively engaged with actual reading and not merely skills practice. The limitations of AR are that the program does not emphasize higher-order comprehension, does not provide for direct instruction from the teacher in comprehension, vocabulary, or decoding, and reduces the teacher to the role of manager. In addition, one of the dangers in using AR identified in the literature (Groce & Groce, 2005) is that librarians and teachers tend to limit a student's choices and access to books if the student's choice does not appear on the list of books appropriate for that student's level in the program. Hence the use of AR may discourage rather than encourage students' wide reading, and so we caution that if AR is to be used at all, it is best used as a supplement to other reading instruction and should be enhanced by other choices of print and nonprint texts.

READ 180 (SCHOLASTIC)

READ 180 is an elaborately constructed, computer-assisted instructional program that provides instruction and practice in reading, writing, and spelling with regular assessment strategies. Results of assessments are provided to both teachers and students. The program is also available in Spanish. The program requires that 90 minutes of time per day be devoted to READ 180 in class sizes of 15 students or less. Teachers receive supplementary materials such as motivating videotapes that relate to the trade books at each level, short trade books that are a combination of classic and current literature, literature guides, resource and activity books, and teaching aids. This program has been observed by one of the authors of this chapter in local high school classrooms.

Daily lessons begin with 20 minutes of teacher-directed instruction with the whole class. The content of this instruction is at the teacher's discretion and may include such activities as preteaching vocabulary in the trade books

and stories or activating and building students' prior knowledge in preparation for reading. Following the teacher's direct instruction to the whole class, individuals rotate activities with time spent on computer-assisted instruction in comprehension, vocabulary, metacognition, word recognition, phonics, and spelling instruction, and writing or reading independently under supervision of the teacher. The materials in the program correspond to levels that the students move through on the basis of regular assessments. Students are able to see their progress through program records.

Research on READ 180

Nine studies were located on the impact of READ 180 on students' reading achievement; most of these were sponsored by the publisher, Scholastic. These studies included pretest and posttest designs and surveys of teachers and students that were program evaluations. None of these studies were published in a peer-reviewed journal, none of them investigated the program with high school students, and none of them had true random assignment of individual students to the intervention and comparison groups. Some of these studies also lacked comparison groups.

Taken together, these studies provide little research support for the efficacy of READ 180. For example, one study (Becker, Shakeshaft, Mann, & Sweeny, 2002) conducted an independent evaluation of the program in several large cities, showing a difference in favor of students who had been enrolled in the READ 180 program. This study, however, was criticized for a lack of a well-controlled design without random assignment of students to treatment and comparison groups and small effects or practical significance (Thorpe, 2003).

Another independent study (Thorpe, 2003) reported an evaluation of READ 180 with middle school students in 6th, 7th, and 8th grades in three schools in one district in the Midwest. The students receiving READ 180 did not increase their reading comprehension competencies any more than did students using other programs or approaches to reading instruction. Students' performance in reading comprehension was similar across the school year in both the READ 180 group and the comparison group.

Strengths and Limitations of READ 180

This program also has its strengths and limitations. In terms of strengths, READ 180 is motivating and engaging. Personal observations of the program showed that high school students were actively engaged and interested in their instructional activity. In addition, there is a component for teacher direction and instruction that is not scripted, but is left to the teacher's discretion based on his or her knowledge of students' needs. The program is rather comprehensive and includes small- and whole-group instruction as well as

individual instruction in vocabulary, comprehension, and metacognition or self-monitoring of reading, writing, and spelling. The program does include higher-order comprehension such as analyzing literary elements, making predictions, identifying points of view and author's purpose, and distinguishing fact from opinion. The program is based on regular assessment and feedback on students' progress toward their personal goals.

There are, however, also limitations of the program. Aside from some of the literature that is included for students reading at various levels, there is little connection to students' reading and writing in their subject matter classes or content areas. Observations of the program demonstrated that it is possible for students to answer comprehension questions by viewing a video without having read the corresponding text. In addition, the comprehension component does not emphasize enough of the higher-order thinking/reading skills and strategies.

Since meta-analysis of research (Glass, McGaw, & Smith, 1981) has shown that class sizes of 20 or less increase students' achievement, no matter what the program, it may well be that the small class size alone and/or the extended time of 90 minutes or double periods of the school day accounts for any gains in reading achievement. This is a rather expensive program to purchase, but according to teachers who have used the program (Lupino, 2005), it will need to be supplemented by other reading instruction that is more teacher directed.

STRATEGIC LITERACY INITIATIVE: READING APPRENTICESHIP (WESTED)

Strategic Literacy Initiative: Reading Apprenticeship (RA) is a computer-assisted instructional program for middle and high school students. Published by one of the regional educational laboratories in the United States that is funded by the U.S. Department of Education to do educational research and research dissemination, RA is a program developed exclusively for adolescents. The program is built around four dimensions—the social (e.g., sharing book talks, sharing reading processes and solutions, noticing others' strategies for reading), the personal (e.g., developing metacognition or reflection on reading processes, assessing performance and goals), the cognitive (e.g., monitoring comprehension, setting purposes for reading), and knowledge building (e.g., developing discourse-specific knowledge in content areas, building knowledge structures, developing vocabulary).

This program relies on a sophisticated teacher to make careful educational decisions regarding instruction. It allows for the most freedom of choice for teachers of the well-known published programs. RA relies on the teacher's ability to teach reading and writing process strategies in a direct instruction

and modeling approach. It also allows for students' collaboration with peers, cooperative learning, and inquiry based on students' needs and interests.

Research on Reading Apprenticeship

To date, the research on RA has consisted of evaluations of the program by the publisher or personnel connected with WestEd. These evaluations have been conducted in such regions of the country as the San Francisco Bay area in California and have been conducted with high school students. Although the findings of these studies have been promising by showing achievement gains, these evaluations, like the evaluations of other programs, have been flawed by a lack of random assignment of individual students to RA or lack of a comparison group. At the time of this writing, however, RA is one of two programs being subjected to a national evaluation by using random assignment and an independent evaluator (staff from the American Institutes for Research [AIR] and the Manpower Demonstration Research Corporation [MDRC]) in more than a dozen school districts across the nation. This study is being funded by the U.S. Department of Education.

Strengths and Limitations of Reading Apprenticeship

One of the program's biggest strengths is also its biggest limitation. Although the program provides teachers with the greatest amount of decision making and direct instruction of many of these programs, successful implementation requires experienced teachers who have the knowledge and skills to be able to model strategies, diagnose group and individual problems, foresee the needs of the students, and oversee inquiry and collaboration. It is not clear if a beginning teacher would be able to implement the program fully with the amount of training and staff support that the program offers. Other strengths of the program include its focus on secondary students, strong ties to content area learning, and grounding in strategies and methods that are based on recent research on reading comprehension and effective instruction for adolescents in literacy. It will be interesting to note the results of the large-scale evaluation that is being conducted on this program, which will examine both the efficacy of this program and its implementation in high school classrooms across the nation.

XTREME READING (UNIVERSITY OF KANSAS CENTER FOR RESEARCH ON LEARNING)

Xtreme Reading is an instructional program for reading that was designed for students entering high school who are reading two or more years below grade level. The program was designed for students with learning disabilities as well as for other at-risk readers. On the basis of the Strategic Instruction

Model developed by researchers at the University of Kansas (Schumaker et al., 2006), the program was designed for use with classes of 12–15 students. The program involves instruction in reading strategies such as word identification, self-questioning, visual imagery, paraphrasing, and making inferences. In addition, students are taught classroom skills such as how to participate in classroom discussions and how to work collaboratively within small groups or with partners in cooperative learning. This program is different from others as students are also taught social and behavioral skills and are guided to set goals for their futures.

Much of this program is teacher supervised and directed. During each class, the students read aloud from a series of engaging novels and short stories. During this activity, the teacher models the behaviors of expert readers (e.g., asking questions, making inferences, verbalizing visual images prompted by the story). The teacher then prompts the students to use these strategies themselves. Students eventually prompt each other to use these reading strategies. They practice using each strategy with partners and then independently through written responses that are scored by the teacher, who provides the students with feedback on their performance. In this way, the students then progress through reading passages at various ability levels based on comprehension tests taken after reading. In the final stage of instruction, students apply the strategies to a variety of materials such as newspapers, magazines, textbooks, and novels. They also use all the strategies in combination.

Research on Xtreme Reading

Like most of these programs, little research has been conducted that demonstrates the efficacy of Xtreme Reading. At the time of this writing, the developers of the program are testing the effects of a year-long course for struggling readers who entered high school reading two or more years below their grade level. In addition, this program is one of the two that is being subjected to a randomized evaluation conducted by independent evaluators at AIR and MDRC in 17 high schools across the nation over the course of two academic years.

Strengths and Limitations of Xtreme Reading

This greatest strength of this program is also its greatest limitation. Like RA, this program provides for much discretion and direct instruction on the part of the teacher, and in doing so, it relies extensively on a skillful teacher. It is unclear if a novice teacher would be able to provide modeling and practice in each of the strategies that compose the program. The program does, however, offer promise as students are carefully scaffolded by teacher guidance and extensive and varying forms of practice.

THE READING EDGE (SUCCESS FOR ALL FOUNDATION)

The Reading Edge, a middle school program for literacy instruction, relies heavily on cooperative learning, which is no surprise since it was developed by a leading developer of and researcher on cooperative learning, Robert Slavin. It is based on a cycle of teach-team-test, with quarterly assessments for regrouping students. The program provides for daily instruction in 45- to 55-minute blocks or 80–90 minutes on alternate days and can be used over a span of several years with classes of 20 or less. This program provides for individual and small-group instruction and practice with partner reading and peer monitoring and feedback. The program does not require technology, but technology is incorporated through computer and DVD supplements.

The Reading Edge offers instruction and practice in word recognition, fluency, vocabulary, comprehension, metacognition, comprehension monitoring, and writing. It teaches a process for writing of prewriting, drafting, revising, editing, and publishing. The writing program includes instruction and practice in writing for various audiences in various genres, such as persuasive writing.

The program is rather comprehensive. It addresses such higher-order thinking and reading skills as drawing conclusions, analyzing cause and effect, problem-solving, determining the author's craft, distinguishing fact from opinion, and analysis of point of view. Students read short stories, novels, poetry, and nonfiction at their individual instructional levels. The Reading Edge is designed to address and build students' prior knowledge and develop their study skills. Teachers receive lesson plans and manuals, materials, and strategy and comprehension tools. Assessments track students' progress in vocabulary, word structure, fluency, comprehension, and comprehension strategies.

Research on the Reading Edge

Like other programs, most of the research conducted on the Reading Edge program has been conducted or contracted by the developer of the program. One well-designed study that used random assignment of students to the program tested the effects of the Reading Edge in 35 elementary schools in high-poverty areas (Borman et al., 2005). The students in these studies were primarily minority students (57 percent African American and 10 percent Hispanic). This large-scale evaluation showed that students in the program outperformed students receiving other reading instruction.

Strengths and Limitations of the Reading Edge

Like other programs, the Reading Edge has several strengths and several limitations. This program does capitalize on cooperative and collaborative

learning, which can be motivating to older students by working in peer groups. The program is reportedly aligned with the findings of the National Reading Panel and is relatively comprehensive in scope. There are weaknesses, however, as well. First, this program is not designed for the high school level. Second, the program does not relate instruction to students' reading in their subject matter classrooms or to reading and writing across the content areas. Spelling instruction is not well described. Finally, there is no extensive computer-assisted instructional component that would support the teacher in providing additional practice to students and reinforce the teacher's instruction.

PROJECT CRISS

Project CRISS (Creating Independence through Student-Owned Strategies) is a professional development program for teachers rather than a program that is designed to work directly with students. The mission statement for Project CRISS is to "provide a research-based, national support system to educators throughout the curriculum that increases student-centered teaching, independent learning, and student achievement" (Project CRISS, n.d.). Developed in Kalispell, Montana, by teachers, including Carol Santa, the former president of the International Reading Association, with funding provided by the National Diffusion Network, Project CRISS works to assist teachers in providing strategic reading instruction through the process of explaining strategies, modeling them for students, and having students reflect on their use. Teachers who receive professional development from Project CRISS go through 12–18 hours of in-service training, which includes discussion of Project CRISS principles and philosophy, textbook analysis, methods of teaching the author's craft, discussion strategies, organization and learning strategies, writing strategies, vocabulary, and assessment.

Research on Project CRISS

Although no studies on the impact of Project CRISS have been published in peer-reviewed journals, the Project CRISS homepage (<http://www.projectcriss.com>) presents several evaluations of the project's work in school districts in Utah, Florida, Colorado, Virginia, and Washington. Evaluation projects were conducted by an outside evaluation agency. These external evaluations showed that students participating in classrooms in which Project CRISS principles and philosophies were enacted learned strategies that should lead to improved comprehension and learning of content information (Santa, 2004). In addition, Project CRISS principles and philosophies are based on research reported and advocated in Biancarosa and Snow (2004).

A LOOK AT LESSER-KNOWN PROGRAMS

Jamestown Reading Navigator (Glencoe/McGraw-Hill)

Jamestown Reading Navigator is an Internet/print-based resource that provides skill development, practice, and assessment in reading and writing. The program components include development and practice in phonics/decoding, fluency, comprehension, vocabulary, and writing. This program was developed exclusively for adolescents who are struggling readers (reading two or more years below their grade levels) in 6th–12th grades. Jamestown Reading Navigator is reported to have been developed based on research in adolescent literacy and to be aligned with the “Reading Next” report (Biancarosa & Snow, 2004) from the Alliance for Excellent Education, which outlined 15 key elements of effective literacy instruction for adolescents.

Content standards for grades 6–12 in reading and writing are available on the Web site (Jamestown Reading Navigator, 2006). These standards address such strands as word analysis, fluency, and vocabulary; literary response and analysis; and writing strategies and applications. Students take a diagnostic test for placement and instruction in the program; their progress is monitored through the program by ongoing assessments. Materials include in-class reader anthologies and magazines with poetry and prose that contain content written exclusively for adolescents. Students apply reading strategies by reading content, viewing interactive multimedia, and writing in response to reading.

The program is delivered in small groups, large groups, and individual or computer lab situations. Resources for teachers include an online management and reporting system, professional development, and assignment to a reading coach, who is available by e-mail or telephone. Professional development is also offered online in implementation and strategies in five modules, including fluency, vocabulary, writing, reading strategies, and assessment.

Research on Jamestown Reading Navigator

At the time of this writing, there is no extant research that demonstrates the efficacy of the program. Hence we do not know the impact of Jamestown Reading Navigator on improving students’ reading or writing achievement. There is, however, research being conducted by the AIR on the effectiveness of the program. This is a national and large-scale evaluation that is funded by the U.S. Department of Education and promises to provide some answers.

Strengths and Limitations of Jamestown Reading Navigator

Just as we expected, this program has its strengths and limitations. One strength of the program is that it was designed exclusively for adolescents and was developed based on reports of effective reading instruction for adolescents.

As such, it is not merely a program that has been expanded to include upper-grade students. The publisher reports that the program makes appropriate connections to content areas. The balance between print and nonprint texts may be appealing to teens and preteens. Limitations that we can draw from our perusal of the information available about the program include a lack of focus in the program's standards on reading comprehension; magazines and in-class reader anthologies that may not be motivating to adolescents; and a lack of encouragement and access to a wide range of reading materials, including classic and popular contemporary literature.

Essential Learning Systems (Creative Education Institute)

This program looks quite different from the others as it is based on a medical model and ideas of faulty sensory processing. The program has a therapeutic approach, with activities that link visual, auditory, and motor or kinesthetic pathways. The program description uses terms like *dyslexia* and considers a lack of phonemic awareness, phonics, and decoding skills as the main cause of reading difficulties.

The program provides for 90 minutes a day for reading and writing, with 200 lessons, or enough for two years, with programs available for middle and high schools. Comprehension practice focuses on literal comprehension and recall. A copy-write approach is described, in which students repeat and write computer-spoken words, phrases, or sentences through dictation. The premise of the program is a learning disabilities/special education perspective on reading, spelling, and writing.

Teachers are considered lab facilitators. They receive a set of manuals, newsletters, and Web-accessible publications as well as e-mail and telephone conferences. No direct instruction by the teacher is described. There is an automated management system. Results of assessments are provided to teachers.

Research on Essential Learning Solutions

The research reported on the program's Web site claims spectacular gains in reading achievement: average gains in reading of two and a half years in four and a half months at the high school level and two years at the middle school level in one academic year (Creative Education Institute, n.d.). The research that resulted in these claims, however, is more anecdotal than of an actual study. No actual evaluation was described, and the measure that demonstrated these gains was not identified. Hence it is likely that these results were obtained from informal reading inventories that show growth in students' instructional reading levels and were not the result of standardized reading achievement tests. In addition, there was no random assignment of students to the program, and no comparison groups were used. These evaluations may have been conducted or financed by the program developer.

Strengths and Limitations of Essential Learning Solutions

This program also has strengths and limitations. The program does address appropriate areas for adolescents such as vocabulary, higher-order comprehension skills of drawing conclusions and predicting outcomes, self-monitoring comprehension, metacognition, strategies to resolve comprehension failures, and use of prior knowledge. There is direct instruction and practice provided by the software. There are several limitations as well, however. First, there appears to be no particular adaptations of the program for secondary students such as reading in and across content areas and use of nonprint texts. Second, comprehension is not addressed until the last day of the instructional cycle. Finally, the research support for the efficacy of this program is weak.

CONCLUSION

We believe that it is crucial for administrators and teachers to be familiar with the research on and background of any program before investing the money and time necessary to fully implement that program. Therefore we close this chapter by providing criteria for evaluating research on available programs and some criteria for evaluating the programs themselves.

When examining research on programs, administrators and teachers should consider several issues, as listed below:

- Is the research performed by an independent researcher, or by someone affiliated with the company?
- Is the research funded by the company that publishes the program?
- Has the research been published in a peer-reviewed journal?
- Does the company provide access to all the research done on its product, or only research that provides positive results?

When evaluating these programs, administrators and teachers should consider the following:

- Do the practices within the program align with best practices, as articulated by professional literacy organizations such as the International Reading Association and the National Council of Teachers of English?
- Do the practices within the program honor the knowledge and professionalism of teachers? Or do they attempt to script instruction or reduce the role of the teacher to that of a program manager by merely handing students over to a computer?

Although we recognize that programs may have some usefulness in school settings, we would like to emphasize that there is no such thing as a quick fix for secondary students' problems with literacy. We believe that the most important factor in the teaching-learning process is the teacher and the teacher's

professional judgment in working with his or her own students. Therefore we note that computer-assisted instructional programs—or any secondary literacy program, for that matter—should have a sufficient block of time in the school day for teacher-directed instruction and modeling and freedom for teachers to supplement the program and its materials in ways that would best benefit the needs of individual students.

We conclude by emphasizing that no computer program or scripted instructional approach can substitute for careful professional decisions made by teachers. Therefore we believe that the most effective programs will be those that allow for the teacher to actually teach, and not just manage a program. The programs that we predict will be the most successful will be ones that emphasize higher levels of comprehension, motivate and engage students, offer and encourage reading a variety of print and nonprint materials, and connect reading and writing to content areas.

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Chapter Six

RECONFIGURING LITERACY INSTRUCTION AND LABS IN SECONDARY SCHOOLS

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There has been an increasing national interest in secondary literacy instruction, particularly with respect to so-called struggling readers. These readers have recently been termed *striving readers* in a funding initiative of the U.S. Department of Education to temper some of the negative connotations of the term *struggling*. These readers are still widely referred to as struggling readers. However, the education community has not reached consensus on how to define *struggling readers*; in this chapter, they will be defined as readers who lag behind their peers in reading achievement. The controversy centers on how *much* lag there is and the *reasons behind* the lag. In this chapter, I will offer considerations for reconfiguring settings for these readers, particularly the literacy labs that offer instruction and learning opportunities.

In the remainder of this chapter, I discuss two broad perspectives on reconfiguring secondary instruction and literacy labs, with a focus on intervention: one based on a structured, more linear response to research/policy reports, and one based more on the importance of engagement with print and media texts and the social and cultural dimensions of these practices. The first perspective is important because of its political foundation, articulation of national policies, and financial backing. The second is important because it represents the state of the art in connecting the literacy experiences and practices of youth both inside and outside of schools. In the latter group, I place the shift of reconfiguration of programs and labs for individuals to interventions focusing more on schoolwide literacy and literacy practices in and out of school.

Just like for struggling readers, there is no clear definition about what a literacy lab is, although labs are typically places staffed by personnel with specialized training, and instructional and learning resources specially designed to help learners who have been identified as being in need of extra or specialized instructional support. For the purposes of this chapter, I discuss labs and intervention classes together since, despite the names assigned to them, they serve the same clientele.

RECONFIGURING INSTRUCTION AND LABS BASED ON RECENT RESEARCH/POLICY REPORTS

An increased interest in adolescents has been articulated in research/policy reports (e.g., Biancarosa & Snow, 2006; Kamil, 2003; National Institute of Child Health and Human Development, 2000). These reports draw selectively from research, do not attempt a comprehensive synthesis of the extant research, and almost always have policy implications. The research synthesized includes work broadly defined within the fields of adolescent literacy and work from related fields such as reading and middle and secondary education. Some of the reports offer recommendations for addressing problems that they bring to the fore. The main themes of some reports appear in reports that follow them, creating the sense that some themes are more valid than others because they appear across reports. For example, the National Reading Panel (NRP) outlined five components of reading: phonemic awareness, phonics, fluency, vocabulary, and text comprehension; these themes appear across most of the subsequent reports. I caution readers in citing the reports as research: first, the reports cannot be definitive because they select some research, while excluding other research. For example, the NRP report used experimental and quasi-experimental studies (those with random assignment and/or controlled research designs), while excluding complex, contextually important factors highlighted in qualitative or observational studies (Conley & Hinchman, 2004). Second, the reports were not clearly intended to be taken as research or syntheses of research as much as position statements or calls to action. Other reports that synthesize findings from their own data (e.g., ACT Inc., 2006) do not address the issue of selective research synthesis, but their analyses are based on their authors' own definitions of reading and their own benchmarks for performance. Finally, a number of influential position statements (e.g., Alvermann, 2002; Moore, Birdyshaw, Bean, & Rycik, 1999) synthesize the opinions of noted experts about what literacy instruction and learning opportunities adolescents deserve. These position statements are also cited at times as research.

Ironically, in the current era of education, the call for so-called scientifically based research evidence compels educators and policy makers alike to cite

something as research as a basis for any generalization, whether it is research or not. The national agenda (trickling down to states) generated from the more widely disseminated reports calls for certain so-called interventions in the classical sense. That call has generated prepackaged commercial or sponsored literacy programs with clearly stated sets of instructional approaches geared toward certain reading process components, usually phonemic awareness, phonics, fluency, vocabulary, and comprehension—the so-called big five components from the NRP report. Many of the popular interventions include advertising documentation to show how they are connected to the NRP report or its counterparts. Some of these interventions have achieved enough of a national level of notoriety that they are adopted without hesitation in large school districts and studied by scholars (Alvermann & Rush, 2004).

Alvermann and Rush (2004), among others, offered a broader agenda for interventions, focusing on the importance of motivation and engagement and helping define *text* to include not just print, but a variety of media, and to consider the construction of curricula that support academic literacy, staff development for teachers, and collaboration *with*, rather than *intervention on*, students. The most colloquial renditions of the big five components of reading—phonemic awareness, phonics, fluency, comprehension, and vocabulary—are at the core of many of the interventions used in reading programs or labs. These interventions, which are also marketed as all-purpose secondary programs, often target specific components, such as fluency, or attempt to address several components such as fluency, vocabulary, and comprehension. These interventions are directed at whole-school populations of struggling readers, whether individual students need work in all of them, some students need the intervention but not others, or none of the students need the interventions.

Note, however, that in these traditional labs, *intervention* means using a planned set of instructional routines and specific instructional programs, including certain sets of materials specifically designed to disrupt and address deficiencies in the various subcomponents that cause readers to struggle behind their peers. This perspective on intervention is also based on the idea that intensive work that targets some sort of deficit or developmental lag in one of the subcomponents, e.g., decoding, or fluency, will enhance overall reading performance. To their credit, many of the organizations, panels, and individuals contributing to the research/policy reports acknowledge the importance of motivation and other affective issues that distinguish secondary struggling readers from their elementary counterparts.

Because the affective dimensions are not as tangible as processes or strategies linked to the reports and hence are not as clearly marketable, the affective factors are subverted to quick-fix interventions that target specific skills and strategies. For example, a key recommendation is that districts and schools

assess students much more thoroughly to know how they differ and how the difference may be translated into more carefully tailored programs.

I have emphasized to colleagues in a number of forums organized by individual districts and organizations enrolling multiple districts the importance of paying attention to the research/policy reports, not only in terms of what they state explicitly, but what they imply, because their messages are adopted by professional organizations, school districts, and policy makers. It is also important to note the chronology of the reports because most of them build on the scholarship and perspectives of their predecessors, which leads not only to redundancy, but also to creative or opportunistic reinterpretations of the original reports. For example, the range of interpretations of the NRP report in subsequent reports is a testament to my claim. In this section, I synthesize some of the general themes in reports from organizations, panels, and position papers because these have informed and are continuing to influence the reconfiguration of secondary instruction and labs.

1. There is a crisis in adolescent literacy. Some reports use a crisis argument to get our attention. This seemingly newly discovered crisis sprinkled throughout the reports cites low levels of reading achievement as the root cause of low academic performance, social ills, and even incarceration of youth and young adults. The crisis position has spurred states and school districts to abruptly shift attention and resources from early literacy instruction to programs and interventions for adolescents. The crisis position, although effective in getting attention, is inaccurate on two counts. First, it commits the age-old sin of confusing correlation with causation. Second, it ignores the fact that adolescents' reading achievement, in general, has changed little in about 30 years (Perie, Grigg, & Donahue, 2005). Clearly the crisis is manufactured to garner attention. In ignoring the complexities of multiple interrelated measures that contribute to reading problems and are defined by them, the reports ignore, for example, how poverty could be viewed as the root cause of early literacy lag, which predicts later reading problems. From a correlational rather than a causative perspective, eliminating poverty might eliminate literacy problems, which in turn might lead to a host of life-altering circumstances, including literate adolescents who become contributing members of society. From this perspective, labs and programs should target specific skills that adolescents did not acquire in earlier grades to disrupt their eventual failure through school and, later, in their communities.
2. The majority of high school students can and should read a lot better than they do. Reports and position statements note that secondary students will not improve without more intervention in middle schools and high schools. Many of the discussions use existing data, such as the National Assessments of Educational Progress (NAEP) data, to show that the basic level of proficiency that most students have archived in reading is not good enough because texts in college and the workplace are increasingly complex and demand higher and higher levels of proficiency. This renewed interest in adolescent reading has also rekindled an interest in supporting students' reading of a range of informational texts across content areas. In fact, if students' reading across the curriculum was scaffolded in

some way by teachers, and teachers redesigned assignments to hold students more accountable for independent, critical reading of texts, reading achievement overall would likely rise. It seems more straightforward, however, to direct resources at specific interventions, rather than at teacher development. So educators are more likely to institute specific reading classes, reading programs, and interventions (many of them commercially produced) than to translate interest in reading in the disciplines to actual practices to improve adolescents' reading across the curriculum.

3. Most struggling readers do not have disabilities. A range of criteria are used to classify struggling readers. They are typically defined, or at least referred to in most of the research/policy reports, as students reading "below grade level." In some cases, the criterion is more specific—like "students reading two grade equivalents below peers on standardized measures of reading." Most of the adolescents who are labeled as "struggling" or "not proficient" have neither learning disabilities nor any other cognitive, linguistic, or language problems that preclude competent reading. In spite of the fact that most students classified as struggling do *not* have cognitive, linguistic, perceptual, or neurological problems, the issue of struggling reading, and even developmental reading approaches and programs, has been defined at the national level largely as an issue for special education. Even though most students diagnosed with high-incidence disabilities, such as learning disabilities, have reading problems, most struggling readers would not qualify for special education using the assessments that are typically used to classify students as learning disabled. Even though criteria for identification of struggling readers are vague, groups of people with very specific criteria for identifying students who need very specific types of intervention are willing to bend their criteria, their research traditions, their terminology, and their programs and reach beyond their traditional boundaries to be part of the attention shift to struggling adolescents.
4. Students' motivation may be as important or more important than instructional strategies. Some of the evidence on students' motivation and engagement points to *perception about ability* as a more powerful predictor of future achievement than *past achievement* (Anderman et al., 2001). Motivation is still largely ignored in formulating programs for disengaged adolescents, however. Although researchers in motivation in general, and achievement motivation, in particular, have articulated useful, carefully validated models over the last 30 years, that work has not been directed primarily at practitioners. There is, however, a renewed interest in motivation because of a call for more attention to it in the research/policy reports. Nevertheless, the reports do not clearly specify instructional approaches and resources that support motivation, so educators turn to more folk-based, rather than empirically supported, notions of motivation. For example, motivation may be framed as something that helps foster students' interest in something, or something that helps them see personal relevance or meet relevant goals. An exception to the almost totally theoretical thread is the work of a few scholars in literacy and motivation who have attempted to apply theory directly to teaching (Wigfield, Guthrie, & Perencevich, 2004).
5. Adolescents receive little support in academic literacy from the middle grades through high school. The reports call attention to the assumption that once students learn to read, usually by the end of primary grades, they are then equipped to read a variety of texts in content areas such as social studies and science. Some of the reports conclude erroneously that (1) literacy educators have just discovered

this false assumption and (2) we know little about how to support students learning across content areas. There is ample evidence in about 30 years of research in content area reading, content area literacy (reading, writing, and speaking), and comprehension that supporting students' understanding of content area texts, with explicit instruction, pre-reading preparation, guidance during reading, and postreading review and synthesis, would improve students' reading and content area learning. It is also well documented why content teachers do not readily embrace the idea of learning more about reading and how it might be used to support learning in their content areas. Instead of relying on existing models or instructional approaches for supporting content area literacy, the reports have engendered the idea that schoolwide reading programs constitute another sort of intervention. These schoolwide programs are implemented as a quick fix, rather than addressing the more complex issue of changing how teachers view their roles and responsibilities in using literacy to support learning.

6. Instruction and support for English language learners (ELLs) does not reflect literacy educators' knowledge base. These educators, including reading educators, second language and culture teachers, ELL specialists, and bilingual education specialists, have a professional knowledge about which approaches best support ELLs in reading or in using reading to learn content, but often, the approaches backed by the most evidence are not enacted. In many schools, owing to the inadequacy of assessments and the desire to quickly classify and program students, ELLs are placed in intervention programs designed for struggling readers or matched with instructional materials designed either for struggling readers or to support English-only learners. Yet, in the absence of comprehensive support for ELLs, particularly with teachers who can scaffold students' primary language as they learn content and support their transition to English texts, approaches that are widely used, such as sheltered instruction approaches, flourish. Like other programs and interventions, the programs for ELLs are interventions that seem cost-effective and promise reasonable results without demanding the level of resources needed to educate and hire highly qualified teachers with backgrounds in the languages, cultures, and pedagogical tools needed to best support these learners. At worst, districts caught off guard with recent influxes of families with varying languages and cultures simply program these students into existing programs for struggling learners.
7. There are no quick-fix programs that address the complex needs of struggling secondary readers. In spite of the evidence against spending money to implement programs that promise to solve complicated, almost intractable problems (Allington & Walmsley, 1995; Alvermann & Rush, 2004) and evidence accumulated since the 1960s that teachers, not programs, make the difference in reading performance and engagement (Bond & Dykstra, 1967), millions of dollars are being infused into commercially published interventions, rather than educating competent, caring teachers to work with struggling learners. As noted, many of these commercial interventions make claims aligned with the No Child Left Behind legislation or the NRP report. In addressing one subcomponent, or even attempting to address several, however, it is unlikely that commercial programs can attend to the range of contexts that influence reading and address reading for multiple purposes across the disciplines.
8. Educators have a considerable research base that documents approaches and secondary programs that work. Some of the organizations and panels behind

recent reports on adolescent literacy failed to synthesize the extensive research base in reading in the content areas over the last 30 years. Since the emerging trend is to resort to the classical intervention model and a subcomponent view of reading, many of the reports, and the intervention programs that link to reports, simply view adolescents as older versions of younger struggling readers who are merely lagging in skills. There are numerous social and affective dimensions associated with failure in reading that complicate this simple deficit view. Also, the simplistic interventions that target individual readers' deficits without attention to academic literacy and support for ELLs to build more effective schoolwide reading programs miss most of the opportunities that could make a lasting difference in adolescents' lives. Hence educators have the knowledge base, but thus far, the policy makers have either ignored or directed the federal and state agenda away from the research base. In addition, districts often lack the resources to institute more comprehensive school and district reading programs that attend to both intervention and academic literacy support.

9. Adolescents are moving away from print literacies to digital literacies and inter-medial texts. Adolescents' movement into increasing use of media and multitasking by using more and more media is clearly documented (Foehr, 2006). Although recent reports acknowledge this trend, little of it is being articulated in practice in schools. In spite of adolescents' increasing engagement with non-print media (digital texts and electronic media) in much of their reading and writing, high-stakes assessments and most school curricula focus almost exclusively on print literacies, which adolescents find less engaging the longer they are in school. Two crucial issues emerge related to the gap between these in-school and out-of-school literacies: first, the types of literate practices at which adolescents are getting better and better due to the Internet, media authoring tools, and electronic devices (e.g., cell phones with text messaging, instant messaging on computers, video games) are not being assessed or scaffolded in instructional settings in schools; second, the use of these technologies represents not only new practices, but also new cognitive mapping, or changes in the way adolescents' brains actually work (Restak, 2003) and significant modifications in how educators can get and maintain adolescents' attention (Lankshear & Knobel, 2003). To design programs that engage today's young people, develop fluency in various literacies, and maintain their perseverance over time, the movement from print to the screen cannot be ignored.

RECONFIGURING INSTRUCTION BASED ON RESEARCH ON ENGAGEMENT AND NEW LITERACIES

The synthesis from the recent research/policy reports on adolescent literacy shows some bridging of traditional component views of reading and deficit notions of struggling reading with new literacies practices. *New literacies* is a contested term, but it generally refers to the use of more progressive tools, including reading and writing digitally, and how the practices that make use of these tools work within the new globalized economy. Rather than sets of isolated skills, the new literacies are practices used to accomplish goals, engage in activities, and gain and maintain membership in communities.

Reconfigurations of both reading and literacy programs in general, and labs in particular, call for more attention to social and cultural contexts in which literate practices are embedded (Alvermann, Hinchman, Moore, Phelps, & Waff, 2006). Many of these reconfigured programs rely more on digital literacies used in tandem with traditional print-based practices but are rooted in popular culture texts and the understanding, creation, and use of these texts as a way for students to critique the world and construct their social identities. In short, the programs provide students an opportunity to explore the world and themselves in it via a variety of both print and media texts, including texts already created and texts that students themselves create.

EXAMPLE OF A RECONFIGURED LAB BASED ON ENGAGEMENT AND NEW LITERACIES

Most recently, my colleagues and I (O'Brien, Beach, & Scharber, in press) have been engaged in a three-year study of a 7th- and 8th-grade intervention class located in a suburb of the twin cities in Minnesota. This class is similar in scope and curriculum to the Jefferson High School Literacy Lab, which I have reported on elsewhere (O'Brien, Springs, & Stith, 2001). The intervention is a lab for students who have been identified as having the lowest reading performance in the school. The enrollment is relatively low, with 15 students in each class, and the teacher-to-student ratio is remarkably good, with one teacher for every 7 to 8 students. It meets once per day in a block scheduling format with 93-minute class periods. In the Jefferson High Literacy Lab, we studied aspects of interventions used in programs nationally before designing the literacy lab program and studying what happened when each component was brought online. In the current intervention class, the teachers, based on what they had learned about both traditional and new literacies interventions, designed the class. The teachers attended two teacher education programs, in which they received additional licenses focusing on K-12 reading. One of these programs was a traditional program emphasizing skills and strategies orientation, and one of them was a program focusing on a sociocultural orientation. The teachers collaborated to set up the program with both foci. Rather than intervene in the design, for the first two years, we have simply studied the class. The class was constructed partially in response to a need to prepare 8th graders for Minnesota's high-stakes reading and writing tests administered each February, tests they must pass to graduate from high school. We are currently beginning the third year of studying the intervention class and are using data from the first two years to collaborate with the teachers to redesign it.

Students are selected for the program based on performance on standardized achievement tests, but once in the program, they exit based largely on performance on the Scholastic Reading Inventory (SRI) administered as

part of the students' placement in the READ 180 program. As noted, a big advantage of the program is the level of individual attention from two highly qualified teachers. In addition to the READ 180 program, students engage in sustained silent reading (SSR) with young adult novels and guided reading with various comprehension strategies such as using graphic organizers to link with prior knowledge. The teachers use various forms of guided reading and intersperse whole-class oral reading with discussion, dramatization of stories, and questions. Students write stories; comic books; wikis, which are shared online texts, in which each entry can be edited by other writers; poetry; and journals entries in response to reading. They also construct various media projects using tools like PowerPoint and GargeBand, Comic Life, and other software applications.

Unlike traditional programs and labs, in which students engage in activities to target specific skills and strategies, in the intervention class, we included practices students engage in to explore ideas, construct community, and develop agency in meeting personally relevant goals. We intentionally set up opportunities for students to engage in practices *other than* reading and writing activities geared toward meeting standards and raising reading achievement. We studied how the students developed agency and perceptions about competence as they participated in the class because we viewed this as crucial to their future success.

In contrast to classical labs, focusing mostly on skills and strategies, we looked at the intervention class environment as a community that was engaging. We assumed that part of the reason that the students succeed in such programs is that they feel part of a classroom community. In previous research on intervention programs and labs, we looked at the role of digital media in motivating and engaging struggling adolescents (Beach & O'Brien, in press).

There have been two central questions we wanted to answer by this work. First, we wanted to know how engagement with new literacies practices, particularly media projects, improved adolescents' achievement. Second, we wanted to know how engaging with digital media changed struggling adolescents' perceptions about ability, thereby increasing self-efficacy. More than ever before, these reconfigured labs will attend to affective dimensions as much as to cognitive and linguistic dimensions. In the next section, I discuss some of the findings of the research and its implications for reconfigured programs and labs.

In the initial analysis of the data, we found four dimensions of practice. The first two focused on students' use of a variety of mediating tools (e.g., language, computers, collaboration with peers) within the activities in the class. We looked at how students' experiences and understandings were mediated by using these tools in relation to rules and the classroom community. Dimensions three and four focused on the identities of the students mediated by their

literacy practices in these in- and out-of-classroom contexts. For example, we attended to how the students developed their sense of competence and allegiance to peers through work on class activities and projects.

Participation in the Social Context of the Classroom

We focused not only on literacy practices, but noted students' perceptions of their competence and success in employing various practices to engage in activities related to classroom projects. We also looked at how students engaged in these practices by using tools associated with both traditional skills-centered notions of literacy and new literacies notions, for example, using digital tools to construct presentations. While the acquisition of skills and strategies is important, a student's perceptions about the usefulness of skills and strategies in meeting relevant purposes, such as completing projects, is equally important. Ultimately, the settings of labs or reconfigured programs for adolescents must be designed as positive communities in which adolescents can work together to employ literacy practices, such as reading and writing, for useful purposes. This is in direct contrast to programs that focus on the skills and strategies as goals in and of themselves.

Connections with Out-of-School Contexts

We also noted instances in which students imported their out-of-school practices into school. For example, we noted their references to activities like sports, hobbies, and playing computer games and how these interests and activities found their way into the students' writing and media production in the class. Again, this is in contrast to using assigned content and prescribed sets of skills associated with the content as an intervention and instead building on existing practices to enhance practices more valued in school and in high-stakes assessments. We found that so-called reluctant readers and writers were more likely to engage in these practices when they felt they could draw from familiar topics and forms, for example, narratives from computer games.

Agency/Self-Confidence

As noted from references to previous work with digital media in labs, in the engagement perspective that is so important in more progressive labs, students' self-perceptions of the class in general or of specific activities are crucial. If students have autonomy to choose activities or projects that are interesting and challenging, they are more likely to develop agency, that is, as they become confident and attribute success to the skills and strategies they are using. Skills and strategy instruction focusing on agency are more powerful and sustaining

than instruction students perceive as designed specifically for fixed tasks associated with grades and other assessments because they realize that they are getting better at something that leads to important ends. In interviews and talkalouds (situations in which students talk aloud about their perceptions of a task and about their abilities to succeed at it), it was apparent that how we set up choice, task structure, and outcomes of activities was crucial to how students viewed the lab in general, and the projects in particular. Hence we focused on how the classroom context as a whole, and the assignment in particular, promoted agency and confidence.

Social Allegiance to the Classroom Community

Our analysis focused on our observations, interviews, and talkaloud data, which pointed to how invested students were in the classroom community and what allegiances they had to particular groups and activities in which those groups were engaged. We also gleaned perspectives from the two teachers. In light of the most current work on sociocultural theories, students' identities, and their relationships to others within physical and social space, we wanted to know that the intervention class was a place in which students felt supported, had valued peers, and shared goals, pride, and satisfaction in working on projects with others. Along with engagement, these issues should be considered carefully in designing labs or other programs for adolescents.

FRAMEWORKS THAT INFORM THE DESIGN OF NEW LITERACIES PROGRAMS AND LABS

In contrast to the traditional labs, which are based mostly on cognitive theories of literacy and learning, such as intervention programs focusing on comprehension strategies, and psychometric assessment measures, such as program goals measured by standardized tests, our current work is based in large part on theoretical frameworks from achievement motivation and motivation in reading (Guthrie & Wigfield, 1997). Unlike the traditional labs and the notion of using strategies to promote achievement and reduce gaps or bring students up to grade level, the motivation and engagement perspective acknowledges the importance of students' early perceptions about ability in determining their future engagement with literacy tasks.

Therefore, in reconfigured labs, the focus is not only on skill acquisition organized around components of reading, or explicit strategies instruction, but on setting up tasks, interaction, and feedback that promote self-efficacy. For example, the programs set up challenging tasks but try to ensure the success of learners at different levels of achievement; they provide structure with more autonomy through choice of texts and tasks, and they use assessment *for* learning (Stiggins, 2004) to give learners specific feedback about what they

are doing, how they improving, and what they have control over to continue to get better. These programs and labs are established based on the understanding that long before middle school, usually around 2nd grade, students who struggle in reading have already experienced failure, which has reinforced their low perceptions about ability, contributed to loss of agency, and increased disengagement from reading. Unlike traditional labs and intervention models, the new programs and labs do not view acquisition of reading proficiency via practice with subcomponents in isolation; rather, the frameworks from achievement motivation and engagement consider that students' perceptions of themselves as low-ability readers and writers and their lack of engagement in turn result in lack of practice, low fluency, lagging decoding skills, and a diminished repertoire of comprehension strategies. In short, readers are deficient in skills and lack strategies not simply because of disabilities or developmental lag, but because their perceptions of themselves as low-ability readers and writers start the domino effect of disengagement that ensures less interest, less practice, and less perseverance, all of which result in low performance.

In the position papers and research/policy reports cited previously, the role of motivation in engaging struggling readers is almost universally acknowledged as a crucial issue (Jetton & Alexander, 2004). Specific suggestions about how to select motivating texts and tasks, design more motivating lessons, and provide more motivating classroom climates may be mentioned but are noticeably missing from commercial or other popular interventions and other programs.

Traditional programs and labs, supported by many of the research/policy reports, are too narrow to promote students' engagement and do not consider perception of ability as an important component. Their focus on scopes and sequences of skills, ongoing assessments of gains, and specific instructional frameworks geared toward standards have some advantages considering that many teachers and administrators lack the instructional and curriculum planning knowledge to connect specific reading assessments to interventions or programs. On the other hand, new literacies programs have the advantage of looking at broader contexts of reading such as reading engagement, purposes, and practices involving print and a range of media. The happy medium is that reconfigured programs and labs include careful assessment to target specific subcomponents of reading that struggling readers need, while attending to the complex affective dimensions which guarantee that they will engage in reading and writing and other practices because they feel competent and want to meet personally relevant goals. The task is daunting, but possible with the right balance.

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Chapter Seven

MIDDLE SCHOOL LITERACY

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Literacy is the ability to use reading, writing, listening, and speaking to learn, think critically, and solve problems. On National Literacy Day in 1993, then president Bill Clinton declared that literacy is no longer a luxury, but a right and responsibility. Almost a decade later, as he unveiled the new Head Start Program initiatives in 2002, President George W. Bush described literacy as the new civil right. Unfortunately, the goal of nationwide literacy remains elusive; illiteracy continues to be one of our nation's most pressing problems. Only 13 percent of adults aged 16 and older can perform complex and challenging literacy tasks (U.S. Department of Education, 2003). The statistics concerning middle school students are even more alarming. For example, students who leave 3rd grade as poor readers continue to be poor readers into high school (Reading Study Group, 2002) and are most at risk of dropping out before graduation (National Governors Association Center for Best Practices [NGACBP], 2005). English language learners and students from low-socioeconomic-status families face even greater challenges. About 50 percent of students entering 9th grade in high-poverty schools are reading at least three years below grade level (National Association of State Boards of Education [NASBE], 2006).

Over the past decade, a staggering 3,000 students a day dropped out of high school (Joftus, 2002), many of whom did not have the literacy skills to keep up with the curriculum. A concerned citizen might rightly ask, What is happening in between the end of grade 3 and the high school grades? The quantity and quality of literacy instruction students receive in middle school is not solving our nation's literacy problem. The urgency of finding a solution

to the problem is stressed by the No Child Left Behind Act of 2001, which mandates that by 2014, all students must be proficient in reading.

This chapter provides an overview of the critical role that literacy plays in middle school curricula and instruction. The chapter is divided into eight sections. In the first section, we identify reasons why literacy is important in the middle school. The second section provides a brief background on the developmental characteristics of young adolescents. The third section highlights components of successful middle schools. In the fourth section, we describe successful middle school literacy programs. In the fifth section, we identify the roles of classroom teachers, followed by a discussion, in the sixth section, of the roles of literacy coaches. The chapter ends with sections on assessment in the middle schools and assessment of middle school literacy programs.

LITERACY IN THE MIDDLE SCHOOL

The middle grades encompass grades 4–8, and the students typically range from age 10 to 14. Unfortunately, the literacy statistics for these students are not encouraging. About 70 percent of adolescents can be characterized as struggling readers, while almost 50 percent of African American and Latino 8th graders read below a basic literacy level, meaning that they cannot perform simple, everyday literacy activities (NASBE, 2006). Less than 50 percent of 4th- and 8th-grade students in every state meet the National Assessment of Educational Progress (NAEP) proficiency standards in reading (NGACBP, 2005). NAEP, which is considered the nation's report card, is a national assessment of what students know and can do in various subject areas such as reading.

Why do middle school students have such difficulty with literacy? Literacy becomes increasingly difficult in the middle grades because around 4th grade, more emphasis is placed on reading and writing to learn. In the middle grades, literacy requires that reading, writing, listening, and speaking become increasingly integrated and interdependent. Literacy also requires that students master both content knowledge and functional skills. Literacy influences middle school students in many contexts such as content literacy, critical literacy, functional literacy, information literacy, family literacy, and social literacy. The term *literacy* has become so powerful and pervasive that it has been appropriated and applied to areas that are peripheral to language arts such as computer literacy, technical literacy, and scientific literacy.

Literacy plays a fundamental role in middle school education by fostering learning, critical thinking, and problem-solving through reading, writing, listening, and speaking in relevant contexts. Middle school literacy plays a crucial role in students' preparation for later life. The middle school years are especially crucial for students from minority cultures and students from families of low socioeconomic status because of what has been referred to as

the Matthew effect: a pattern of cumulative advantage and disadvantage over an extended period of time, with the academically rich getting richer and the poor getting poorer (Cunningham & Stanovich, 1997).

It is during the middle school years that young adolescents form attitudes about education and its relevance to their future. During these years, they also make decisions about how long to remain in school and whether to prepare for higher education. More often than not, young adolescents make these decisions based on their performance in school, especially their ability to read and write about what they are learning.

Literacy is crucial to the teaching-learning process that occurs in the middle grades because this is when young adolescents' reading focuses on expository text, which places increasing demands on the students' vocabulary, syntax, and comprehension skills. In addition to increasingly dense text, expository text is frequently accompanied by tables, charts, graphs, and flow charts. Unfortunately, despite these increasing demands on their literacy skills, formal reading instruction ends prematurely for many young adolescents once they enter middle school. Consequently, many young adolescents fail to develop adequately their vocabulary, syntax, and comprehension skills. What little direct reading and writing instruction they do receive in middle school is frequently disconnected from the reading and writing they are required to do in English, mathematics, science, and social studies. The result is that students are expected to apply their literacy skills, but they receive little or no instruction in how to do so.

YOUNG ADOLESCENT DEVELOPMENT

Early adolescence encompasses the middle school years, which is a time of great change. Young adolescents are experiencing the physical, cognitive, personal, social, and moral changes associated with moving from childhood into adolescence. These five areas of change are interrelated and frequently overlap. Consequently, a change in one area can bring about a change in another area. During this time, many students are also experiencing the changes associated with moving from elementary school to middle school such as having more teachers and making new friends. Owing to a variety of social transformations, such as changes in the family structure and a world dominated by the media, the sociocultural context in which young adolescents are growing up today is quite different from that of only a few years ago.

Physically, young adolescents undergo more change than at any other time of their lives, except infancy. Unlike infants, however, young adolescents are aware of these changes and how they affect their daily lives. Cognitively, middle school students are moving from concrete to more formal, abstract thinking. They are beginning to understand hypothetical situations and perform logical

reasoning. Personally and socially, young adolescents are changing in the way they view themselves and how they relate to and interact with other people, especially their peers. Morally, middle school students are changing in how they reason about right and wrong.

For many young adolescents, the changes associated with early adolescence occur quite smoothly. For others, the impact of these changes can have negative effects such as declining grades, decreased interest in school, poor attendance, and low self-esteem. Successful middle schools, however, can help make this time of change a positive experience for young adolescents.

COMPONENTS OF SUCCESSFUL MIDDLE SCHOOLS

What are some of the components that help middle schools meet the needs of young adolescence? The National Middle School Association (2003) has identified the following components among those that are key to successful middle schools: interdisciplinary teams, integrated curricula, a full exploratory program, and teachers knowledgeable about young adolescents.

Interdisciplinary teams are small groups of teachers, generally representing each of the content areas, who teach the same students. In some middle schools, special education teachers, reading teachers, arts teachers, music teachers, and physical education teachers may also be part of a team. Ideally, all team members have the same planning time and use flexible block scheduling, with teachers on the team deciding how to use the block of time. Teams meet on a regular basis to plan ways to integrate the curriculum. Ideally, these meetings occur when the teams are in the beginning stages of planning integrated units and themes. Specific sessions are scheduled to help teams brainstorm activities and assignments that involve integrating reading, writing, listening, and speaking into the content. Teams use strategies that help them move, as much as possible, from a teacher-centered curriculum to a student-centered one. The major advantages of interdisciplinary teams are several teachers working together to meet the needs of individual students and teachers who can design lessons to help students see connections among various disciplines.

An integrated curriculum takes into account the personal concerns of young adolescents and the social issues that have an impact on their lives. In an integrated curriculum, young adolescents' questions and concerns form the basis of a meaningful curriculum. The boundaries across disciplines blur as the activities and projects center on answers to students' questions and concerns. The skills that students learn and apply in this type of curriculum tend to be higher-order cognitive skills such as reflective thinking and problem-solving. For example, setting goals, integrating content, and communicating clearly about the content become important skills. According to Beane (2004), middle school educators and policy makers should ensure that existing curricula "provide opportunities

for young adolescents to participate in decision-making” and “encourage collaborative learning and problem solving” (p. 57).

The goal of exploratory programs in the middle schools is “to make the adult world more familiar” (Waks, 2002, p. 37). Exploratory programs offer regularly scheduled classes in a variety of special interest areas. Young adolescents are at an age when they are beginning to learn how to consider options and make informed choices. Exploratory programs are designed to help students in this endeavor as well as learn about and pursue their interests and talents. Students should be free to choose their own exploratory courses and base their choices on their own interests, rather than on the interests and choices of their friends.

Given the changes that middle school students are going through, it is critical that they have teachers who have the necessary training and experience to work with young adolescents. Ideally, this training and experience involve not only course work in adolescent development, but also course work in how to teach young adolescents by taking into account the nature of the curriculum and the needs of young adolescents.

COMPONENTS OF SUCCESSFUL MIDDLE SCHOOL LITERACY PROGRAMS

What do successful middle school literacy programs look like? Successful middle school literacy programs are developed around the key components of successful middle schools previously described. First and foremost, they are developed around the needs of young adolescents and take into account the changes that students are undergoing. In successful middle school literacy programs, interdisciplinary teams of teachers plan ways to incorporate the language arts into their content area lessons. All teachers are knowledgeable not only about their own content area material and how to teach it, but also about young adolescent development, how to teach reading and writing, and how to integrate the language arts into their content areas. Teachers plan together to ensure that the curriculum is integrated and that it focuses on higher-order skills. Successful literacy programs build on the school’s exploratory program by allowing students to pursue their own interests and talents and by providing them with opportunities to make choices.

In their report for the Alliance for Excellent Education, Biancarosa and Snow (2004) identified 15 components for successful adolescent literacy programs. These components are as follows:

1. *Direct teaching of comprehension skills.* Comprehension skills are explicitly taught and modeled, and students are provided with time to practice them.
2. *Contextually embedded instruction.* Instruction is implemented within and across content areas and focuses on content area texts and tasks.

3. *Motivation and self-directed learning.* Instruction focuses on developing motivated and self-directed learners.
4. *Collaborative learning.* Instruction focuses on helping students use text to learn in collaboration with other students.
5. *Tutoring.* Struggling or striving readers receive individualized, targeted instruction to promote independent learning.
6. *Text variety.* Students are exposed to a wide variety of texts with different styles, topics, and difficulty levels.
7. *Concentrated writing.* Writing instruction is implemented within and across content areas and focuses on content area texts and tasks.
8. *Technology.* Students learn to use technology as a means of integrating reading and writing into their content area learning.
9. *Formative assessment.* Ongoing assessment is used to guide instruction.
10. *Extended time.* Literacy instruction takes place over several periods and is integrated across the content areas.
11. *Teacher development.* Professional development for teachers is guided by teacher needs and is an ongoing process.
12. *Summative assessment.* Assessment focuses on student progress and is used for program development.
13. *Interdisciplinary teams.* Small groups of teachers from the content areas collaborate to focus on individual student and group needs.
14. *Leadership.* Administrators support the literacy program and promote leadership among teachers.
15. *Comprehensive program.* The literacy program focuses on reading, writing, listening, and speaking within and across the content areas, with a particular emphasis on student needs.

What do literacy programs that are built around these 15 components look like? In successful programs, all teachers promote the language development of young adolescents. This means that communication, dialogue, discussion, and interaction between the teacher and the students, and the students themselves, are crucial elements of learning. Activities in which students interact with the teacher and with each other characterize successful programs. Students play an active role in their learning and use their literacy skills to extend their learning. Students receive formal instruction in effective listening and speaking skills. Activities that integrate reading, writing, listening, and speaking with content area material are essential. Play writing and performances, role-playing, improvisation, poetry readings, journal writing, and peer editing are frequently used to integrate language arts into the curriculum and to capitalize on the social nature of young adolescents.

An important outcome of a successful literacy program is that students engage in reading and writing for enjoyment as well as for learning. Accordingly, opportunities are provided for students to read and write recreationally in all content areas. Recreational reading allows middle school students to read, at their own pace, from sources of their own choosing. Similarly, recreational writing provides students with opportunities to write without having

to concentrate on form, punctuation, and spelling and without worrying about sharing their writing with others. When students are read aloud to, the intent is to provide them with informal opportunities to respond and react to what they are hearing. Reading aloud to students also establishes a common starting point for class discussions and other activities.

In successful programs, teachers focus on student learning that makes connections across disciplines, rather than on student learning that focuses exclusively on the memorization of facts within a particular discipline. Teaching occurs in a manner that facilitates students' learning as an active, constructive process, rather than as a passive, reproductive process. Students are active participants in their own learning so that they can learn new material in relevant ways.

ROLE OF CLASSROOM TEACHERS

Teacher quality is perhaps the single most important school-related factor influencing student achievement (Rice, 2003). Given the increasing emphasis on integrated curricula in the middle grades, all teachers, regardless of the subjects they teach, are being called on to integrate the language arts into their subjects. A key recommendation of the NASBE (2006) is that "state plans must target improving literacy skills by teaching them within the context of core academic subjects, rather than apart from challenging content instruction" (p. 5).

Unfortunately, many content area middle school teachers see themselves as content area specialists, and they are reluctant to take time away from their content to teach literacy skills. Also, many teachers have not received sufficient training in how to incorporate the language arts into their teaching. Commendably, many states are in the process of redefining the requirements for pre- and in-service middle school teachers in the area of literacy instruction. Many states are also beginning to offer special certification in adolescent literacy as well as professional development in literacy instruction and literacy mentoring programs (NGACBP, 2005). In terms of professional development for in-service teachers, the NGACBP (2005) recommends that such training be systemic, sustained, and focused on the following activities:

- analyzing student performance data to identify gaps and set school performance goals;
- matching instruction to student needs based on student assessment data;
- promoting collaboration among educators; and
- assigning school personnel roles to support literacy improvement. (p. 8)

What exactly are the roles of effective classroom teachers in a schoolwide literacy program for young adolescents? Farnan (2000) identified four broad

roles of effective classroom teachers in a middle school literacy program. First, effective teachers are reflective practitioners who focus on problem-solving and decision making. This means that teachers know the role that literacy plays in the content they teach. They also know the literacy skills students need to learn the content, and they are able to teach and assess those skills. Being a reflective practitioner implies asking questions about your teaching; asking questions is consistent with the view of teachers as researchers who carry out action research projects. Action research can be conducted by individual teachers or by teams of teachers. Using the team approach, ideas for such projects are generated by team members and center on questions and concerns they have about their own practice. Teachers then publish their results in practitioner-oriented journals.

The second role of effective classroom teachers in a middle school literacy program is that of collaborators. This role is particularly important at the middle school level given a focus on interdisciplinary teams. As collaborators, team members plan together to integrate the curriculum and to integrate the language arts into the curriculum. They reflect, solve problems, and make decisions together about student needs and progress. They collect and analyze student data on authentic literacy tasks and then use the results to plan the curriculum. They read and discuss current literacy research together and discuss ways to apply it to their teaching. This notion of teachers as collaborators is ideally suited to help teachers grapple with the complex issues that confront them daily. It is particularly important to beginning teachers as it helps them overcome the feeling of isolation that many of them feel. Farnan (2000) identified several other positive literacy outcomes from teachers working as collaborators, including “increased teacher expertise and professionalism, enhanced student achievement, and an increasing focus on effective classroom practice” (p. 11).

Farnan’s (2000) third role for effective classroom teachers is serving as active professionals and leaders. This role implies that content area teachers stay informed and view themselves as lifelong learners. According to Farnan, teachers “attend conferences; read professional journals and books; participate in collegial forums in which ideas, concerns, and insights are exchanged; disseminate information from their action research projects; and participate in graduate programs” (p. 11). Being active professional leaders helps content area teachers incorporate research-based literacy strategies into their teaching. In this role, content area teachers are active in professional organizations, such as the National Science Teachers’ Association (NSTA), the National Council for the Social Studies (NCSS), and the National Council of Teachers of Mathematics (NCTM), and they also are well informed about current research in the language arts through the publications of organizations such as the International Reading Association (IRA) and the National Council of

Teachers of English (NCTE). In this role, content area teachers also become familiar with the curriculum standards for middle school English, language arts, and reading, published jointly by IRA, NCTE, and the University of Illinois's Center for the Study of Reading. These standards help content area teachers learn exactly what middle school students should know and be able to do in language arts and what role they, as content area specialists, can play in helping students become proficient in these standards.

The fourth role is that of teachers as mentors. It is well known that the teaching profession has a high attrition rate, with estimates ranging from 30 to 50 percent of new teachers leaving within the first five years of teaching. One cause of this high attrition rate is teacher burnout due to inability to cope with challenges that they view as insurmountable. As Farnan (2000) pointed out, new teachers are still novices who need continued mentoring, and successful teachers can serve as powerful mentors. Many beginning teachers struggle with learning the content and the best ways to teach it, and they sometimes lose sight of the fact that incorporating literacy instruction into their teaching is critical if students are to learn the material. Experienced content area teachers, especially those on interdisciplinary teams, are in a unique position to mentor the beginning teachers in their schools, and especially those on their teams. Simple activities, such as visiting others' classrooms and sharing advice on how to incorporate literacy instruction into the lessons, are typically welcomed by beginning teachers.

ROLE OF THE LITERACY COACH

Given the important roles that content area teachers play in middle school literacy programs, how can they possibly keep up with their own content areas and still find time to stay abreast of the current research in the language arts and how best to incorporate literacy instruction into their teaching? How can the one or two courses in content area reading and writing that teachers take in their teaching training programs prepare them to meet the literacy needs of their students? Fortunately, professional organizations have recognized the enormous challenge that content area teachers face not only to teach their content, but also to help their students develop their literacy skills. IRA, with support from the Carnegie Corporation of New York and in collaboration with NCTE, NCTM, NSTA, and NCSS, has developed standards for middle school literacy coaches. IRA anticipates that the standards will be used by numerous audiences, including administrators, school boards, principals, team leaders, parents, university faculty, and accrediting agencies. According to IRA, literacy coaches should play a critical role in successful middle school literacy programs. What exactly are literacy coaches, and what do they do? We answer these questions in this section.

What Are Literacy Coaches?

Literacy coaches in middle schools are literacy experts who “coach content area teachers in the upper grades who currently lack the capacity and confidence (and sometimes the drive) to teach reading strategies to students particular to their disciplines” (International Reading Association [IRA], 2006, p. 2). Snow, Ippolito, and Schwartz (2006) identified the qualifications for becoming a middle school literacy coach. These qualifications include a strong foundation in literacy, strong leadership skills, working knowledge of adult learning, familiarity with young adolescents, and excellent teaching skills. In addition, it is helpful if literacy coaches have experience in specific content areas, excellent communication and presentation skills, and strong interpersonal skills. Ideally, literacy coaches should have at least a master’s degree in literacy or a reading endorsement. The standards for literacy coaches are divided into two areas: three leadership standards and one content area standard:

Leadership Standard 1: *Skillful Collaborators*. Middle school “content area coaches are skilled collaborators who function effectively in [the] middle school . . . setting” (IRA, 2006, p. 5).

Leadership Standard 2: *Skillful, Job-Embedded Coaches*. “Content area literacy coaches are skilled instructional coaches for . . . teachers in the core content areas of English language arts, mathematics, science, and social studies” (IRA, 2006, p. 5).

Leadership Standard 3: *Skillful Evaluator of Literacy Needs*. “Content area literacy coaches are skilled evaluators of literacy needs within various subject areas and are able to collaborate with . . . school leadership teams and teachers to interpret and use assessment data to inform instruction” (IRA, 2006, p. 5).

Content Area Standard 4: *Skillful Instructional Strategists*. “Content area literacy coaches are accomplished middle . . . school teachers who are skilled in developing and implementing instructional strategies to improve academic literacy in the specific content areas” (IRA, 2006, p. 5).

As IRA (2006) pointed out, the preceding standards represent ideals. Becoming an accomplished literacy coach requires extensive, targeted professional development over several years. It also requires constant professional development over a career.

What Do Literacy Coaches Do?

The primary responsibility of literacy coaches is to provide professional development in literacy to teachers. According to IRA (2006), the professional development that literacy coaches provide should be guided by the following four features of successful professional development:

grounded in inquiry and reflection; participant driven and collaborative, involving a sharing of knowledge among teachers within communities of practice; sustained,

ongoing, and intensive; and connected to and derived from teachers' ongoing work with their students. (p. 3)

Literacy specialists are responsible for coordinating the schoolwide literacy programs that are developed around the needs of young adolescents. What does this involve? Within the literacy coach standards, IRA delineated seven elements that specify the literacy coach's key responsibilities. They are as follows:

Element 1.1. "Working with the school's literacy team, literacy coaches determine the school's strengths (and need for improvement) in the area of literacy in order to improve students' reading, writing, and communication skills and content area achievement" (IRA, 2006, p. 8). Activities related to this element include working with a literacy team to conduct a schoolwide literacy assessment and communicating the findings to the staff, leading discussions with teachers about problems they face, and working with the staff to align the curriculum to state and district standards.

Element 1.2. "Literacy coaches promote productive relationships with and among school staff" (IRA, 2006, p. 9). Specific activities for this element include becoming familiar with the literacy needs and concerns of the staff, responding to requests for help from teachers, facilitating literacy discussions among teachers, and keeping administrators informed and soliciting their support for the literacy program.

Element 1.3. "Literacy coaches strengthen their professional teaching knowledge, skills, and strategies" (IRA, 2006, p. 11). This element stipulates that literacy coaches read and apply current literacy research, meeting regularly with other coaches, and attend professional conferences and training to keep abreast of the field.

Element 2.1. "Literacy coaches work with teachers individually, in collaborative teams, and/or with departments, providing practical support on a full range of reading, writing, and communication strategies" (IRA, 2006, p. 11). Specifically, literacy coaches help teachers select textbooks, plan instruction around the textbook, and select literacy strategies to support instruction; provide professional development to teachers; and help teachers link research to their practice.

Element 2.2. "Literacy coaches observe and provide feedback to teachers on instruction related to literacy development and content area knowledge" (IRA, 2006, p. 15). Literacy coaches' feedback to teachers should prompt discussion, identify strengths and areas for improvement, and focus on future goals; literacy coaches can also give demonstration lessons to teachers and teams. Demonstration lessons can be videotaped for other teachers in the school and used for simulated recall sessions with groups of teachers.

Element 3.1. "Literacy coaches lead faculty in the selection and use of a range of assessment tools as a means to make sound decisions about student literacy needs as related to the curriculum and to instruction" (IRA, 2006, p. 15). Literacy coaches are responsible for designing the school literacy assessment program, setting test schedules and analyzing the results, and helping teachers design classroom literacy assessments.

Element 3.2. "As dynamic supports for reflection and action, literacy coaches conduct regular meetings with content area teachers to examine student work and

monitor progress” (IRA, 2006, p. 16). Literacy coaches help content area teachers find ways to observe student literacy skills, hold meetings with content area teachers to examine and evaluate student work, and help teachers analyze the results of the content area standardized tests.

LITERACY ASSESSMENT IN THE MIDDLE SCHOOL

As the preceding elements indicate, the literacy coach is responsible for helping classroom teachers conduct both formative and summative assessments of students’ literacy skills. What exactly does this involve? Literacy coaches help teachers assess the literacy strengths and weaknesses of students, particularly at-risk students, by using a variety of assessment devices.

Perhaps even more important than assessing students’ specific strengths and weaknesses is assessing their interests and attitudes toward literacy. Because some students see no use for literacy in their lives, a critical factor in their success is finding some way to connect the school literacy program to students’ personal interests and experiences. Successful literacy coaches help teachers recognize and value the cultural and linguistic strengths of all students.

Ensuring that the literacy program is goal oriented is an important assessment responsibility of the literacy coach. Teachers in a successful literacy program should be able to agree on what graduating students should ideally be able to do in the areas of reading, writing, speaking, and listening. Without agreement among teachers on what is important, literacy programs too often end up focusing primarily on improving standardized test scores. While high scores on tests are important, they should not be an end in and of themselves. Goals are equally important. Without goals that are specific to individual schools, teachers have little sense of how to build on what has been taught previously and how to prepare students for what will be taught in the future.

Historically, there have been at least three major goals of middle school literacy. The first is functional literacy, which prepares students to write, read, and speak well enough to compete and succeed in the working world. The second is academic literacy, which enables students to appreciate cultural literature and develop their thinking abilities and appreciation of the world around them. The third is social literacy, which prepares students to change society for the better in accordance with democratic and egalitarian educational ideals. In practice, these three goals overlap considerably and are represented to varying degrees in all successful literacy programs.

ASSESSMENT OF MIDDLE SCHOOL LITERACY PROGRAMS

Successful literacy programs are evaluated and revised regularly, with all stakeholders involved in the process. Coordinating such an effort involves three specific tasks on the part of the literacy coach. First, schoolwide literacy

goals and objectives are annually reviewed, revised, and even eliminated, if necessary. For example, just because all students are achieving a certain objective does not mean that the objective remains part of the curriculum—the objective must be relevant to the evolving literacy goals of the program. Second, the literacy coach helps teachers use assessment data to measure student progress toward goals and objectives. This information is then used to make systematic revisions in classroom practice. Third, the literacy coach surveys teachers and students regularly to get their input on the overall strengths and weaknesses of the program as well as on specific features of the program. Regular evaluation and revision of a middle-grade literacy program ensures that it will continue to help students achieve important, lifelong literacy skills.

Literacy coaches are responsible for coordinating the standardized, state criterion-referenced, and classroom literacy tests at the school level. At the state and district levels, this coordination involves helping officials choose and develop assessments that are appropriate for young adolescents. For example, literacy coaches often serve on state and district literacy assessment committees so that they can provide input on the types of assessments that the students in their schools will be required to take. On the local level, literacy coaches are responsible for administering these tests, interpreting the results, and communicating these results to students and parents. Finally, literacy coaches are responsible for helping teachers design their own classroom assessments and use the results to make effective decisions about students.

In successful middle school literacy programs, literacy coaches help teachers integrate authentic assessment into literacy instruction. Unfortunately, many programs are unsuccessful because teachers receive little training in sound assessment practices in general, let alone in authentic types of assessment, such as portfolio and performance assessment, that link literacy instruction and assessment. Although teachers may be familiar with current assessment practices, many are reluctant to use them because of the time involved. In successful programs, literacy coaches work with teacher teams, from the ground up, to design and implement these forms of assessment on a schoolwide basis. The literacy coach meets regularly with teacher teams to discuss their students' performance on the criterion- and norm-referenced tests that they take.

In conclusion, literacy plays a critical role in middle school curricula and instruction. Successful middle school literacy programs are designed around the developmental characteristics of young adolescents and are dependent on a collaborative relationship between classroom teachers and literacy coaches.

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Chapter Eight

CONTENT LITERACY: READING, WRITING, LISTENING, AND TALKING IN SUBJECT AREAS

David W. Moore

The following is a fictional account of a 9th-grade solar system unit of instruction. This account is written in the form of a journal and reflects on the content literacy practices that occurred in this teacher's classroom. It is a reference point for this chapter on content literacy: reading, writing, listening, and talking in the subject areas.

I explored the solar system with my 9th-grade science class during the last two weeks. I launched this unit of instruction by reading aloud a few inspiring excerpts on space travel, showing a brief NASA video of its accomplishments, then having students call up what they already knew about the solar system. Next, I displayed and read aloud the following prompt that would guide students' thinking through this unit:

You are the commander of a space shuttle that recently traveled through the solar system. Now that you have returned, you are to report on your journey to members of the U.S. Congress, people who know very little about the details of your trip or what you experienced. Describe your journey so that Congress will fund more money for the space program.

I explained that everyone would have many opportunities to gather information on the solar system for his or her presentation. Then I presented the unit's five objectives so everyone knew the basic expectations: (1) analyze the solar nebular hypothesis, the most widely accepted theory of the origin of the solar system; (2) describe prior explorations of the solar system; (3) portray the distinguishing characteristics, locations, and motions of the principal

objects in the solar system; (4) compose a persuasive multiparagraph presentation; and (5) deliver a polished speech that uses visual aids and technology to clarify and defend positions.

As usual, I included objectives for subject matter as well as language arts. My students and I regularly work to develop both areas in my classes. I always share my objectives this way so that students know the essentials they are expected to learn and so that they can take an active role in monitoring their learning. I also presented the assessments we will use to determine how well our teaching and learning is progressing. Doing this at the beginning helps us keep focused.

To begin students' inquiries into the solar system, I reviewed the basic differences between planets and dwarf planets, satellites, asteroids, meteors, and comets. Even during this review, I focused attention on word-learning strategies. For instance, I noted that the root word of *asteroid* is *astro*, meaning "star," as in *astrology*, *astronomy*, and *astronaut*, and that *meteor* comes from *meta* and *aoro*, meaning "beyond air."

I called attention to the various references available in the class—brochures, nonfiction library books, newspaper clippings, CDs, and the Web—that provided various ways to learn the unit's subject matter. I had gone through the science department's resource center and the school's media center, pulling together reading materials on the solar system so that students could choose passages that fit their interests and abilities.

Students acquired much information for this unit through a computer simulation that models travel through the solar system. The graphics are quite vivid, and the information is abundant and accurate. The game-like aspect of the simulation involves exploring as much of the solar system as possible within an allotted time. Because the positions of the planets relative to each other are constantly changing, the simulation is somewhat different each time it is played.

I devoted five days to students individually or in small groups, gathering ideas and information from the available materials. At the beginning of each class period, I conducted brief lessons on the solar system as well as on the language arts competencies addressed during this unit. At the end of each period, I held whole-class discussions about the students' inquiries, sharing insights into the solar system and tips on composing their presentations.

One day, when the class had formed into pairs, I noticed Victor and Theresa, two students with limited English proficiency, seated together. When I asked whether or not their pairing was by their choice, they said yes. Victor told me, "This way, if we get stuck trying to understand and explain what we're learning in English, we can switch to Spanish." "OK," I said, "first talk through the subject matter as much as you can—and help each other—in English, but use Spanish mainly to get through any rough spots."

On several occasions, I had individuals write out the beginnings of their presentations on an overhead transparency, then the class talked about what they liked about each introduction and inquired into unclear ideas. When an introduction was confusing, either a classmate or I asked something like, “Why are you including _____?” or “What support do you have for _____?” I insisted on all questions and comments being respectful. I also made sure that the class’s gender and ethnic groups were represented fairly when nominating individuals to share their introductions.

On the seventh day of the unit, I reminded the class that this was an opportunity to work full-time to finish their presentations. As I circulated about the room, I answered numerous substantive questions about the solar system, space travel, and multiparagraph presentations and speeches. The class seemed well engaged with science concepts and language arts competencies.

The culmination of this unit consisted of students presenting their reports in small groups. After each presentation, the group collaboratively assessed it by using a scoring guide, or rubric. Each presenter then attached the group’s consensus assessment and a self-assessment to his or her printed material for my rating. We debriefed the presentations as a whole class, concluding with a discussion of the immensity of the solar system and the possibility of one day actually exploring all of it with manned spacecraft.

INTRODUCTION

The fictional account of classroom instruction just presented suggests how subject matter and language arts can be brought together. It depicts content literacy in action. Content literacy refers to “the ability to use reading and writing for the acquisition of new content in a given discipline” (McKenna & Robinson, 1990, p. 184). As the fictional account shows, students can use reading, writing, listening, and talking to learn about the solar system. Reading brochures and library books, interacting with computer simulations, talking through unclear ideas, and composing and listening to peers’ presentations are powerful tools for acquiring new subject matter knowledge. Students’ reading, writing, listening, and talking can be improved when they are engaged in topics like the solar system.

Content literacy goes by names like *academic literacy*, *content area reading and writing*, *disciplinary reading and writing*, and *literacy across the curriculum*. Content literacy links attention to reading, writing, listening, and talking with attention to school subjects, such as biology, geometry, history, literature, physical education, and theater, to name a few. Teachers who work to improve their students’ content literacies help them use language like biologists, mathematicians, historians, novelists, athletes, actors, and so on. Content literacy

is in contrast with the reading and writing people do while conducting their personal lives, running their households, performing their jobs, and acting as citizens. It is the literacy of school.

BACKGROUND

The content literacies of youth have been receiving more attention recently. While pockets of reading educators have realized the importance of secondary school content literacy instruction for years, influential U.S. educational policy makers are just beginning to recognize its value.

Reading Educators

Educators' attention to content literacy in the United States can be traced to the early 1900s. At that time, many educational theorists began questioning the traditional goals of oral reading and rote learning and began realizing the importance of silently reading for meaning. For instance, a noted psychologist and philosopher of this era, William James, told of students who could recite that "the interior of the earth is in a condition of igneous fusion" (James, 1923, p. 150), but who could not say whether the bottom of a very deep hole would be hotter or colder than the top. Progressive educational philosophers such as John Dewey and reformers such as William Heard Kilpatrick and Colonel Francis Parker in the early 1900s advocated teaching students how to understand and remember meaningful ideas.

Pioneering calls for reading instruction in the high schools occurred in the early 1940s as a few educators began realizing that many high school readers struggled at this level. Those involved in the study of child development, such as Ruth Strang, promoted reading instruction that changed across the life span, leading to the catch phrase "First children learn to read, then they read to learn." During this time, William S. Gray initiated the slogan "Every teacher a teacher of reading" to indicate that all high school teachers should play a role in youth's reading development. About three decades later, Harold Herber (1970) published *Teaching Reading in Content Areas*, the first text devoted exclusively to this topic. Current textbooks devoted to the content literacy of youth include titles such as *Content Reading and Literacy* (Alvermann, Phelps, & Ridgeway, 2006) and *Developing Readers and Writers in the Content Areas* (Moore, Moore, Cunningham, & Cunningham, 2006). An online Google search of the term *content literacy* produced 97,500 hits at the time of this writing.

While a small portion of the professional educational literature has addressed content literacy for more than a century, actual content literacy practices implemented in middle and high school classrooms have been comparatively

limited. Classroom surveys and observations suggest that past middle and high school teachers rarely focused on their students' literacies while examining subject matter (Cuban, 1993). Up until now, secondary school teachers have concentrated on students' subject matter learning and generally neglected their literacy learning.

Educational Policy Makers

U.S. educational policy makers' attention to what many have called a reading crisis or a literacy crisis (e.g., McQuillan, 1998) is due in large part to reading test score reports. For instance, the National Assessment of Educational Progress (NAEP), commonly called the nation's report card, shows about 25 percent of U.S. 8th graders reading below basic, the lowest level of the test (Livingston, 2006). The NAEP also shows 12th-grade readers' scores declining slightly from 1992 to 2002. U.S. students' performance on international educational comparisons typically presents a substandard picture for older readers. U.S. nine-year-olds typically score higher than their international peers on reading assessments; however, 15-year-olds typically score about the same as their international peers on reading assessments, and U.S. adults' literacy scores are below several other industrialized countries' scores.

In 2003, 19 states administered mandatory high school exit exams, reading tests students must pass to graduate from high school, and five states are phasing in such exams by 2008 (Gayler, Chudowsky, Kober, & Hamilton, 2003). Exit exam pass rates vary from state to state, but all place considerable numbers of youth at risk of not passing. Practically every state has established academic standards, expectations of what youth are to accomplish in school, and content literacy standards normally are included.

A recent survey of employers' perceptions of high school graduates' readiness for the workforce revealed that many believe these graduates lack the skills needed for success (Casner-Lotto & Barrington, 2006). While many employers considered high school graduates to be adequate with information technology, openness to diversity, and collaborative teamwork, many considered them deficient in reading comprehension and writing. Finally, ACT Inc. (2006), a principal publisher of college entrance exams, considered only about half of the seniors they tested in 2005 to be ready for college-level reading. ACT also reported slight declines in older youth's reading achievement, with more students in the 8th grade headed for college-level reading than those in the 12th grade.

The No Child Left Behind Act of 2001 (NCLB; cf. <http://www.ed.gov/nclb/landing.jhtml>), which the federal government enacted in 2002, calls for all U.S. students to be proficient in reading (as well as math and science) by

the 2013–2014 academic year. By including the mandate for *all* students to be proficient, NCLB focuses on eliminating the substantial gaps in academic achievement demonstrated along racial, ethnic, and income lines. This focus is noteworthy because according to the NAEP, the average 8th grader who is African American or Hispanic or who is from a low-income family reads three to four grade levels below those students who are white or better advantaged. Youth with such underdeveloped literacies often find themselves in non-college-bound high school courses, and those in urban high schools often have graduation rates below 50 percent (Barton, 2003).

In response to reports such as these on U.S. adolescents' literacy performance, many highly visible and influential educational policy makers have called for content literacy instruction. Groups recently advocating such instruction in the secondary school subject areas include the U.S. Department of Education (n.d.), the National Association of State Boards of Education (2006), the National Governor's Association Center for Best Practices (2005), the National Association of Secondary School Principals (2005), and the Carnegie Corporation of New York in conjunction with the Alliance for Excellent Education (Biancarosa & Snow, 2004). Secondary school teachers of all subject areas now are becoming responsible for all students attaining high levels of literacy.

RATIONALE

If you are like many who are new to the idea of content literacy instruction in secondary schools, you might wonder why the response to U.S. adolescents' reading achievement involves subject matter teachers. You might ask something like, "I'm convinced of the need to improve adolescents' literacy performance, but shouldn't this be done during English or special reading classes?" If you are a middle or secondary school teacher, you might think only elementary teachers should teach literacy, wondering something like, "Shouldn't lower-grade teachers be the ones to concentrate on improving students' reading and writing so upper-grade teachers can present their content?" Three compelling reasons for linking youth's reading, writing, listening, and talking with subject matter study follow: (1) subject matter consists of language, (2) the language of subject matter differs, and (3) the demands of subject matter language continually increase.

Subject Matter Consists of Language

Biologists, historians, and astronomers use language to construct and convey meaning about what they examine. Even when scientists investigate concrete natural phenomena, they work with words to form concepts and

explain conceptual relationships about the phenomenon. Think how various subject matter specialists would examine a large boulder they might come across in the outdoors: how a paleontologist would think and talk about any fossils that shed light on prehistoric plant and animal life, how an anthropologist would comment on any pictographs and petroglyphs that reveal information about ancient cultures, and how a geologist would refer to its mineral content. Each subject matter specialist would employ a particular perspective on the identical boulder, using language to advance that perspective.

Acting like a biologist, historian, astronomer, paleontologist, anthropologist, or geologist means using language in particular ways to think about particular aspects of the world. Among other things, it means being proficient in reading the journal articles, textbooks, brochures, and scholarly books of the specialization as well as writing the observation notes, transcripts, reactions to experiences, reports, and so on that characterize the specialization.

Subject matter teachers are best able to support students who are challenged by subject matter language. Instruction typically benefits learners the most when they want to accomplish something specific. Teaching students to take notes about history content generally is most appropriate when students have the desire to understand and remember history. Teaching students how to solve mathematics word problems is done best in math class when students want to solve such problems. Content literacy learning occurs best in content area classrooms when students have the need to know and where teachers are expert in the language of the subject.

The Language of Subject Matter Differs

A single word often means different things when used in different subjects. For instance, in English class, *base* refers to the central word to which prefixes and suffixes are attached, yet in chemistry, *base* is the word for the compound that reacts with acids to form salts. In economics, *base* represents the lowest price of a publicly traded stock, while in mathematics, *base* refers to the source of numbering systems. Then consider *table*. Is it used to refer to a water table, a kitchen table, or a multiplication table? Does someone want to table a motion or table a set of information?

The following words demonstrate the reality of single words having several meanings: *base*, *table*, *principal*, *power*, *prime*, *radical*, *square*, and *set*. When used in mathematics, these words have very specific, technical meanings that differ from their meanings when used outside of math. Youth benefit from deep understanding of words' different meanings according to the subject areas where they are used.

Language of the Subject Area Texts

Take note of the poem “The Eagle,” presented below.

The Eagle

He clasps the crag with crooked hands;
 Close to the sun in lonely lands,
 Ringed with the azure world, he stands.
 The wrinkled sea beneath him crawls;
 He watches from his mountain walls,
 And like a thunderbolt he falls.

Alfred, Lord Tennyson (1851)

What does this lyric poem mean? Is it a portrayal of a significant event in a raptor’s life? Is it actually referring to a person rather than an eagle? Or is Tennyson talking about the British military in a manner similar to his “Charge of the Light Brigade” (“Theirs not to reason why, / Theirs but to do and die”)? Perhaps “The Eagle” is meant to be ambiguous and multilayered so that readers will access multiple meanings and think about multiple aspects of their natural and social worlds.

Note the music of Tennyson’s words. The structure of the first line is an eight-syllable, iambic tetrameter that provides notable rhythm. The alliteration in this line (clasps, crag, crooked) and the later rhymes (hands, lands, stands; crawls, walls, falls) suggests a certain majesty. And the descriptive language of the poem (azure world, wrinkled sea, thunderbolt) appeals rather vividly and compellingly to the senses.

Now compare “The Eagle” with the following passage about angles.

Angles

An angle is the union of two rays that do not lie on the same line. When the sum of the measure of two angles is 90° , the angles are complementary; when the sum of the measure is 180° , the angles are supplementary. (Moore, Moore, Cunningham, & Cunningham, 2006, p. 5)

Did you find yourself having to mentally shift gears when reading the angles passage after “The Eagle”? Did you need a different mind-set, a different way of thinking and reading? The meaning of the angles passage is much more exact and constrained than what just preceded it. There is little room for multiple defensible interpretations. This passage tersely tells what an angle is and what to name the sums of angles’ measures. It exemplifies scholarly mathematical conceptualizations of physical space.

The angles passage has none of the musicality found in “The Eagle”; it is presented in a forthright, no-nonsense manner that gets straight to the point. Its precise, painstakingly sequenced description guides readers unequivocally.

Furthermore, the vocabulary of the angles passage is distinctive, including the symbol for degree and the multiple-meaning words *ray*, *complementary*, and *supplementary*.

The Magna Carta selection presented below offers another glimpse into the language differences among subject matter.

Magna Carta

In 1215, a group of barons forced King John of England to sign the Magna Carta. The barons wanted to restore their privileges; however, the Magna Carta grounded constitutional government in political institutions for all English-speaking people. (Moore et al., 2006, p. 5)

This passage seems to present concepts more explicitly than “The Eagle” but less explicitly than the angles passage. It offers some room for interpretation. It presents English history factoids, implies the time span of the notion of constitutional government, and suggests how human actions often have unintended consequences. The language of the Magna Carta passage fits the genre of nonfiction narrative, rather than the poetic or procedural genres of the other passages. It exemplifies the way social scientists present cause-effect relationships among social, economic, and political events. And it assumes readers will be familiar with the terms *barons*, *privileges*, *constitutional government*, and *political institutions* because it offers no clarifications.

“The Eagle” and the passages on angles and the Magna Carta suggest how the language of subject matter differs. These reading selections show why subject matter teachers are the logical choice for teaching content literacy. Subject matter teachers know the mind-sets of those who produced such materials, the special vocabulary of the materials, their structures, and generally, what it takes to make sense of them.

Language of the Subject Area Classrooms

Along with the language of the subject, the language of the classroom matters. Teachers do well when they clarify the forms of language, thought, and action that students need to participate effectively in their classrooms. For instance, math teachers might expect students to solve problems by calculating data precisely and recording the findings in meticulous order. A government teacher might expect these same students to solve problems by examining hypothetical situations, forming opinions about appropriate courses of action, and advocating their opinions during open-ended debates. To do well, these students need to act like meticulous problem-solvers in the math class and adventurous debaters in the government class.

An English language arts teacher then might expect this same group of students to participate in teacher-student writing conferences as a sign of being

serious writers. When this happens, teachers are at risk of mistakenly considering those who prefer to not participate to be second-rate writers. Finally, a science teacher might expect these students to act like bankers of information who, when tested, accurately recover what was deposited during class lectures.

Regardless of the subject area, teachers tend to reward those who communicate as expected. Youth sometimes have difficulty in school because they do not apply the fine points of acting like particular readers, writers, listeners, and speakers in particular classrooms. These youth might lack the language of a classroom because they are unaware of the verbal customs sanctioned there. Or these youth might decide willfully not to participate in classroom language for personal and cultural reasons, disdaining the academic customs of mainstream classrooms.

Educators who acknowledge the role of classroom language seek ways to explicitly inform youth of their classroom language expectations. They also seek ways to inform youth's decisions to participate because they realize that youth ultimately decide the extent to which they develop their content literacies.

The Demands of Subject Matter Language Continually Increase

As students progress through school, they read more and more expository material about more and more complicated ideas. They might read stories about neighborhood helpers in the primary grades, textbook passages about world geography in the middle grades, and primary sources comparing governmental systems in high school.

The two columns presented in Table 8.1 hint at the increase in word difficulty that students experience as they progress through the grades. To be specific, all the words are derived from bases or roots, but each word in the left column contains two syllables, the base word appears fully in each (i.e., delete the *y* in each and the base remains), and all the words represent somewhat familiar, simple, and concrete things.

On the other hand, the words in the right column also all end with *y*, but they contain up to seven syllables, and all have roots rather than bases—their central elements cannot stand alone. The Greek and Latin roots *chrono* (time),

Table 8.1
Derived Words

Relatively Easy	Relatively Difficult
dirty	chronology
cloudy	dermatology
fruity	heterogeneity
hilly	monogamy
rainy	philanthropy
sleepy	sedimentary

derm (skin), *gen* (type), *gam* (marriage), *anthrop* (man), and *sed* (settle) require a prefix or suffix to appear in English. These words represent somewhat unfamiliar, complex, and abstract phenomena.

The ever-increasing difficulty of what students read, as exemplified by these columns of words, indicates the need for continual support across the subjects at all grade levels. Just as primary-grade students benefit from peeling off the *y* of certain words and examining their bases, secondary school students benefit from removing multiple prefixes and suffixes, knowing the meanings of the foreign roots, and combining these elements into sensible concepts. And to be sure, the sentences, paragraphs, and longer discourse that students encounter across the grades increase in complexity in their own ways.

In summary, students deserve content literacy instruction across the subject areas and throughout their school careers. Extended instruction over time in subject matter reading, writing, listening, and talking enables individuals to handle the dramatic changes they experience in learning about the world.

INSTRUCTION

Organizing instruction to promote reading, writing, listening, and speaking along with subject matter learning is complex; indeed, entire textbooks are devoted to this enterprise (see, e.g., Moore et al., 2006). This section presents six features of content literacy instruction that provide a good starting point for planning it. The six features are (1) instructional units focusing on big ideas, (2) objectives linked with assessments, (3) materials that students can and want to read, (4) guidance through challenging tasks, (5) explicit instruction in strategies, and (6) differentiation and collaboration.

Instructional Units Focusing on Big Ideas

Classroom units of instruction are a productive framework for bringing together language and subject matter. Units divide the school year among topics and blocks of time, lasting from a few days to a few weeks. The fictional unit at the beginning of this chapter focused on the solar system, a common topic. Table 8.2 presents other common topics that high school instructional units center about.

Table 8.2
Units of Instruction

English	Algebra	Biology	American history
<i>Beloved</i> (novel)	Number system	The cell	Precontact America
Poetry (genre)	Rational numbers	Heredity	European exploration
Angelou (author)	Properties	Interdependence	Colonies
Identity (theme)	Equations	Evolution	Nation forming
Essay (skill)	Linear functions	Energy flow	Westward expansion

After selecting a unit topic, focusing attention on its big ideas helps to link language and subject matter. With regard to the novel *Beloved*, a big idea could be what it means to be beloved. If precontact America were the topic of an American history unit, a big idea could be whether Native Americans were better off before or after European contact. Rather than relying on a question, the solar system unit's big idea asked the student to produce a composition that would "describe your journey so that Congress will fund more money for the space program."

Big ideas are meant to provoke and sustain students' thinking, use of language, and subject matter learning. They glue together what students encounter during day-to-day unit activities. When focusing on big ideas, students still need to grasp the numerous facts associated with a topic, but these facts become the building blocks of thought and language. The open-ended aspect of big ideas permits all high- and low-achieving students to form acceptable responses, although their sophistication might vary.

Objectives Linked with Assessments

By stating what is to be learned during a unit, objectives direct students' and teachers' actions. Objectives, which have gone by the names of *goals*, *aims*, *curriculum standards*, and *content outcomes*, designate what is to be accomplished. Linking units' subject matter and language objectives places a focus on content literacy. For instance, the fictional solar system unit contains two literacy objectives ("Compose a persuasive multiparagraph presentation ..." and "Deliver a polished speech ..."). The presence of these two in a science unit calls for instruction that attends to both, developing language in the service of learning subject matter.

Assessments, measures of what students know and can do, can be productive teaching and learning tools. As the fictional unit portrayed, showing early on how reading and writing will be assessed and having classmates use scoring guides while responding to one another's presentations clarifies expectations and signals what is important. The scoring guides, checklists, and tests help teachers and students keep their eyes on their subject matter and content literacy objectives.

Materials That Students Can and Want to Read

Youth who spend time reading and writing connected text tend to increase their word knowledge, fluency, and reading comprehension, along with their knowledge of the world and attitude toward literacy (Krashen, 2004). Providing students accessible and interesting materials, time to read them, and support for their reading promotes literacy.

Materials written at different levels of difficulty and in different genres give students a chance to get subject matter that is personally meaningful. As

the solar system unit showed, teachers can provide various types of reference material—brochures, nonfiction library books, newspaper clippings, CDs, and the Web—obtained from classroom supplies as well as department and media center collections. Some teachers pair picture books with advanced reading materials, thinking that the simpler materials provide stepping-stones to the more complex ones. These teachers believe that some of the time spent helping students understand their textbooks might be time better spent getting understandable materials into students' hands.

Guidance through Challenging Tasks

Challenging tasks, ones that call for special effort but are not defeating, improve learning (Bransford, Brown, & Cocking, 1999). Challenging tasks are neither too easy nor too demanding. They are assignments that students cannot accomplish on their own, but can accomplish with reasonable support. Delivering a polished speech promoting solar system exploration, as the fictional unit expected, would challenge most 9th-grade students yet be within their grasp.

Guidance through challenging language tasks has discernible beginnings, middles, and endings. For instance, if students are expected to understand a challenging passage, teachers might begin by connecting its unfamiliar vocabulary and ideas with subject matter encountered earlier. They might have students take notes or ask and answer questions while reading. After reading, they might have students produce a written response then receive feedback. This sequence of guidance leads to teachers uncovering—rather than covering—subject matter.

Guidance through challenging tasks helps youth develop understandings of the particular topic at hand as well as future ones. Guidance promotes knowledge of the world, which is crucial background for making sense of new ideas. As students develop their understandings of the solar system and persuasive speech presentations, for example, they bring this new knowledge to future reading and subject matter learning. They learn about the world incrementally, continually connecting new ideas and information with what they already know.

Explicit Instruction in Strategies

Explicit instruction in how to accomplish what youth are expected to accomplish promotes their comprehension and learning (Nokes & Dole, 2004). If a unit plan calls for students to obtain information online, and they are not already adept at searching for information online, then effective teachers would present the strategies for accomplishing that task. With the solar system unit, teachers would demonstrate how to access the Web, locate appropriate sites

in the solar system, and record pertinent information before having students do it on their own.

Strategies enable individuals to learn on their own, when no guidance is available. Strategies teachers commonly address during content literacy instruction include graphically organizing ideas, thinking aloud while reading, discussing ideas in cooperative learning groups, and maintaining journals or learning logs (Bacevich & Salinger, 2006).

An effective instructional practice is to introduce strategies such as these with materials unrelated to the current unit of instruction, then quickly integrate the strategies into ongoing course work. This provides students with the opportunity to take control of their learning. It shows that thinking deeply about subject matter and learning it is not a matter of being innately smart, but a matter of applying proper strategies.

Differentiation and Collaboration

Differentiating instruction means accommodating the strengths and needs of diverse learners. Teachers who differentiate instruction know that not everyone learns the same way and that individuals have preferred ways of processing subject matter as well as different cultural backgrounds, career aspirations, and identities. They assume that individuals follow different pathways to learning.

Collaboration is a powerful practice for differentiating instruction, especially for English language learners. As the solar system unit portrayed, some students who are learning English might benefit from working alongside another who speaks the same first language. Such collaboration permits learners to talk through their confusion and emerging understanding. It provides opportunities for participants to think of things they otherwise might not have considered. Collaborative discussions are powerful tools for helping learners come at subject matter differently and obtain new insights and perspectives.

A FINAL WORD

Youth who begin to read, write, listen, and talk like subject matter specialists go far toward achieving the high levels of language needed for the twenty-first century. Secondary school subject matter classrooms are a prime location for instruction along these lines. Content literacy, the literacy of school, deserves the attention of those wishing to promote literacy and subject matter learning.

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Chapter Nine

EXEMPLARY YOUNG ADULT LITERATURE: THE BEST BOOKS FOR ADOLESCENTS

James Blasingame Jr.

I recently found myself inescapably encircled by 200 rowdy, teenaged girls, all wearing plastic vampire teeth and identical black “Bite Me” T-shirts, as they mobbed best-selling author Stephanie Meyer, or as she is more often known, the “vampire lady.” Stephanie’s most recent book, *New Moon* (Little, Brown, 2006), the sequel to her teenage vampire thriller *Twilight* (Little, Brown, 2005), spent 11 weeks as number one on *The New York Times* bestseller book list in the category of children’s chapter books.

Stephanie was appearing at Changing Hands Bookstore in Tempe, Arizona, and anyone failing to arrive at least 90 minutes early was out of luck. Teen readers around the world are enthralled with her protagonists, Edward Cullen (the handsome but aloof teen vampire) and Bella Swan (the adventurous high school junior looking for her place in the world). The popularity of these books even extends to international fan sites, which are Web sites created by young fans of Stephanie’s work, such as *TwilightLexicon.com*, a very stylish and technologically savvy Web site with a wealth of pages on everything from vampire mythology, to detailed chapter summaries, to discussion boards where fans can chat.

What makes the books of a certain author so popular with young readers? On the surface, it may look as if they are just enthusiastic participants in the latest fad, but an examination beneath the surface reveals that quality young adult literature rises to the top for good reasons, and the reasons are rooted in the nature of adolescence itself.

Young adult readers have very definite opinions about books. A few years ago, at age 13, my niece Katelin had amassed a considerable collection of young adult books autographed to her by various famous authors, including Phyllis Reynolds Naylor, Sharon Draper, and Vicki Grove. As a student at the University of Kansas at that time, under the tutelage of renowned adolescent literature expert John Bushman, I had the opportunity to meet with 20 or more outstanding authors as they visited campus. After hosting the authors around the campus for two days, I always scored a set of autographed books for my nephews and niece, Alex, Nick, and Katelin.

These three were not only avid readers, but discriminating readers as well. As her 8th-grade school year began, I asked Katelin what they would be reading this year in English class. She responded, "I don't know what we're going to be reading yet, Uncle Jim, but I hope it's the good, interesting stuff and not the dumb, boring stuff." Among the books that Katelin would read that year from the "good, interesting stuff" were Vicki Grove's *Crystal Garden* (Putnam, 1995), Carolyn Cooney's *Face on the Milk Carton* (Delacorte, 1990), Christopher Paul Curtis's *The Watson's Go to Birmingham: 1963* (Delacorte, 1995), Sharon Draper's *Tears of a Tiger* (Atheneum, 1994), and Karen Hesse's *Letters from Rifka* (Henry Holt, 1992). All these books have won multiple awards, and all have been recognized as among the very best in young adult literature.

CHARACTERISTICS OF EXEMPLARY YOUNG ADULT LITERATURE

What are the hallmarks of the very best in literature for adolescents? Exemplary literature for young adults becomes something very special when the reader interfaces with it; it becomes a sort of user's guide to life, a guide with great influence over how the reader grows as a human being. Perhaps a better way to ask the question would be, What kind of books do young adults need in their lives?

The answer to this question might be reduced to these five principles:

1. Young adults need books with characters and situations to which they can relate.
2. Young adults need books that treat the issues that adolescents face respectfully.
3. Young adults need books that are accessible to them.
4. Young adults need books that reflect the diversity of their world.
5. Young adults need books that help them make sense of their own lives.

I will explore each of these five principles as well as good examples of books that are exemplars of each. At the end of the chapter, I will include some lists of recommended works that also fit these principles. Let us look at the first, second, and fifth principles together. In their best-selling book on adolescent literature, *Literature for Today's Young Adults*, Alleen Nilsen and Ken Donelson (2004) placed readers on a continuum of stages of literary appreciation,

stages they progress through as they mature. Readers are generally in the third stage as they enter adolescence, the stage of “losing oneself in literature” (p. 39), when reading becomes a pleasant escape from everyday life. As adolescence overtakes them, however, they progress into the fourth stage, the stage of “finding oneself in literature” (p. 39). To do this, they need literature with characters with whom they can connect, characters with whom they can easily and strongly identify.

As Mel Glenn, winner of the American Library Association’s (ALA) Best Books Award for *Class Dismissed! High School Poems* (Clarion, 1982), explains, “When a reader can say, ‘Hey, I feel what that character is going through,’ a tangible connection has been made between printed word and human recipient, or in other words, what is that character to me or me to that character that I should care so; the reader and the protagonist intertwine” (Blasingame, 2007, p. 174). It is this connection between the reader and the characters, especially the connection with the protagonist, that is so crucial in high-quality young adult literature.

READER RESPONSE THEORY

This connection is surely the one that Louise Rosenblatt, the founder of reader response theory, first wrote about in her landmark work *Literature as Exploration* in 1938. Rosenblatt’s theory was that when a text and a reader come together, something is created that never existed before because each reader is a unique individual and

brings to the work personality traits, memories of past events, present needs and pre-occupations, a particular mood of the moment, and a particular physical condition. These and many other elements in a never-to-be-duplicated combination determine his response to the peculiar contribution of the text. (pp. 30–31)

According to Rosenblatt, the meaning of a text is created in a transaction that takes place between the text and the reader.

THEORIES OF ADOLESCENT DEVELOPMENT

The significance of this transaction is especially high, considering the physical, emotional, and psychological development that takes place during adolescence. Moral and personality development are in high gear for teens at this time, as theorized by noted developmental psychologists Lawrence Kohlberg and Erik Erikson. In his 1981 work *Essays on Moral Development*, Kohlberg describes stages of moral development in which human beings form consciences, including how these consciences operate and change as children mature. In his 1950 work *Childhood and Society*, Erickson theorizes

eight stages of human development, each describing the tensions between two polar opposite states of psychological development. For example, in stage 5 (12–18 years of age), “Identity versus Role Confusion,” teens ask the question, Who am I? Erikson is famous for coining the phrase *identity crisis* in referring to this stage. The individual attempts to determine personal beliefs, values, and roles in life such as gender roles and social roles. During this time, adolescents are experimenting with identities, trying on different ways of being, and seeing how well they fit.

Books can enable young readers to experiment safely and vicariously through the trials and tribulations of characters like them. Far better that when a young reader encounters a certain life-changing decision or dilemma for the very first time, it is in a book, rather than in real life. As Newbery Medal winner Katherine Paterson contends,

that’s what books do for you. They give you practice doing difficult things in life. In a way, they prepare you for things that you are going to have to face or someone you know and care about is going through. They sort of help you know how it feels—though not exactly. It is the remove that gives you a deep pleasure rather than a total pain. (Scholastic Inc., 2005)

CHARACTERS AND SITUATIONS CLOSE TO THE LIVES OF YOUNG ADULTS

Books that fulfill these requirements (relatable characters and events and stories that help young people make sense of their own lives) may look very different from each other on the surface. For example, the five books in Gary Paulsen’s *Hatchet* (Bradbury, 1987) series have entirely different settings and conflicts from Laurie Halse Anderson’s *Speak* (Farrar, Straus and Giroux, 1999). After being marooned in the Canadian wilderness, Paulsen’s protagonist, Brian, spends most of his time just trying to stay alive, while Anderson’s Melinda Sordino spends most of her time at school or at home after having been secretly raped at a high school party. Yet Brian and Melinda are not so different: they both feel alone and hopeless, without power and without purpose, floundering in a hostile environment. Feeling alone, feeling somehow different from everyone else, is a commonality among teenagers, and books with characters who also experience these feelings are helpful to them. Award-winning author and counselor to dysfunctional families Chris Crutcher (1992) explains, “Stories can help teenagers look at their feelings or come to emotional resolution, from a safe distance.... I have never met a depressed person, or an anxious person, or a fearful person who was not encouraged by the knowledge that others feel the same way they do. ‘I am not alone’ is powerful medicine” (p. 39).

As young readers follow the ups and downs of characters much like themselves, they wrestle with the protagonist’s issues side-by-side with him or her.

These issues may be as innocuous as working up the nerve to ask someone out on a date, or as heart wrenching as helplessly watching as a terminally ill sibling declines, such as in *Drums, Girls and Dangerous Pie* (DayBue, 2004), New Jersey middle school teacher Jordan Sonnenblick's first successful novel. Sonnenblick wrote *Drums* after learning that one of his students was dealing with a terminally ill sibling. He knew full well the power of literature for healing and for helping young people make sense of the world, but the right book for his student, a book about living with a terminally ill brother or sister, was not available, and so he set out to write it: "I saw a void. I loved this kid, and I wrote the book that wasn't there for her. People say they climb Mt. Everest because it's there, well I wrote this book because the need was there" (Blasingame, 2006, p. 61).

Sonnenblick also understood the need for authenticity and accuracy, and as he worked on the plot details of *Drums*, his goal was 100 percent believability: "It needed to be perfect. A very special reader was trusting me to tell her the truth, and when someone hands you the ball of their trust, you don't drop the ball" (Blasingame, 2006, p. 62). Sonnenblick turned to a lifetime friend, an oncologist, for information about cancer symptoms, medicine, side effects, and treatments. Good young adult authors display the utmost respect for their readers.

Young readers love the gritty details that come from an author's personal experience, too. Consider two of their favorites, Will Hobbs and Gary Paulsen. In Hobbs's *Wild Man Island* (HarperCollins, 2002), 14-year-old Andy Galloway is marooned on Alaska's Admiralty Island while sea kayaking. Will wrote that book after he and his wife, Jean, sea kayaked that very same area and saw for themselves many of the obstacles that Andy would encounter in the book, including whales, sea lions, and giant brown bears. Gary Paulsen wrote *Woodson* (Bradbury, 1990) and *Dogsong* (Bradbury, 1985), two books steeped in the facts of running dogsleds, very soon after personally running the Iditarod, Alaska's annual 1,150-mile dogsled race from Anchorage to Nome.

REFLECTING DIVERSITY IN YOUNG ADULT LITERATURE

Adolescents also need books that reflect the diversity of who they are. It is imperative that *all* young people see themselves in their reading and that all adolescents see the total diversity of the human race in their reading as well. When adolescents do not see themselves in their reading, they are likely to infer, consciously or subconsciously, that they do not count or do not matter. In her 2006 article "The Voices of Power and the Power of Voices," scholar of Native American literacy Marlinda White-Kaulaity described the consequences suffered by young readers who never see their own ethnic or cultural heritage reflected in their classroom reading. She stated that "when certain

voices are excluded ... teachers deprive young readers of one purpose of literature: to read and learn about themselves and others in life" (p. 8).

In addition to omitting a group, stereotyping members of that group as being all alike (good or bad) further marginalizes the group and is grossly inaccurate. For example, in debunking the myth of the romanticized, noble Native American as portrayed in so-called enlightened books and films, Native American author Cynthia Leitich Smith stated that the romanticized stereotype is nearly as bad as the old cowboys and Indians movie image of a fearsome savage: "The problem is that it's equally dehumanizing. Literature must show us in our full complexity, and that includes flaws and, in some cases, perspectives that might make others uncomfortable" (Blasingame, 2007, p. 163). Multicultural children's literature scholar Virginia Loh (2006) further explained the problem with stereotyping of any kind, positive or negative:

The main caveat seems to be attributing characteristics and traits to an entire group without considering individuals and the multiplicity of culture and ethnicity even though there are consistencies among cultural groups. No one image is enough to create stereotypes, but pervasive images do, which are then reinforced by culture and/or society. (p. 48)

One author who is especially adept at showing people in their full complexity is Gary Soto, a National Book Award finalist and winner of the Literature Award from the Hispanic Heritage Foundation. Just a few of Soto's books include *Buried Onions* (Harcourt, 1997), *Jesse* (Harcourt, 1994), *Living Up the Street* (Strawberry Hill Press, 1985), *A Fire in My Hands* (Turtleback Books, 1990), *Baseball in April* (Harcourt, 1990), and *Petty Crimes* (Harcourt, 1998). Soto's books often revolve around teen characters growing up Latino in his hometown of Fresno, California. Soto creates characters who are as complex as their counterparts in the real world, an important quality for young readers who are beginning to understand that people are generally neither all bad nor all good nor all anything, but are, instead, complex and not always easy to understand.

Voices from diverse ethnic/cultural heritages are important, and so are voices of the individuals who all too often receive negative attention or no attention at all. Jack Gantos, winner of the Michael Printz Honor Award and the Newbery Honor Award, is famous for his beloved protagonist Joey Pigza and his adventures in *Joey Pigza Swallowed the Key* (Farrar, Straus and Giroux, 1998), *Joey Pigza Loses Control* (Farrar, Straus and Giroux, 2000), *What Would Joey Do?* (Farrar, Straus and Giroux, 2002), and *I Am Not Joey Pigza* (Farrar, Straus and Giroux, 2008). Joey is an early teen who suffers from attention-deficit/hyperactivity disorder (ADHD). Over the course of the series, as Joey comes to terms with his own ADHD, he also attempts to provide stability for the maladjusted adults in his dysfunctional family. Gantos charmingly

portrays Joey as a boy who does not judge those around him and does his best to make the world a better place for everyone.

Depression, just like ADHD, is very much a part of the lives of young people or their peers. According to a report from the Substance Abuse and Mental Health Services Administration (2006),

population studies show that at any one time between 10 and 15 percent of the child and adolescent population has *some* symptoms of depression. The prevalence of the full-fledged diagnosis of major depression among all children ages 9 to 17 has been estimated at 5 percent.

One of the best recent novels to address this aspect of adolescence is *Damage* (HarperCollins, 2001), by A. M. Jenkins. Her protagonist, Austin Reid, is the star quarterback of the Parkersville High School Panthers, who secretly suffers from depression and suicidal impulses caused by a chemical imbalance. Ultimately, Austin will have to accept that he is who is and must love himself enough to look for help.

Young readers not only need to read about characters like them, but also characters different from them. Young adult books have an imperative to help young people grow to understand the world they live in and all its peoples. As White-Kaulaity explains, all young readers, from all walks of life, “need cross boundary knowledge, interaction and experiences to live in an interdependent world. Literature can help achieve such goals” (p. 10). As former president of the Assembly on Literature for Adolescents of the National Council of Teachers of English, author, and editor Michael Cart says, “Literature teaches empathy, tolerance, and respect for the dignity and worth of every human being” (Blasingame, 2007, p. 130). Cart (2006) shared further words about the power of literature to help readers understand the lives of others in his masterful work *From Romance to Realism: Fifty Years of Growth and Change in Young Adult Literature*:

Fiction gives us not only an external view of another life, however, but an internal one, as well, through its empathic immediacy, the emotional rapport that it offers the reader; it enables us, in short, to eavesdrop on someone else’s heart. Yes we can get statistical profile of the adolescent problem drinker from a report in *Time* magazine, but to emotionally comprehend the problem, to understand how it feels to be trapped in that skin, we turn to Robert Cormier and his novel, *We All Fall Down*. . . . To understand the emotional plight of impoverished, single-parent families, we look to Virginia Euwer Wolff’s *Make Lemonade*. (p. 269)

Literature has great power to put the reader in the shoes of the characters in ways that touch emotions, values, and beliefs.

Many outstanding authors are writing wonderful books today, supplying the requisite variety of voices, and voices that all young readers need to hear.

A list of recommended authors providing these voices can be found at the end of this chapter.

ACCESSIBLE LITERATURE

One final principle of the five remains to be addressed: accessibility. None of the good things that young adult literature holds in store for readers are available to them if they cannot or will not read it. As Nicholas Karolides contended in his 1991 edited collection *Reader Response in the Classroom: Evoking and Interpreting Meaning in Literature*, in his own essay “The Transactional Theory of Literature,”

the language of a text, the situation, characters, or the expressed issues can dissuade a reader from comprehension of the text and thus inhibit involvement with it. In effect, if the reader has insufficient linguistic or experiential background to allow participation, the reader cannot relate to the text, and the reading act will be short-circuited. (p. 23)

Two of the quickest paths to short-circuiting students’ reading are stories that are not interesting because they are not at the students’ maturity/experiential level in content and stories that are too high above students’ reading ability. Young people who read substantially below grade level may find the majority of books written for their age frustratingly difficult to read. Conversely, most books written at their reading level may not be age-appropriate in content. Five possible solutions to this dilemma are (1) high/low books, which have high-interest topics written at lower reading levels; (2) series books, which maintain the same characters and setting from book to book; (3) graphic novels, with storyboard graphics to go with the text; (4) short story collections, which are sets of stories centered on a common theme; (4) poetry collections, usually centered on a theme; and (5) narratives told in verse.

Publishers such as Orca, James Lorimer and Company, and Townsend Press are committed to providing young adult literature in a variety of content areas through books with high interest and low reading difficulty. Orca’s *Juice* (2006), by Eric Walters, for example, is the story of a high school football star pressured to use anabolic steroids by his coach. This is very mature subject matter, but the readability level of the book averages at about the third grade level, and the book is only 112 pages long. The Bluford books from Townsend Press, and now in reprint by Scholastic Inc., comprise one of today’s most successful book series for teen readers. These 13 books are set at fictitious Guion Bluford High School (named for the first African American U.S. astronaut) in southern California, and the stories revolve around the lives of students at Bluford High, an urban school with a primarily African American and Latino student body.

Graphic novels can also entice struggling readers. Research shows that they improve reading (Krashen, 1993), and many of them are very complex and sophisticated. Graphic novels provide the reader with additional context clues to the text embedded in the cartooning. Recently, the genre was acknowledged for its true potential when Gene Yang's *American Born Chinese* (First Second, 2006) was a National Book Award finalist in the regular category of young people's literature. Other outstanding graphic novels, just to name a few, include the entire *Age of Bronze* series (Image Comics, 2001) by Eric Shanower; Alan Moore's *Watchmen* (DC Comics, 1995) and his *V Is for Vendetta* (DC Comics, 1988); Art Spiegelman's *Maus* (Pantheon, 1986); Will Eisner's *Contract with God* (Titan Books, 1989); Neil Gaiman's *Sandman* series (DC Comics, 1993); Daniel Clowes's *Ghost World* (Fantagraphics Books, 1997); Craig Thompson's *Blankets* (Top Shelf, 2003); and Jeff Smith's *Bone* series (Cartoon Books, 1996).

Short stories appeal to readers of all abilities through quickly developed plots and conflict resolutions. Several short story collection editors stand out through the quality of their work: Don Gallo, Michael Cart, Jerry and Helen Weiss, and Lori Carlson, who collect stories from the best writers, and Gary Soto, Chris Crutcher, Lawrence Yep, Jane Yolen, Graham Salisbury, and Sherman Alexie, who have put together collections of their own work. Additional recommended authors and short story collections are listed at the end of the chapter.

Poetry collections and stories told in verse can also appeal to the struggling and advanced reader alike. Some of the best collections today come from Sarah Holbrook, Alberto Rios, Naomi Shihab Nye, Pat Mora, Paul Fleischman, Nikki Grimes, and again, Lori Carlson. Poetry has the benefit of strong image and feeling.

Young readers love the sound and performance aspects of poetry, and many of them are performance poets, often slam/hip-hop poets. Slam poetry is "a form of spoken word performed at a competitive poetry event, called a 'slam,' at which poets perform their own poems (or, in rare cases, those of others) that are 'judged' on a numeric scale by randomly picked members of the audience" (Wikipedia, 2006). An excellent book of slam poems compiled from the national poetry slam competition is *From Page to Stage and Back Again, 2003 National Poetry Slam* (Wordsmith Press, 2004), edited by Michael Salinger, a performance poet. An additional place to find slam poetry written by poets 19 years of age or younger is at Poetic License's Youth Online Poetry Journal (http://www.itvs.org/poeticlicense/youth_flash.html).

Narratives written in verse can be especially powerful. The story and the rhythm of the language can work together to enhance the reader's understanding. Some of the very best of today's young adult authors work in this medium, including Sharon Draper, Mel Glenn, Nikki Grimes, and Karen Hesse. Some

of their best are *Bronx Masquerade*, by Nikki Grimes (Dial, 2002); *Class Dismissed: High School Poems*, by Mel Glenn (Clarion, 1982); *Dark Sons*, by Nikki Grimes (Jump at the Sun, 2005); *Out of the Dust*, by Karen Hesse (Scholastic, 1996); *Split Image*, by Mel Glenn (HarperCollins, 2000); and *Who Killed Mr. Chippendale: A Mystery in Poems*, also by Mel Glenn (Lodestar, 1996). The quality of these works is fantastic, such as Karen Hesse's *Out of the Dust*, which won the Newbery Medal.

ADDITIONAL GENRES

All the genres of literature are present in young adult literature. A few additional genres popular with young readers are historical fiction, fantasy, mystery, and science fiction. The best of these genres merit acknowledgment.

Cast Two Shadows (Harcourt, 1998) is one of renowned historical fictionist Ann Rinaldi's best works. The protagonist, Carolyn Whitaker, is the teenaged daughter of a rich plantation owner and a slave during the American Revolutionary War. Reading about the life of a biracial child may be especially relevant for young readers coming to understand their own heritage. Additional recommended works of historical fiction are listed at the end of the chapter.

The majority of young adult fiction on the market today is fantasy. The attraction for young readers may have much to do with the archetypal plotline in fantasy. Typically, protagonists in fantasy fiction are unappreciated and misunderstood at home and must venture out into the wider universe to discover their true talents. This journey generally involves a grand quest, with the fate of the world, planetary system, or universe hanging in the balance. Consider J.R.R. Tolkien's *The Lord of the Rings* trilogy, in which Frodo Baggins must overcome supernatural forces to save Middle Earth, despite the fact that he is not very big, not very experienced, and not at all feared and respected. Bilbo's story is surely the quintessential tale of adolescence. Additional recommended fantasy works are listed at the end of the chapter.

Although young adult mysteries are far outnumbered by fantasies, there are some very good ones, such as Kevin Brooks's *The Road of the Dead* (Scholastic, 2006). Brooks's protagonist, 14-year-old Ruben Ford, and his 17-year-old brother Cole, set out to solve the mystery of their sister's horrible murder in the remote area of Dartmoor, England. Ruben can hear the thoughts and feel the feelings of other people, even at great distances, and even when he would prefer not to. He can even feel himself inside his sister's killer's mind. Young readers will find themselves identifying heavily with both Ruben and Cole. Additional recommended mysteries are listed at the end of the chapter.

Science fiction fans are passionate, and National Book Award winner Pete Hautman has written an excellent young adult science fiction book titled *Hole in the Sky* (Simon and Schuster, 2001). In this futuristic tale, Earth has been

ravaged by a super influenza virus, leaving most of the world's population dead. The few who survive live in constant fear of a psychopathic cult called the Survivors. Hautman tells the story from the point of view of four teenaged protagonists, and it is filled with chase and escape, safety and danger, life and death action. Additional recommended science fiction authors and works are listed at the end of the chapter.

A few additional authors well known for excellent books on particular topics include Joan Bauer, writer of humorous stories about young women growing such as *Rules of the Road* (Putnam, 1998) and *Best Foot Forward* (Putnam, 2005); Francesca Lia Block, writer of innovative urban fairy tales for the hip such as *Weetzie Bat* (HarperCollins, 1989); Edward Bloor, writer of social satires such as *Story Time* (Harcourt, 2004); Sharon Creech, writer of fictional narratives such as *Walk Two Moons* (HarperCollins, 1994); Sara Dessen, writer of realistic fiction such as *Dreamland* (Viking, 2000); John Green, writer of realistic fiction such as *Looking for Alaska* (Penguin, 2005); S. E. Hinton, one of the true pioneers of young adult literature, whose work involves coming of age under tough conditions such as *The Outsiders* (Viking, 1967) and *Rumble Fish* (Delacorte, 1976); Robert Lipsyte, writer of sports books such as *The Contender* (HarperCollins, 1967); David Lubar, writer of humorous stories of young men successfully making the best of life such as *Dunk* (Clarion, 2002) and *Sleeping Freshmen Never Lie* (Dutton, 2005); Gordon Korman, writer of humorous stories of young men in interesting situations such as *Son of the Mob* (Hyperion, 2002) and *No More Dead Dogs* (Hyperion, 2002); Richard Peck, writer of narrative fiction with autobiographical elements such as *A Long Way from Chicago* (Dial, 1998) and *A Year Down Yonder* (Dial, 2000); Rodman Philbrick, writer of realistic fiction such as *Freak the Mighty* (Scholastic, 1993); Jerry Spinelli, who writes about quirky characters who teach lessons about life such as in *Maniac Magee* (Little, Brown, 1990) and *Stargirl* (Knopf, 2000); Janet Tashjian, writer of humorous political satire such as *The Gospel According to Larry* (Holt, 2001) and *Vote for Larry* (Holt, 2004); Virginia Euwer Wolff, who writes about making the most of life's difficulties such as in *Make Lemonade* (Holt, 1993); and Ned Vizzini, who takes humorous looks at the problems of adolescence such as in *Be More Chill* (Miramax, 2004) and *It's Kind of a Funny Story* (Miramax, 2006). There are many, many others; my apologies to those I have omitted.

AWARDS

Exemplary young adult literature is recognized for its excellence through the bestowing of many awards, some with a very specific accomplishment in mind, such as the Coretta Scott King Award, which is given to authors of African descent representing an appreciation of the American dream (American

Library Association, 2006), or the Scott O'Dell Award, which is specifically for "a meritorious book . . . for children or young adults" with a "focus on historical fiction" (ScottOdell.com, 2006). A few of the more prestigious awards include all of the various ALA awards (<http://www.ala.org/ala/yalsa/booklistsawards/booklistsbook.htm>), the Booklist Editors' Choice, the Boston Globe–Horn Book Award, the Margaret A. Edwards Award, the National Book Award, the Newbery Medal, the Printz Award, Publishers Weekly Best Book of the Year, the Pura Belpré Award (portraying and celebrating the Latino experience), VOYA Books in the Middle, and the YALSA Popular Paperback for Young Adults.

As a culminating activity in the search for exemplary young adult literature, let us return to that black T-shirted mob of teenaged girls I found myself engulfed in as I began this chapter. Why are these teenagers so emotionally engaged with Stephanie Meyer's vampire novels about Isabella (Bella) Swan and her love interest, the handsome, eternally teenaged vampire Edward Cullen? In her article titled "Vampires, Changelings, and Radical Mutant Teens: What the Demons, Freaks, and Other Abominations of Young Adult Literature Can Teach Us About Youth," Elaine O'Quinn (2004), professor of English at Appalachian State University, examined this very issue: why are adolescent readers so drawn to such unusual characters? O'Quinn explained that teens are constantly struggling with the people whom they are changing into, physically, emotionally, and psychologically. As they struggle with concepts of right and wrong, with newfound talents and vulnerabilities, they are very much like the vampire and werewolf protagonists, who are also "caught up in the pursuit of self, community, and humanity; trying to balance a newfound physicality with emotional awareness, intellectual consciousness, and moral perception; and attempting to negotiate a world strung somewhere between farce and tragedy" (p. 52). O'Quinn further explained that adolescents and their favorite supernatural characters share in the basic issues of maturing such as "how to deal with profound feelings of alienation and loneliness" (p. 54). For some young readers, realistic fiction works just fine for letting a protagonist carry life's burden for a while, but others may need something else, stories with even more distance from reality to safely examine their own life issues.

Whether it is fantasy, modern realism, outdoor adventure, mystery, horror, biography, or autobiography, the important thing is this: young people need to hear *their* stories. It may happen on a distant planet in a future century, or it may have happened in a concentration camp in a world war 65 years ago, it may even happen to a teenaged vampire, but they will recognize themselves and their stories in the authors' creations. By telling their stories, authors validate and honor young readers' lives. In her acceptance speech for the Astrid Lindgren Award, Katherine Paterson (2006) said,

What I want to say to isolated, angry, fearful youth—to all the children society has regarded as disposable, children who cannot love others because they have not yet learned to love themselves, all the sad, the lonely, the frightened who might read my books is this: you are seen, you are not alone, you are not despised, you are unique and of infinite value in the human family. As a writer I can try to say this through the words of a story.

Exemplary young adult literature is available to adolescents in thousands of titles and by hundreds of excellent authors. These authors and their works meet adolescents' need for literature in which they can see themselves and their life experiences as well as seeing the life experiences of teens representing other walks of life with which they may not be familiar. The best books will ring true to young readers because of authentic plots and accurate details. No matter what issues of adolescence authors write about, they must always treat these issues with respect. The best books will be those written so that the text is accessible to teen readers, who may then fold their reading into their maturation process, using the experiences of the characters to help them form their own values, beliefs, and perspectives on life—and have a little fun along the way.

RECOMMENDED LITERATURE

Authors Whose Books Reflect the Diversity of the Human Experience

Sherman Alexie: *The Lone Ranger and Tonto Fistfight in Heaven* (Atlantic Monthly Press, 1993), *Reservation Blues* (Warner, 1996), *The Toughest Indian in the World* (Grove Press, 2001); Julia Alvarez: *How Tia Lola Came to Stay* (Knopf, 2001), *How the Garcia Girls Lost Their Accents* (Algonquin, 1991); Rudolfo Anaya: *Bless Me, Ultima* (TQS Publications, 1972); Laurie Halse Anderson: *Speak* (Farrar, Straus and Giroux, 1998), *Catalyst* (Viking, 2000), *Twisted* (Viking, 2007); Maya Angelou: *I Know Why the Caged Bird Sings* (Random House, 1969); Judy Blume: *Are You There, God? It's Me, Margaret* (Bradbury, 1970), *Forever* (Bradbury, 1975); Coe Booth: *Tyrell* (Scholastic, 2006), Joseph Bruchac: *Heart of a Chief* (Dial, 1998), *Code Talker* (Scholastic, 2005), *Jim Thorpe—Original All-American* (Dial, 2006); Sandra Cisneros: *The House on Mango Street* (Random House, 1984), *Caramelo* (Knopf, 2003); Chris Crowe: *Mississippi Trial, 1955* (Fogelman, 2002); Christopher Paul Curtis: *The Watsons Go to Birmingham, 1963* (Delacorte, 1995), *Bud, Not Buddy* (Delacorte, 1999), *Bucking the Sarge* (Wendy Lamb Books, 2004); Sharon Draper: *Copper Sun* (Athenem, 2006), *Tears of a Tiger* (Atheneum, 1994), *Forged by Fire* (Atheneum, 1997); Nancy Garden: *Annie on My Mind* (Farrar, Straus and Giroux, 1981), *Endgame* (Harcourt, 2006); K. L. Going: *Fat Kid Rules the World* (Putnam, 2003), *St. Iggy* (Harcourt, 2006); Bette Greene: *The Drowning of Stephan Jones* (Bantam, 1991); Laila Halaby: *West of the Jordan* (Beacon, 2003); Virginia Hamilton: *The House of Dies Drear* (Simon and Schuster, 1968), *M.C. Higgins the Great* (Simon and Schuster, 1974); Valerie Hobbs: *Stefan's Story* (Farrar, Straus and Giroux, 2003), *Letting Go of Bobby James or How I Found My Self of Steam* (Farrar, Straus and Giroux, 2004); Francisco Jiménez: *Breaking Through* (Houghton Mifflin, 2001), *Circuit: Stories from the Life of a Migrant Child* (University of New Mexico Press, 1997); Angela Johnson: *Heaven* (Simon and Schuster,

1998), *First Part Last* (Simon and Schuster, 2003), *Toning the Sweep* (Orchard, 1993); Cynthia Kadohata: *Kira-Kira* (Atheneum, 2004), *Weedflower* (Atheneum, 2006); M. E. Kerr: *If I Love You, Am I Trapped Forever?* (HarperCollins, 1973), *Deliver Us from Evie* (HarperCollins, 1994); Ron Koertge: *Arizona Kid* (Little, Brown, 1988), *Margaux with an X* (Walker, 2004), *Spaz and Stoner* (Candlewick, 2002); David Levithan: *Boy Meets Boy* (Knopf, 2003), *The Realm of Possibility* (Knopf, 2004), *Wide Awake* (Knopf, 2006); Lois Lowry: *Number the Stars* (Houghton Mifflin, 1989); Victor Martinez: *Parrot in the Oven* (Joanna Cotler, 1996); Janet McDonald: *Spellbound* (Farrar, Straus and Giroux, 2001), *Twists and Turns* (Farrar, Straus and Giroux, 2003); Ben Michaelson: *Touching Spirit Bear* (HarperCollins, 2001); Walter Dean Myers: *Monster* (HarperCollins, 1999), *The Beast* (Scholastic, 2003), *Fallen Angels* (Scholastic, 1988); An Na: *A Step from Heaven* (Handprint, 2001); Naomi Shihab Nye: *Nineteen Varieties of Gazelle: Poems of the Middle East* (Greenwillow, 2002), *This Same Sky* (Simon and Schuster, 1992); Linda Sue Park: *A Single Shard* (Clarion, 2001), *The Kite Fighters* (Clarion, 2000), *When My Name Was Keoko* (Clarion, 2002); Pam Muñoz Ryan: *Esperanza Rising* (Scholastic, 2000), *Becoming Naomi Leon* (Scholastic, 2004); Alex Sanchez: *Rainbow Boys* (Simon and Schuster, 2001), *So Hard to Say* (Simon and Schuster, 2004); Cynthia Leitich Smith: *Rain Is Not My Indian Name* (HarperCollins, 2001), *Indian Shoes* (HarperCollins, 2002); Greg Leitich Smith: *Ninjas, Piranhas, and Galileo* (Little, Brown, 2003), *Tofu and T-Rex* (Little, Brown, 2005); Gary Soto: *Buried Onions* (Harcourt, 1997), *Jesse* (Harcourt, 1994), *Accidental Love* (Harcourt, 2006); Mildred Taylor: *The Road to Memphis* (Dial, 1990), *Roll of Thunder Hear My Cry* (Dial, 1976), *Let the Circle Be Unbroken* (Dial, 1981); Terry Trueman: *Stuck in Neutral* (HarperCollins, 2000), *Cruise Control* (HarperCollins, 2004), *Inside Out* (HarperCollins, 2003); Victor Villaseñor: *Macho* (Delta, 1997), *Walking Stars: Stories of Magic and Power* (Piñata Books, 1994); Jeanne Wakatsuki: *Farewell to Manzanar* (Laurel Leaf, 1983); James Welch: *Fool's Crow* (Viking, 1986); Rita Williams-Garcia: *Like Sisters on the Homefront* (Lodestar, 1995), *Blue Tights* (Puffin, 1996); Ellen Wittlinger: *Hard Love* (Simon and Schuster, 1999), *What's in a Name* (Simon and Schuster, 2000); June Rae Wood: *The Man Who Loved Clowns* (Putnam, 1992), *Turtle on a Fence Post* (Putnam, 1997); Jacquelyn Woodson: *Miracle's Boys* (Putnam, 2000), *I Hadn't Meant to Tell You This* (Laurel Leaf, 1995), *From the Notebooks of Melanin Sun* (Scholastic, 1995).

Recommended Works of Historical Fiction

Crispin, Cross of Lead, by Avi (Hyperion, 2002); *Eyes of the Emperor*, by Graham Salisbury (Wendy Lamb Books, 2005); *Grasslands*, by Deb Seely (Holiday House, 2002); *Island of the Blue Dolphins*, by Scott O'Dell (Houghton Mifflin, 1960); *The Land*, by Mildred Taylor (Fogelman, 2001); *The Last Mission*, by Harry Mazer (Delacorte, 1979); *The Legend of Bass Reeves*, by Gary Paulsen (Wendy Lamb Books, 2006); *Mary, Bloody Mary*, by Carolyn Meyer (Gulliver, 1999); *Nightjohn*, by Gary Paulsen (Delacorte, 1993); *Out of the Dust*, by Karen Hesse (Scholastic, 1996); *Sarny: A Life Remembered*, by Gary Paulsen (Delacorte, 1997); *Sing Down the Moon*, by Scott O'Dell (Houghton Mifflin, 1970); *A Single Shard*, by Linda Sue Park (Clarion, 2001); *Soldier's Heart*, by Gary Paulsen (Delacorte, 1998); *Under the Blood-Red Sun*, by Graham Salisbury (Delacorte, 1994).

Recommended Short Story Collections

American Dragons, by Lawrence Yep (HarperCollins, 1993); *Athletic Shorts*, by Chris Crutcher (Greenwillow, 1991); *Baseball in April*, by Gary Soto (Harcourt, 1990);

Dreams and Visions: Fourteen Flights of Fantasy, edited by Jerry and Helen Weiss (Starscape, 2006); *First Crossing: Stories about Teen Immigrants*, edited by Don Gallo (Candlewick, 2004); *Island Boyz*, by Graham Salisbury (Random House, 2002); *Moccasin Thunder: American Indian Stories for Today*, edited by Lori Carlson (HarperCollins, 2005); *Necessary Noise: Stories about Our Families As They Really Are*, edited by Michael Cart (HarperCollins, 2003); *On the Fringe*, edited by Don Gallo (Dial, 2001); the Rush Hour series, edited by Michael Cart (Delacorte, 1997–2007); *Ten Little Indians*, by Sherman Alexie (Grove, 2003); *Tomorrowland: 10 Stories about the Future*, edited by Michael Cart (Scholastic, 1999); *Toughest Indian in the World*, by Sherman Alexie (Atlantic Monthly Press, 2000); *Vampires: A Collection of Original Stories*, by Jane Yolen (HarperCollins, 1991).

Recommended Poetry Collections

Chicks Up Front, by Sarah Holbrook (for young women in their upper teen years) (Cleveland State University Poetry Center, 1998); *Cool Salsa: Bilingual Poems on Growing Up Latino in the United States*, edited by Lori Carlson (Holt, 1994); *Joyful Noise: Poems for Two Voices*, by Paul Fleischman (HarperCollins, 1998); *My Own True Name*, by Pat Mora (Arte Publico, 2000); *Nineteen Varieties of Gazelle: Poems of the Middle East*, by Naomi Shihab Nye (Greenwillow, 2002); *The Smallest Muscle in the Human Body*, by Alberto Rios (Copper Canyon Press, 2002); *Walking on the Boundaries of Change*, by Sara Holbrook (Boyd's Mills, 1998).

Recommended Fantasy Works

Abarat, by Clive Barker (Joanna Cotler, 2002); *The Amber Spyglass*, by Philip Pullman (Knopf, 1999); the Artemis Fowl series, by Eoin Colfer (Hyperion, 2001–2006); *City of the Beasts*, by Isabel Allende (HarperCollins, 2002); *Dragonflight*, by Anne McCaffrey (Atheneum, 1976); *Ella Enchanted*, by Gail Carson Levine (HarperCollins, 1997); *Eldest*, by Christopher Paolini (Knopf, 2005); *Eragon*, by Christopher Paolini (Knopf, 2003); *Farthest Shore*, by Ursula Le Guin (Atheneum, 1972); *The Golden Compass*, by Philip Pullman (Knopf, 1996); *The Goose Girl*, by Shannon Hale (Bloomsbury, 2003); the Harry Potter series, by J. K. Rowling (Arthur A. Levine Books/Scholastic Inc., 1997–2004); *Heir Apparent*, by Vivian Vande Velde (Harcourt, 2002); *The Hobbit*, by J.R.R. Tolkien (Allen and Unwin, 1937); *Inkheart*, by Cornelia Funke (Scholastic, 2003); *Inkspell*, by Cornelia Funke (Scholastic, 2005); *Kingdom of the Golden Dragon*, by Isabel Allende (Rayo, 2004); *The Lord of the Rings*, by J.R.R. Tolkien (Allen and Unwin, 1954); *The Magic Circle*, by Donna Jo Napoli (Dutton, 1993); *A Sending of Dragons*, by Jane Yolen (Delacorte, 1987); *The Subtle Knife*, by Philip Pullman (Knopf, 1997); *The Thief Lord*, by Cornelia Funke (Scholastic, 2002); *The Tombs of Atuan*, by Ursula Le Guin (Atheneum, 1972); *A Wizard of Earthsea*, by Ursula Le Guin (Parnassus, 1968).

Recommended Science Fiction Works

47, by Walter Mosley (Little, Brown, 2005); *Dune*, by Frank Herbert (Chilton, 1965); *Ender's Game*, by Orson Scott Card (TOR, 1985); *Feed*, by M. T. Anderson (Candlewick, 2002); *House of Stairs*, by William Sleator (Dutton, 1974); *House of the Scorpion*, by Nancy Farmer (Atheneum, 2002); *Interstellar Pig*, by William Sleator (Dutton, 1984); *The Last Book in the Universe*, by Rodman Philbrick (Blue Sky Press, 2000); *Mr. Was*, by Pete

Hautman (Simon and Schuster, 1996); *Parasite Pig*, by William Sleator (Dutton, 2002); *Stranger in a Strange Land*, by Robert Heinlein (Putnam, 1961).

Recommended Mysteries

The Body of Christopher Creed, by Carol Plum-Ucci (Harcourt, 2000); *I Am the Cheese*, by Robert Cormier (Knopf, 1977); *I Know What You Did Last Summer*, by Lois Duncan (Archway, 1975); *The Other Side of Dark*, by Joan Lowery Nixon (Delacorte, 1986); *Séance*, by Joan Lowery Nixon (Harcourt, 1980); *Summer of Fear*, by Lois Duncan (Little, Brown, 1976); *Who Killed Mr. Chippendale: A Mystery in Poems*, by Mel Glenn (Dutton, 1996).

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Chapter Ten

MOTIVATING ADOLESCENTS IN LITERACY

Jeanne Swafford

Adolescents have a reputation for being difficult to live with, being bored with everything (particularly things suggested by teachers or parents), and being full of raging hormones. Perhaps aspects of this reputation are well founded, but there is much more to adolescents than these negative attributes. Adolescents are passionate individuals. They care deeply about their relationships with their peers and spend much time building relationships with them, face-to-face and electronically. Much of what they do revolves around activities with their peers, such as sports, gaming, music, and, yes, even occasional academically related pursuits. Adolescents care very much about how their peers perceive them and about fitting in with their peer groups. This allegiance to their peers represents a shift from when they were younger and adult influence and support were viewed as most important. Motivation to engage in school-related tasks also declines in the years surrounding adolescence. For decades, various sources have noted that the numbers of students who are alliterate (they can read but choose not to) are higher than expected (Guthrie, McGough, Bennett, & Rice, 1996). The challenge for teachers is to figure out how to capitalize on the strengths adolescents bring to school to make education—and literacy learning, in particular—more motivating, meaningful, and engaging.

MOTIVATIONS

The multifaceted construct of motivation has been a topic of much interest to researchers for years (e.g., Wigfield & Guthrie, 1997). Various explanations

of motivation have been proposed and investigated. In this section of the chapter, I draw from writings from both psychology and education to describe different aspects of motivation. These aspects are not to be seen as definitive, but as illustrative of the complexity of the construct. First, I briefly describe the traditional intrinsic and extrinsic dimensions of motivation. Next, I describe the attributes adolescents often credit for their success or failure, thus influencing motivation. I also examine the kinds of achievement goals that contribute to motivation. Last, I describe social goals, the most recent element to be researched in relation to motivation. Although I refer to motivations to read, these motivations also apply to other aspects of literacy such as writing.

Intrinsic Motivation

Traditional explanations of motivation include discussions of intrinsic and extrinsic motivations. Intrinsic motivation has typically been described as coming from within an individual and is related to the satisfaction or pleasure a person gets from engaging in a task. Intrinsic motivation is often described as it relates to a learner's feelings of self-efficacy (competency) and autonomy (self-direction or self-determination).

Self-Efficacy

Intrinsic motivation has been linked to self-efficacy (Wigfield & Guthrie, 1997) or feelings of competency. Self-efficacy is important for understanding an individual's motivations to choose, attempt, sustain, and complete tasks (Pajares & Schunk, 2001). Adolescents who possess high self-efficacy believe that they are capable of successfully reading difficult texts. When they are challenged by a text, they will persist and put forth more effort because they are confident that they possess strategies they need to negotiate a text successfully. Adolescents who demonstrate high self-efficacy are more intrinsically motivated to read challenging texts, especially relating to topics about which they are passionate. The challenge and the satisfaction of learning something new or understanding a difficult text would be motivating in and of itself. If adolescents have low self-efficacy, they probably will not engage in reading texts they perceive as difficult. If they do begin to read a text and find it difficult, they will not persist.

Self-efficacy should not be viewed as an either-or proposition. It depends on many conditions, which include, but are not limited to, the type or difficulty of text/s, the purpose for reading, and a reader's schema and interest about a topic. For example, an individual may have high self-efficacy when reading a text for which he or she has a well-developed schema. On the other hand, a reader may experience low self-efficacy when reading about random topics to answer questions on a standardized test. A reader's perceptions of self-efficacy (competency) will definitely influence motivation to read.

Autonomy

Autonomy is also related to intrinsic motivation. When adolescents have a sense of autonomy, they believe that their behaviors are self-directed or self-determined (Reed, Schallert, Beth, & Woodruff, 2004). They make their own choices about their purposes for reading, what to read, when to read, where to read, with whom to read, and what strategies to use before reading, during reading, and after reading. When readers are autonomous, they self-direct their reading.

When students experience autonomy, they may read for the sheer joy of reading, or they may choose to read because they are particularly curious about a topic or issue. Autonomous readers often lose themselves in their reading, whether its purpose is for pleasure or for information (which can also be for pleasure). Some writers liken this kind of involvement to what Csikszentmihalyi (1990) called *flow*: students become so enthralled or immersed in what they are reading that they do not know what is going on around them. They tune out everything, except the world of the text; they lose track of time, and nothing else matters. Not only do individuals enjoy losing themselves in a book to experience pleasure, but they also experience freedom and fulfillment. This is the ultimate experience of autonomous reading.

Extrinsic Motivation

Extrinsic motivation is described as coming from outside the individual and is traditionally associated with tangible rewards such as grades, privileges (e.g., pizza parties, free time), or punishments. External motivation typically has not received rave reviews in educational literature. Research has demonstrated that students will engage in behaviors as long as rewards are present. When those rewards are withdrawn, intrinsic motivation is undermined, and behavior diminishes (Deci, Koestner, & Ryan, 2001). Thus extrinsically motivated behaviors tend to be short term. Nevertheless, tangible rewards are an important part of many classroom reading incentive programs.

The early work related to intrinsic and extrinsic motivation was grounded in behaviorism (psychology of human behavior, which posits that behavior results from consequences of past behavior). Since that time, researchers from various traditions have continued to explore the construct of motivation in an attempt to explain why people behave the way they do. Ryan and Deci (2000) suggested that extrinsic motivation varies depending on the degree of autonomy (i.e., self-direction, self-determined behavior, or self-directed goal orientation) related to a task. For example, if Suzy strives to get good grades because her parents threaten to take away her cell phone, she is motivated to avoid punishment. This motivation is characterized by low autonomy (i.e., self-direction). On the other hand, if Sarah makes good grades because

she wants to go to college and she knows good grades are necessary, then her goal is more self-directed (autonomous).

Ryan and Deci (2000) took their explanation of extrinsic motivation a step further and suggested that the extent to which students internalize or integrate the values of a classroom influences their motivation or lack of motivation. In the example mentioned above, Sarah, who makes good grades because she knows it is important for getting into college, has internalized values related to school. If she also studies hard because she understands the power of knowledge for today and in the future, then perhaps she has integrated school values with her own. As the values of school are integrated to become a personal commitment, extrinsic motivation is enhanced. In other words, Ryan and Deci suggested that extrinsic motivation can be viewed as a continuum, from low autonomous motivators to high autonomous motivators, rather than with an either-or perspective.

In the previous discussion of intrinsic motivation, autonomy was related to intrinsic motivation. Yet, in the discussion of extrinsic motivation, Ryan and Deci (2000) also referred to autonomy. I believe these seemingly contradictory ideas are the result of the fuzzy understanding of the construct of motivation. Ryan and Deci seem to suggest that almost all motivations are extrinsic, but some motivations are situated closer toward the intrinsic end of the continuum than others. In an attempt to simplify my use of the word *autonomy*, I refer to autonomy as it relates to intrinsic motivation (or the intrinsic side of the continuum).

Attributes of Success

Motivation also depends on factors that a person attributes to his or her success. These factors include effort, ability, task difficulty, or luck (Pressley, 1998). Adolescents who believe that effort determines success or failure take more responsibility for their successes and failures. They believe that they have personal control over tasks (autonomy), and as long as they feel capable (efficacious), they will be motivated to work hard, study, practice, or do whatever it takes to be successful. Failure (an extrinsic motivator) can quickly change an individual's belief about the usefulness of effort, however.

Other individuals believe that their success depends on their ability (or lack of ability). If students believe that their lack of success is because they are not smart enough, they may not expend much—if any—effort. For example, if students have experienced enough failure, especially when others experience success, they may attribute their failure to their lack of ability. Adolescents who have been labeled “at risk” or who have participated in special reading instruction have likely identified themselves as having less ability than others in their class. If individuals believe that they do not possess the ability to read well (related to low self-efficacy), they believe that

they are powerless to complete a task successfully. As a result, they may not be motivated to read.

Others attribute success to how difficult they believe a task is. If adolescents believe a task is just too difficult to accomplish, they will not expend much effort. For example, suppose the task is to read and understand a poem. Imagine that a student typically has little trouble reading but has had difficulty understanding poetry in the past. If the student attempts to read the poem and experiences the least little bit of confusion, she may quit reading because she believes that understanding the poem (the task) is just too difficult. Success is attributed to how easy or how difficult a student perceives a task to be.

Still others attribute success to luck. If luck is the cause of success or failure, then the individual is not responsible. If students successfully complete a task, they are lucky. If they are not successful, they are simply unlucky. If individuals believe that success is simply the luck of the draw, they are powerless. When individuals feel powerless to control their destiny, so to speak, they are not motivated to engage in tasks that are the least bit challenging.

Regardless of what an adolescent believes is responsible for his or her success or failure, Pressley (1998) contended that academic motivation is a “fragile commodity” (p. 229). Adolescents must be successful to perceive themselves as successful and to possess high self-efficacy. As success declines, lack of motivation will surely follow.

Achievement Goals

Individuals’ achievement goals may also contribute to their motivation to read. What texts adolescents choose to read and how long they engage in reading are driven by their personal achievement goals. In addition, memories related to pleasurable literacy-related tasks may also motivate an individual to set particular goals (Reed et al., 2004). Ruddell and Unrau (2004) described achievement goals as mastery oriented or ego oriented. Mastery-oriented goals are related to intrinsic motivation: a learner is motivated to engage in inquiry about a topic or stick with reading a challenging text because he or she wants to learn. An individual who is mastery oriented will be apt to put forth additional effort when a task becomes difficult so that he or she can accomplish a task. In contrast, ego-oriented goals are related to extrinsic motivation: the focus is on seeking recognition for accomplishing a goal. For example, an individual may brag about reading a very long book in a very short time to impress his or her peers.

Social Goals

Adolescents are also motivated by their social goals (Baker & Wigfield, 1999). As noted earlier in the chapter, adolescents care very much about their

relationships with their peers, and they are motivated by the desire to share with and be accepted by their friends. Because they have similar interests, they read texts about topics that are appealing to their friends (i.e., affinity groups).

Reading that occurs outside of school is often socially motivated and is usually unrelated to academic interests. Literacy-related activities that adolescents engage in outside of school may involve face-to-face or electronic interactions. For example, when studying adolescent girls who wrote zines (self-published alternatives to commercial magazines) outside school, Guzzetti and Gamboa (2004) found that the girls' affinity groups (both online and face-to-face) motivated them to "initiate and sustain . . . writing against gender stereotypes and for social justice" (p. 432). Chandler-Olcott and Mahar's (2003b) study of Rhiannon, who wrote her own fan fictions (fiction written by fans of an original work, using the same characters and/or setting) and constructed anime-focused Web pages (Japanese-style animation), and Eileen, who participated in an art-related anime mailing list, demonstrated motivation from their online affinity groups to further develop their fan fictions.

MOTIVATION AND ENGAGEMENT

The relationship between motivation and engagement is an obvious one. To become engaged in an activity, individuals must be motivated to become involved. Without motivation, engagement would not occur. In the 1990s, research at the National Reading Research Center on reading motivation and engagement laid the foundation for much of the research that is being done today. This research was precipitated in part by the results of a national survey, which revealed that teachers' number one concern was how to motivate students to read (Gambrell, Palmer, Codling, & Mazzone, 1996).

The construct of motivation was described earlier. But what, exactly, is engagement? This answer is not an easy one. Some researchers describe engagement in terms of student outcomes: enjoyment of reading for its own sake (intrinsic motivation), getting lost in reading (intrinsic motivation, flow), and on-task behavior (Guthrie & Wigfield, 2000). Still others suggest that engagement is a combination of factors related to self-efficacy (intrinsic motivation), purposeful reading, relevancy, lack of anxiety, and a positive relationship with the teacher (Cambourne, 1995). Although researchers define engagement in different ways, they all agree that motivation is necessary for engagement to occur. Guthrie and Wigfield (2000) wrote, "A person reads a word or comprehends a text not only because she can do it, but because she is motivated to do it" (p. 404). Although motivation is an essential component of engagement, motivation alone is not sufficient for engagement. Guthrie and Wigfield stated that the cognitive and social dimensions of engaged reading

are also critical components of engagement. The following quote describes engaged readers by showing the relationship between motivation, cognitive dimensions (strategic and knowledgeable reader), and social dimensions of engagement: “Engaged readers are motivated to read for a variety of personal goals, strategic in using multiple approaches to comprehend, knowledgeable in their construction of new understanding from texts, and socially interactive in their approach to literacy” (Guthrie & Wigfield, 2000, p. 403).

LOOKING BACK, LOOKING FORWARD

Although much has changed over the more than 30 years I have been teaching, some things seem to stay the same. Adolescents keep us on our toes. They are energetic and delightful and exasperating, all at the same time. They are less motivated to read and engage in school-related tasks than they were when they were younger. Some adolescents continue to embrace the goals of their parents and teachers and make good grades, even if they are not intrinsically motivated to learn for learning’s sake. Others, however, who may or may not have been successful in elementary school, decide for one reason or another not to place studying, reading, and schoolwork as a high priority. Perhaps school-related tasks are not motivating, or perhaps these adolescents do not know how to juggle the multiple demands and pleasures in their lives.

Also the same, after all these years, is that many teachers strive to create classroom activities intriguing enough that even the least interested student will become curious and motivated to take part. Every now and then, there will be a glimmer of interest demonstrated by a student who does not typically engage in schoolwork. Other teachers feel helpless and lament that they do not know what to do with the student who is “so capable but does not try” or the student who is “so far behind, they’ll never be able to make it.” All these things are still as real today as they were many yesterdays ago.

What has changed in the last decade is how researchers have conceptualized and are studying adolescent literacies (Alvermann, Hinchman, Moore, Phelps, & Waff, 1998). Now they are learning about adolescent literacies from adolescents themselves—researchers are finding out what students are up to and are focusing on their perspectives, not just on those of teachers, about schooling. Today, researchers and teachers are not only concerned with the literacies adolescents use to be successful in school, but also with the personal literacies that adolescents use in their lives outside of school. From recent, in-depth case studies, much has been learned about the multiple literacies adolescents use outside of school. Research about motivation, engagement, and adolescents’ multiple literacies provides clues about how to motivate adolescents in school.

WHAT'S A TEACHER TO DO?

How can teachers build on what is known about motivation and adolescents to create classroom environments and literacy-related tasks that will engage adolescents? Hinchman, Alvermann, Boyd, Brozo, and Vacca (2003–2004), members of the International Reading Association's Commission on Adolescent Literacy, suggest the following ideas, based on their review of research.

Adolescents As Competent Individuals

First, adolescents need to see themselves as competent (efficacious) and having something to offer. When students believe they are competent, they will be more likely to engage successfully in school literacy practices. Research suggests that adolescents competently use multiple literacies outside of school. For example, Smith and Wilhelm's (2002) study of adolescent boys revealed that they read magazines, newspapers, cookbooks, movie reviews, music lyrics, and other texts. Alvermann and Heron (2001) reported that Robert, an adolescent who participated in after-school Read and Talk (R&T) Clubs in a public library, professed a disinterest in reading. Yet in this context outside of school, he not only read and summarized elaborate episodes of *Dragon Ball Z* (a Japanese anime series about the adventures of Goku, who protects the earth and other planets from fierce enemies), he also described the characters and explained the complicated plots.

To design environments and literacy tasks that support and build on students' competencies, teachers need to know about adolescents' interests and out-of-school activities. The importance of showing an interest in adolescents' activities outside of school cannot be underestimated. For example, Bambino, a wrestling expert who participated in Smith and Wilhelm's (2002) study, said, "The teachers don't know you, care about you, recognize you. So why should you care about them or the work they want you to do?" (p. 99). Simply acknowledging Bambino's interest and expertise or asking about a wrestling match would have gone a long way with this adolescent boy. Similarly, Eric, a 6th grader who coauthored the first chapter of *Reconceptualizing the Literacies in Adolescents' Lives* (Alvermann, Hinchman, Moore, Phelps, & Waff, 2006), indicated that if teachers recognized Eric's interest in writing—which he did outside of school—it would show that they valued the choices he made. Alvermann (2006) suggested that this interest "encourages a reciprocal teaching-learning relationship in which teachers take seriously—are even instructionally guided by—the literate identities students choose to share" (p. 8). Girls who wrote zines outside of school suggested that teachers could support in-school writing assignments that encourage "students to write about their own values, experiences, and ideas" (Guzzetti & Gamboa, 2004, p. 433), a characteristic of zines. If, however, teachers do not know that students read and write zines,

they would miss this opportunity to build on students' strengths and interests. For example, Chandler-Olcott and Mahar (2003a) wrote about Rhiannon and Eileen, two adolescent girls who routinely engaged in reading, writing, and illustrating quite elaborate fan fictions. The girls considered their "fanfics" much better writing than their somewhat formulaic school writing and spent more time writing fanfics than academic writing. Although the writing was done for themselves, not for a public audience, it may have been interesting for teachers to see the kind of writing Rhiannon and Eileen did outside of school, not for evaluation purposes or as an effort to include fanfic writing in school, but to get to know the girls and their writing from a different perspective.

It is important that teachers and parents know what interests adolescents outside the classroom. Listed below are questions that might help adults become more consciously aware of the kinds of activities adolescents choose to do outside of school. Many of these questions are guided by what I see my son and his friends doing and by ideas found in the literature related to adolescents and adolescents' literacy activities.

Do students work after school or on weekends? If so, what jobs do they do? What special knowledge do they have that enables them to do their jobs? Are they responsible for their younger siblings while their parents are not home, or do they babysit regularly for others? What extracurricular activities do they participate in? Do they play a sport, dance, play in a band, or act in local theater productions? Do they compose music or write song lyrics or raps? Do they enjoy photography, modeling, styling hair, or designing their own clothes? Do they volunteer at an animal shelter or train and show horses? Are they 4-H members? Perhaps they build their own computers and create Web pages for themselves and others. Are they gaming enthusiasts? Are they members of online communities that expand their friendships across the globe? Are they anime fans or collectors? Do they go to the opening night of movies that appeal to them? Do they make their own CDs and videos? Are they artists or designers of graphics for T-shirts or local tattoo artists? Are they wrestling enthusiasts or reality TV fans? Perhaps they are interested in the armed forces and train regularly to prepare for a military career. Are they into talk radio and have a favorite celebrity host? Where do they hang out after school? What do they do? Are they university or professional sports fans? Do they collect memorabilia? Perhaps they are car, skateboarding, motorcycle, or moped enthusiasts. Do they run marathons or train at a gym? Do they write zines? Do they have their own book clubs? Are they involved in activities for improving the local community? The list could go on and on.

Next, think about the kinds of specialized skills and knowledge adolescents must possess to participate in these activities. What kinds of literacies do young people engage in when participating in after-school activities? What do they read? What kinds of writing or drawing do they do? Consider the idea

that reading is not just about reading books. Adolescents may read text messages, information from the Internet, e-mail, blogs, letters, magazines, advertisements, catalogs, recipes, guidebooks, flyers, directions, zines, newspapers, and poetry. Perhaps they listen to books on tape or read CD lyrics. When adults really start listening to and observing adolescents, it will be easier to understand what interests them and what issues matter to them.

A word of caution is necessary here: adolescents may be suspicious of a teacher's or parent's sudden interest in them and be less than open to queries. Even adolescents who are so-called good students may not readily reveal what brings them pleasure outside of school. The questions could be seen as encroaching on their personal lives. This may especially be the case before adults gain an adolescent's trust. If young people do share bits of information about themselves, savor those and put them to good use. Be careful to respect, rather than critique or trivialize, what adolescents reveal.

Personally Relevant Connections

The second recommendation for creating engaging literacy instruction is to help adolescents make personally relevant connections between their academic literacies and their lives outside of school. Adolescents' interests can be used as a guide for providing them with such texts as magazines, newspapers, novels, informational texts, manuals, song and rap lyrics, and electronic texts in the classroom. These texts can be used as alternatives to textbooks to teach content related to curriculum standards. For example, to demonstrate how writers' voices differ in different contexts, rap lyrics, an article from a popular magazine, and a newspaper clipping can be used. Students will be more motivated, interested, and willing to read texts that are personally relevant.

When helping adolescents make personally relevant connections between themselves and school learning, it is important to build on and recognize students' funds of knowledge from their homes, communities, peers, and popular culture (Moje et al., 2004). Moje and her colleagues found that "pop Latino, gangster rap, and traditional Mexican music" (p. 60) were reflected in Latino students' developing identities and the texts they read (e.g., magazines) and wrote. News media, television, and movies helped students feel more like a part of the global Latino community. Surprisingly, the researchers also found that students used popular culture texts to make connections with and think about science concepts.

Another way to connect students' lives with the school curriculum is to think about the issues about which they are concerned and use those as the focus of inquiry and discussion. Some inquiries may come directly from students' experiences. Fairbanks (2000) invited 6th-grade students to engage in inquiries about social issues that affected them personally. They investigated such

topics as homelessness (one girl had a friend who was homeless and wanted to know more), violence (a boy was concerned about gangs in his neighborhood), and abusive home situations and alcoholism (two students were dealing with these issues at home). Students were motivated to pursue these inquiries because they chose to study issues of crucial importance to them. In relation to motivation, classroom engagements such as these foster intrinsic motivation (i.e., self-efficacy, autonomy) and support mastery-oriented goals. In addition, students would be more likely to attribute their success to effort than other attributes.

A Caution

Adolescents and researchers alike caution teachers about how they use adolescents' popular culture to make connections in classrooms. First, students engage in multiple literacies outside of school to relax, have fun, relieve stress, and accomplish their own purposes (Chandler-Olcott & Mahar, 2003a; Guzzetti & Gamboa, 2004)—all intrinsic motivations. The adolescent girls in the Guzzetti and Gamboa study did not think it was a good idea to suggest that students write zines in school because it would negate the pleasures associated with them; rather, they suggested it would be worthwhile to bring the do-it-yourself ethic of zines and support the freedom of topic choice and sharing or not sharing into the classroom. These practices would bring in the element of autonomy, thus supporting aspects of intrinsic motivation. Second, when teachers use popular culture as a reward or to hook or trick students into engaging in classroom activities, students may view teachers' motives as inauthentic.

Choice

I would be remiss if I did not include the importance of choice as it relates to motivating adolescents to engage in academic literacy. This is not a new idea. One of the most inspiring education-related books I remember reading as an undergraduate was *Hooked on Books* (Fader & McNeil, 1968). My recollection is that a teacher was concerned because his students could not read. He took them to a large book warehouse, gave them empty bags, and told them to choose any books they wanted. His students filled up their bags and wanted more. The teacher learned that not only did the students know how to read, but when they chose what they wanted to read, they read voraciously. (My apologies to the author if my recollection is not quite accurate.) More than 30 years later, 6th-grade students were asked what motivated them to read (Ivey & Broaddus, 2001). Their request was loud and clear: let them read what they choose, and give them access to interesting reading materials.

Choice is also important in terms of how activities within a classroom are structured. In a study done by Alvermann, Young, Green, and Wisenbaker (1999) of a R&T Club, Athene (an adolescent girl in the club) mentioned

that one of her teachers sometimes allowed them to choose a more freestyle discussion, rather than a typical turn-taking, teacher-directed discussion.

Giving students a choice—whether it is a choice about what text to read, what to write about, what inquiry to pursue, or the discussion style—is motivating to adolescents. The choices give them a feeling of autonomy (a motivator associated with intrinsic motivation). Choices also motivate students to engage in tasks for which they are likely to experience high self-efficacy. Honoring students' choices also promotes connections between school and personal literacies. The choices adolescents make are likely to reflect the strengths they bring with them from outside of school.

Active Learning Environment

A third suggestion for creating engaging literacy classrooms is to use active, “experiential and participatory approaches” (Hinchman et al., 2003–2004, p. 306). Because of adolescents' social nature, they are more inclined to engage in activities in which they can actively participate. Gone are the days when the teacher, the so-called sage on the stage, delivers a carefully prepared and fascinating lecture to students, who hang on every word and take copious notes for the sheer joy of learning; rather, students need to be engaged actively in thinking about ideas.

One way to encourage active involvement is to use role-play. For example, when studying about prejudices of all kinds, students could take examples from their own lives and role-play the situation for the class. This activity capitalizes on the third recommendation (making personally relevant connections) as well as the recommendation that approaches need to be participatory. Collaborative group work for solving problems or discussing alternative perspectives and student-controlled discussions encourages students to consider ideas actively. Providing students with opportunities to use their multiple literacies to represent their understandings of content is another way to engage students. For example, students can develop multimedia projects, documentaries, or posters and write raps or poetry to communicate what they have learned.

Approaches that support active, participatory, or experiential learning may motivate students in several ways. Students' self-efficacy may be enhanced when a variety of approaches to learning, not just traditional paper-and-pencil tasks, are honored. When there is no right or wrong answer, but room for interpretation—like in a role-play—students' mastery-oriented goals may also motivate them. Also, when students work together in self-chosen groups to create a product, they are partially motivated by their social goals.

Instructional Support

A fourth recommendation is to provide adolescents with instructional support so that they know how to locate accurate information easily and critique

its usefulness (Hinchman et al., 2003–2004). Think about the skills and strategies students are motivated to use outside of school. Then point out to students how these same skills can be useful in school-related tasks (Alvermann, Huddleston, & Hagood, 2004). Comparing and contrasting these skills and showing young people how they can be modified to suit different purposes should help students transfer skills from one context to another.

In a classroom that honors students' multiple literacies, it is important that many types of texts and other resources are accessible for inquiries. The traditional print resources, such as trade books and reference books, represent only a small portion of what is available. Students have access to the Internet and all its reputable (and disreputable) resources. Primary source documents are at their fingertips at Web sites such as the Smithsonian Institute. Current and back issues of newspapers, magazines, and television broadcasts are also often available on the Internet. With access to digital photography, cell phones with video capability, and other electronic devices, adolescents can easily gather data from the field.

With the mountains of potential resources at their fingertips, students will need to be taught effective search strategies for locating information in different kinds of sources. Locating information in the table of contents or index in a print resource is very different from using a search engine. As students begin to find information, they will need assistance to sort through that information and critically evaluate the sources to determine if they are reliable.

Alvermann (2006) recommended that students need instructional support to evaluate the critically texts they read, view, and hear. This relates, of course, to determining the usefulness of resources. She contended, however, that much more is involved to teach adolescents to develop a critical awareness when reading. Students need to understand that there is often more to a text than meets the eye and that subtexts (implicit meanings) influence readers to think in particular ways.

When adolescents are given the instructional support they need, they can competently approach tasks by critically evaluating them in terms of accuracy, point of view, and how they are meant to influence the reader. These accomplishments promote self-efficacy. In addition, students will be more likely to attribute their success to their effort because they have confidence in the skills and strategies they have used in tasks outside of school and have learned in school.

Embedded Strategy Instruction

The fifth recommendation is to embed systematic strategy instruction in a context where relevant connections are made between school topics and students' knowledge, experiences, and interests developed outside of school.

Strategy instruction also needs to occur within the context of content area (e.g., social studies, science) instruction and in an environment that supports collaborative work (Alvermann, 2006). This recommendation is in direct opposition to the kind of instruction that involves students reading short paragraphs and then using a strategy to answer a question; rather, embedded strategy instruction takes place within the context of the texts students are reading. The strategies that promote “organizing, integrating, and reflecting on informational texts and/or narrative texts” (Alvermann, 2006, p. 9) are effective when taught overtly and systematically. Reciprocal teaching was also found to be effective. This approach involves the teacher and students in a discussion that includes making predictions, clarifying information or ideas, summarizing, and asking questions.

Hinchman and colleagues (2003–2004) suggested that teachers need to practice a teaching model that uses a gradual release of responsibility to guide their strategy instruction, always within the context of conceptual learning. For example, when students are studying about an issue of concern to them, they would need instruction to summarize information from a variety of sources. Summarizing is a complex task that can be broken down into its different parts. To write a summary, adolescents must read and make decisions about what information is most important. Then they must know how to take notes in an organized way. Finally, they use those notes to write a summary.

To teach students this process, using the gradual release of responsibility teaching model, teachers first model and think aloud about how they make decisions about what information is most important. Then they show students how they take notes. Next, it is the students’ turn to read and take notes, collaborating with their peers. The teacher provides responsive guidance, as needed. After guided note taking, the class reconvenes. The students discuss the notes they took, the decisions they made when reading and taking notes, and why they made their decisions. The teacher scaffolds throughout the discussion, making important teaching points to help students hone their strategy use. When students are ready to read and take notes independently, they do so, with the teacher supporting them, as needed. All this work is done within the context of learning content through reading and writing (and other literacies as well).

Students learn how to use strategies in the context of content area learning and with overt and systematic teaching within a supportive, collaborative learning environment. As students need to learn new strategies or use old strategies with different kinds of texts, the teaching process continues. How much time is spent modeling and guiding students’ practice depends on the students’ needs.

Showing students how and then supporting them as they learn literacy strategies are essential for student success. Regardless of how motivating a

topic is, there are points when students may need assistance to approach a task strategically and sustain their work.

The importance of embedded strategy instruction, within the context of content area learning, and in a collaborative environment, cannot be underestimated as it relates to motivation. Without adequate instructional support by the teacher and the social support of peers, students feel out of control and experience low self-efficacy. Students may attribute their lack of success either to their lack of ability or to an impossibly difficult task. All these factors combined could contribute to students' lack of motivation and potentially to academic failure.

CONCLUSION

What motivates adolescents to engage in literacy learning in school? This is a complex question, and the answer is even more complex. Perhaps the better question is, How can teachers create learning environments where students will be motivated to engage in literacy learning in school? I believe the following quote provides the best answer we have to date:

As teachers, we need to take stock of what students already are able to do in the name of literacy. Most are engaging in significant literacy activities in their everyday lives outside of school. Forming bridges that connect school-based literacies with students' out-of-school literacies can support more nuanced thinking in both worlds. Supporting students' development of strategic approaches suitable for both contexts will enable them to be more successful in our increasingly complex society. (Hinchman et al., 2003–2004, p. 309).

Motivation is a complex and multifaceted construct. Researchers and theorists have hypothesized that many factors contribute to motivation, yet it is unclear how to motivate adolescents to engage in literacy-related activities. What researchers, teachers, and parents do know is that young people are motivated and passionate about engaging in personal, multiple literacies outside of school. In this chapter, several factors have been discussed that may help adults better understand what may motivate adolescents to engage in literacy-related activities both inside and outside of school. By observing, listening to, and valuing adolescents' personal literacies, adults can better understand how to design academic contexts in which literacies will be valued by adolescents.

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Chapter Eleven

CRITICAL LITERACY AND ADOLESCENTS

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In this chapter, we define and explain critical literacy by providing an analysis of the term *critical literacy* and the way this term is used in the professional literature in reference to adolescents. We report on the ways the term is used differently for different audiences and the variations in the use of the term *critical literacy*. We suggest a systematic way of understanding critical literacy in situated contexts that involve adolescent learners. We intend to provide direction for further implementation of critical literacy with adolescents.

This overview was guided by a focus on critical theory articulated by the Frankfurt School (Habermas, 1973). At the University of Frankfurt, in Germany, a group of scholars formulated an approach to social criticism that came to be known as the Frankfurt School of thought. Critical theory based on the Frankfurt School seeks to trip the levers of power to establish a dialectic between the construction of the individual and social structure. In language, particularly written language, critical theory seeks to reveal the forms that are privileged by various social hierarchies.

In our review, we were guided by Fairclough (1995), Rogers (2004), and Wodak and Meyer (2000) in their approaches to critical discourse analysis (CDA). CDA is an approach to the study of language use, especially within the use of texts, as well as other cultural and social practices. According to Gee (1996), all these language systems can be referred to as D/discourses, with *discourses* referring to everyday, shared language use and *Discourses* referring to special, insider uses of language that delimit identities (truckers, valley

girls, physicists). In particular, the Discourses are ideological, resistant to self-criticism and interrogation, used as standpoints from which to speak, center on viewpoints and objects with given perspectives while marginalizing others, and relate to power and its circulation. CDA looks at how power is exercised through language to construct representations of the world, of social identities, and of relationships.

Our study drew heavily from Fairclough's (1995) three-dimensional framework of local (a particular text or event), institutional (social institutions that enable and constrain the local domain), and societal (policies and metanarratives that shape and are shaped by the institutional and local domains). This framework provided a way to continually examine how the concept of critical literacy was articulated within particular texts, the forces that shaped this situated use, and the social actions the texts attempted to produce.

Our investigation of critical literacy as it pertains to adolescents revealed several thematic descriptors that appear to represent the multiple lenses through which critical literacy is viewed in situated local contexts. These descriptors are identity, popular culture, project-based learning, reflexive text analysis, and media literacies. We discuss these categories separately as a way to present distinct features of particular themes. Our analysis demonstrates that each of these themes does not exist in isolation; rather, the themes are interrelated and mutually influence one another.

IDENTITIES

From a semiotic perspective, habits, clothes, friends, and idioms are all texts that reveal the subjectivities or multiple layers that students use to talk about themselves. Progressive educators in writing pedagogy (Atwell, 1987; Graves, 1983) have advocated that when students have more choice over their writing topics, they have more voice in their classroom writing. From this approach, voice leads to students' ownership and subsequent empowerment through their writing. Finally, the students represent their understanding of their subjective experiences in their writing.

More recent theorizing in identity formation offers more complex views into who is and who is not in the class. Hagood (2002) suggested that this is not a dichotomous in or out of the class decision. In fact, students always have each of their identities present. Furthermore, the selection of a particular identity is also not discrete. In any case, the formation of self or subjectivities of self is seen as vital to the use of critical literacy. As Hagood stated, "The coupling of critical literacy and formations of the self address[es] how conceptions of self are formed through an interrogation of texts" (p. 248). So to know an individual, it is necessary to listen to the responses that person generates as he or she engages with a particular text, a subsequent text, and so on. Here, as with

most of the chapter, *text* is broadly conceived to include talk, scripts, gestures, traditional texts, visual presentations, and so on.

Hagood (2002) continued with reasoning that makes our quick rephrase a problem. She stated, "This coupling, however, is a tricky matter because neither term [*critical literacy, formations of self*] is unitary in its conceptualization nor singular in its manifestations" (p. 248). People represent their multiple identities through such means as response, lack of response, gesture, and so on. Hagood made the point that critical literacy is premised on liberation, socially situated practice (and therefore political), and societal change, all of which influence constructions of self through texts:

What is central to critical literacy that focuses on identity is the influence of the text and specifically identities in texts on the reader . . . [and] that the identities produced in texts are often normative and stable, stereotypical, and hegemonic, inscribing for adolescent readers identities for emulation that serve to perpetuate dominant, mainstream images of the status quo. (p. 248)

Therefore a critical response to these textual identities entails or enables a student's critical analysis of self.

If adolescents are invited to share their lives as contexts for learning literacy, what are teachers' obligations for having issued such an invitation? When students comply with teachers' requests for their lives as contexts for teacher-mediated learning, what are the possible forms of reception? A case in point is the rather recent attention played on adolescent masculinities as they are produced in texts and in discourses related to texts. Moje, Young, Readence, and Moore (2000) suggested that critical literacy might productively offer activities for adolescents' exploration of their own gender identities. To make matters more complex, Young (2000, 2001) as well as Young and Brozo (2001) targeted versions of masculinities that were seemingly at odds. While Young promoted activities that draw boys' focus to gender inequities as they are portrayed in texts, Brozo (2002) advocated iterative versions of Jungian archetypes (e.g., the lover, the warrior) for reparative masculinities (Lingard & Douglas, 1999). In a review of texts on masculinities and literacies, King (in press) pointed out that the ideology behind the "masculinity" makes for very different intentions on the part of teachers and outcomes for students. For example, students' responses to adolescent fiction that portrays class and race struggles, such as *Tangerine* (Bloor, 1997), may differ by virtue of the stance that each takes toward being male. In the case of Young, it was reasonable to infer a masculinity that is based on feminist understandings of gender (Lingard & Douglas, 1999), which would, in turn, allow for multiple meanings for the masculine. For Brozo (2002), the masculinity appeared to be premised on a reparative version of the mythopoetic men's movement, the reclamation of so-called wild man masculinity (Bly, 1990). Both these literacy theorists lay

claim to promoting a sensibility toward young boys' (and girls') gender development as it is deployed in literature. Each expects a very different version of masculinity as an outcome, however. Reparative masculinities would enhance the privilege of the male protagonists. Feminist-informed masculinities would critique the privilege that they enjoy. Consequently, the acceptable identities that are made available for young men are very different. True to Hagood's (2002) cautions, each of the identity spaces is multiply conceived. Similar examples could be presented from different perspectives on females' identities. Likewise, examinations of school practices from perspectives based on race, social classes, abilities strata, and other social groupings could be presented. It is possible that teachers do no more and no less than make students aware of multiplicities. Insisting on a particular instantiation of masculinity is merely another type of oppression for youth to suffer.

In lieu of seeking an answer to which kind of masculinity is the best, adolescents and their teachers more productively engage in media critiques of the various representations of multiple masculinities as they appear in media. Critical theory analyzes patterns of power differentials and aims to reverse positions in power relationships. The degree to which an individual can accomplish reversal of power positioning through texts is central to the efforts of critical literacy. Reversal of power can be based on the knower/known, as in Wigginton's (1986) example with a troublesome 9th grader in *Foxfire* (cf. chapter 9). Often, the reversal is personified in the identity of a male who is challenging and subsequently supportive of his teachers.

Lankshear and Knobel (2002) offered several media-based strategies for interrogating texts. Their list included meme-ing (personalized, attention-gaining icons); scenariating (recasting current circumstances into new, imagined situations and allowing for play-out); culture jamming (reusing media icons and images in a countercultural way), and transfer (arranging for links to so-called hot properties so that an individual's work will be accessed). How and should these strategies be included in adolescents' literacy? It is really a moot point as the students already control these strategies. These strategies, as literate competence, are made part of the students' identity kits. That competence is transferable and portable and can be deployed outside of classrooms.

Reversal requires an expectation for difference on the part of the teacher. Felman (1997) argued that for the most part, teachers in classrooms ask questions and conduct their teaching inquiry from a stance of confirming the known; that is, they know the answers to the questions they ask. Students are positioned to offer the teacher the answer that the students perceive is wanted by the teacher. Vacca and Vacca (2002) called this teaching "guess what's in my head." In reversal, teachers are indeed the unknower and depend on the student-as-knower to teach. Therefore an expectation for difference is required. This can be a decentering experience for a teacher and an empowering one for

adolescents. It is also important that these experiences with reversal are real, yet inviting students to this difference space is not without its own complexities.

Albright (2001) wrote at length about the resistance that teachers may encounter as part of their critical literacy work with adolescents (as well as any other work). He is careful to distinguish resistance and opposition. Albright muses, "Why students refuse to accept their teacher's invitations to engage in literate activities is a question that I believe haunts many literacy teachers' practices" (p. 648). While this question rings true, it is resistance to constitutive texts and tasks that is the very work of critical literacy. It is a double bind for teachers who intend to practice a critical dialectic with their students. It is not acceptable for empowerment to be to the point of convenience for the teacher; that is, once begun, the process of empowerment for students can sometimes be uncomfortable for teachers. Albright looks for larger frames of understanding to alleviate the potential conflicts that may arise between teachers and students. "Many discourses, especially in schools, reward rationality and manage conflict" (p. 653). Part of a critical approach that would at least address this conundrum would be "foregrounding issues of power and desire" (p. 653) that appear in literacy conflicts (teachers', students', texts', media's, etc.).

Students' resistance to traditional and more progressive literacy practices inside schools can also position them as marginal students. Students' resistant behavior (interpreted as opposition) can place them in remedial instruction, solitary schooling, and repetition of an academic year. In contrast, resistance can be the very tool to understand the ways that literacy is used to colonize and marginalize adolescents' identities in schools. Albright sees these sites of conflict as resistant openings and not as oppositional endings. In a discussion of the use of the movie *American Pie* with adolescent males, Ashcraft (2003) also referenced resistance. In a reversal of stereotypic representations, the males in Ashcraft's study who were discussing *American Pie* addressed the pressures they felt to engage in activities and discourses that were oppressively sexist. When students do reverse, however, they are often uncomfortable, feel that they will get into trouble, or that they will be ridiculed in some way. These are risky behaviors for adolescent students.

One difficulty in using popular culture in the classroom is the allegiance a devoted fan might hold for a pop star. Much has been written about adolescents' obsessive attention to rap, pop, movie, and media stars. Alvermann, Moon, and Hagood (1999) suggested that a transaction across media texts creates fan-star dyads, and subsequent intertextual networks of like-minded fans, who are linked by shared media space. Idolatry simply cannot abide criticism. For example, in a recent presentation on a rap artist, an undergraduate student did not mention the artist's multiple arrests, violent and misogynistic lyrics, or gang membership; rather, the presentation featured bling, (expensive looking, visible jewelry), the artist's girlfriends, and symbols of

his fame. The values of the student relative to the artist, and how the student intended those values to be read by his classmates, are revealed in what was chosen and what was suppressed in the student's presentation. A comparison of the represented and absent characteristics might start a critical investigation of the artist as text. From a more distanced perspective (such as writing about the event for a book chapter), these differences are intriguing, productive, and could lead to a critical self-awareness. This is often intractable work that might be refused by a devotee, however. While this interrogation may *seem* productive, the role of the student-as-fan in fan-star discourses (Alvermann & Hagood, 2000) suggests that the student will not engage in this critical inquiry. In short, a fan-star relationship may preclude critical analysis because of the student's idolatry. Positioning adolescents as media consumers in fan-star transactions leads to inclusion of popular culture in classroom discourses.

POPULAR CULTURE

One way that young people's attention has been drawn to school-based literacy is through framing literacy within students' interests. Often, attempts to include students' interests in classrooms are based on popular culture, which may include texts such as television, video, movies, music, and other youth-oriented media. The inclusion of youth culture as contexts for literacy is a decision that is rife with opportunities for examination. Consider the fact that adolescents are warned that sexually oriented talk, behavior, and gestures are not acceptable in school discourses. Yet when these students leave school, they are bombarded with sexually informed and directed messages. School is either a safe place or a lame place.

It is not our intent to sexualize school, but rather to point out the duplicity experienced by youth. Sexuality and its discourses comprise but one so-called objectionable theme. Because of their adult status, teachers are allowed the very things that they try to keep from their students. The list of privileges is endless. Adults' access to these forbidden pleasures must create adolescents' resentment. It is probably most pronounced when teachers silence the emergence of unpopular popular culture in classrooms. Yet teachers themselves enact the subtleties of these desires. For example, during our observations, a young man was seen flirting with a young woman in class; he was admonished by his teacher to keep flirtation outside of school. Later on, in the class, the same teacher referred to this same striking young man as "our Calvin Klein model." The student was reinforced for a sexuality that he may not even have claimed. Adults' talk in the presence of youth is always monitored, evaluated, and appropriated. For example, when the coach teaches math, the athletes in the class are granted more attention. We are not suggesting that anything be

done differently, only that our habits and talk related to the unpopular are always instructive, whether or not it is our intent to do so.

Walkerdine (1991) argued that elementary grade teachers function as “containers of rationality,” where their classrooms are oases of order in a chaotic world. Walkerdine is critical of the practice of teachers’ containment because of the costs it enacts on these teachers. Nevertheless, early-grade teachers hold back the chaos of the outside world to facilitate the emergence of the child. With some minor revisions, there is an apparent analogy to adolescents’ classrooms. Teachers are constructed, and subsequently represent themselves as mediators for the infusion of popular culture and the everyday lives of their students. From a critical theory approach to media literacy, Alvermann et al. (1999) argued for infusion of popular culture to develop adolescents’ abilities to analyze “the social, political, and economic messages” that are embedded within media. Alvermann, Hagood, and Williams (2001) also explored the complexity of adult-student roles when popular culture is introduced as academic text:

Just as adults position themselves as more knowledgeable about meaning youth will make with popular culture, we also position ourselves as naïve about or oblivious to popular culture. . . . Interestingly, [research has] illustrated that youth are usually quite willing to share their likes and to teach others about their interests if adults show a willingness to listen and learn from them.

From our perspective, this is clearly different from pandering to students’ interests to cajole them to do schoolwork. The interjection of popular culture disrupts business as usual long enough to redirect the learning path. For example, we heard a middle school student object, “Miss, we can’t bring our music in here.” The student was objecting because songs that play well outside of school may cause students embarrassment when they are replayed in schools. Lyrics become charged with strange importance inside of school because of everyone’s awareness of their disruptive potential. Our previous finger-pointing at the duplicity of teachers is now pointing to the student, who is, in this case, self-censoring. Student-as-self with friends on the outside becomes student-as-student with peers and teacher in a classroom, or even student-as-student with a teacher alone. This happens to us all. How many of us have enjoyed a movie with one set of friends, only to be embarrassed viewing it with another set? The problem here for critical literacy is that students will not tell their teachers what was the best part of *American Pie* in the same way that they tell friends the best part because it is simply not acceptable within school discourses to do so (Ashcraft, 2003).

A first problem with the attribution of the connection between youth and popular culture is that it essentializes or stereotypes all youth attention, while it equates and levels all genre and quality of popular culture. There is a

presumption that all adolescents use or consume the same media texts in the same ways. A second notion that is problematic is that once the popular media is incorporated into schoolwork, its value is suspect because of its collocation with academic literacies. A third issue is that students may distrust teachers' intentions with popular culture. Teachers who may need to document their students' academic work may compromise the pleasure that students would have derived from engagement with popular media. Fourth, teachers' choices of media for classroom consumption constitute an instantiation of the students' choices. The teacher may be inaccurate about students' interests. Students must be included in the process of selecting which themes, stories, texts, songs, pictures, and movies are used as classroom texts.

Arguably, teachers serve as mediators between popular culture texts and classroom discourses. Teachers who work to use popular culture as a context for critical literacy are faced with decisions about which texts to allow and which to prohibit. The dilemma is based in understanding how the decisions to include or exclude particular texts impact the value students will hold for such texts. Texts championed by teachers may lead to students' dismissal of these texts solely because of the teachers' sponsorship. Prohibiting an objectionable text can have the effect of increasing its currency or value. Through a shared process of text selection, teachers and students can negotiate the risk factors in the text and discuss how the text may be used productively within a particular project. By focusing the process of deciding which media texts to include and exclude on textual analysis, teachers and students can work to uncover the power structures that privilege or marginalize particular literate practices and products.

PROJECT-BASED LEARNING

Literacy acts are best accomplished when literacy serves a tool for accomplishing a larger measure, rather than literacy learning being the goal itself (Harman, 1985). If a learner has a specific, personal goal in mind that includes his or her social orientation, that student is likely to be more motivated to learn the incidental use of a literate competence. In project-based learning (Bereiter, 2002), students learn "to do" through successive approximations. A learner tries it out (whatever the it is), looks at the outcome, tries it again, and so on. In his discussion of the learning that occurs in the process of constructing hypertext, Bereiter contrasted emergent and presentational modes. An emergent mode is seen as having more learning opportunity than a presentational mode. By analogy, a teacher shifts from a focus on the project-product parameters to a focus on the inquiry strategies deployed during the students' "knowledge building" (p. 75) to capitalize on the embedded literacy lessons. Bereiter's binary between building and telling (emergent and presentational)

as applied to hypertext resonates with the similar use of product-process binaries in critical literacy (e.g., deconstructed differences in race, gender, or sexual orientation).

The teacher needs to shift focus to the learners' discourse while they are engaged in project-product completion. Completing a project is certainly important, especially from the students' perspective. From a literacy learning perspective, it is the language that is used in the production that is a focal point. Talk and texts *about* the construction (the metaproject discourses) are fairly distinct from the object itself. Separation between the actual product and talk about the product is more subtle in a language arts classroom, where the project-product and the metadiscourse (talk about the production) are both linguistic endeavors. Focus on the accuracy of the requirements will more likely be perceived as authority-based imposition, whereas the process texts (talk, writing, enactments) are the data with which to guide instruction. For example, presenting a group with an analysis of their language collected while they were engaged in a project of building a canoe can lead the group to opportunities for learning.

The reflexive use of language as data to influence subsequent iterations of a process is tricky for teachers. Feedback loops should not and cannot come from didactic or curricular intents. Yet teachers can experience a "covered the required content" windfall through their redirection of process discourses. One way around this dilemma is to use real audiences outside the immediate production context. A metaphor for this intent is *boundary breaking*. The intent is to move the product (and the intention that drives the production) away from a focus on teachers and schools and toward real audiences that the students believe count, or wish to influence (peers, politicians, policy makers, community leaders, administrators, families, marginalized groups). By enacting and reifying an outside audience, the teacher provides the students with a rationale (other than grades or school) to shift their attention to the product (i.e., the student identity that is embedded in the eventual product). At the same time, the teacher maintains a focus on the students' metastrategies that are deployed during the emergent processes to take advantage of the opportunities for teaching that emerge.

In a study of elementary and middle school students, Leland and colleagues (2003) engaged the students in critiquing "the difficult things that happen in the world around them." Yet the class project stayed inside the classroom. In contrast, Johnson and Freedman (2005) provided several examples of service learning initiatives that took the critical awareness that was developed in the classroom out into the community. It is not our intention to suggest that the results of all project-based learning must leave the classroom; rather, it is a factor that might be considered for the students' interest and valuation of the work they do.

REFLEXIVE ANALYSIS OF TEXT

In the response to literature approaches to critical literacy, literature is often used as a springboard to students' discussions that relate conflicts in a story to their lives. Bleich's (1986) relatively early resistance to the new critics text-based analysis proposed a subjective criticism that centered on readers' emotional connections to the text that were based on their own experiences. Rosenblatt's (1978, 1995) reader response is also a framework for this individual, emotion-based interaction with a text. For McLaughlin and DeVogd (2004), Rosenblatt's theory is used as a prototype for a critical stance in reading. Readers are brought to focus on power, complexity, perspectives, and adaptations as their teachers direct them to alternative sources. For adolescents who engage with novels as part of their academic literacies work, Johnson and Freedman (2005) suggested that critical literacy is "resistant reading by teachers and students working together to discover language patterns that promote particular ideas about power and oppression based on race, class, gender, or a combination of these three" (p. 11). Accordingly, students are cultured in a resistant stance. Their treatment of multiple theories of response requires that students embody a stance to critique.

Leland et al. (2003) suggested that "a critical literacy perspective encourages readers to use language as a tool for interrogating and critiquing the difficult things that happen in the world around them" (p. 7). With teacher-selected text sets, the range of issues and students' reactions are perhaps circumscribed in ways that might not be to some middle school and secondary students' tolerance. In analyzing and using discussion as text, Rogers (2004) described the use of CDA for conceptualizing critical literacy. Ostrow (2003) recommended that such critical stances be deployed on all media. For literature, classroom discourses, and media, in general, a critical approach directs students to an examination of these texts. Who determines which stances are the permissible ones?

Critical literacy that focuses on text-based reading strategies also uses back reading, or subversive interpretations, to uncover subtexts in the author's writing. A systematic approach to this reading against the grain can be found in Gee's (1999) discourse analysis methods. In studies that deploy critical discourse analysis, the interrogation of texts from personal, political, and sociological perspectives often breaks the physical and psychological borders that frame the project activities as academic work. Yet there is little available description of how teachers or students orient themselves toward critique.

For critical theorists who use literature, the story acts as a catalyst that subsequently results in activism. Breaking the borders from this perspective means that the critical literacy work enters the larger community and gains a larger audience for its outcomes. Yet critical discourse analysis of the type that informs critical literacy must emanate from a stance. As we previously pointed

out, criticism emanates from a multitude of stances. Individuals' deployment of a particular stance may be seen as a strategy. Spivak (1993) referred to this practice as strategic essentialism, or the temporary, purposeful adoption of an identity to do critical work with language products. To engage in criticism, the critic must embody a standpoint. Students who are led to deconstruct texts through their critical examination of them should also be made aware that their critical analysis comes from text practices that are premised on a way of seeing, understanding, and responding to the world as it is represented in the discourse under examination. To what extent students actually label (or should label) their stances is not clear. Yet grounding the identity of self-as-critic is establishing yet another text that is related to other texts. This is the important point in the identity construction through critical literacy approaches with adolescents.

Stein (2001) described a project in multilingual storytelling practices with 12 16-year-old students in Johannesburg. She noted that what began as a project exploring multilingual resources with English as a second language students who were focused on storytelling practices "unexpectedly turned into an important project in the re-appropriation and transformation of textual, cultural, and linguistic forms" (p. 151). The chances of such redirection and personal transfer are enhanced when students examine their own role in the research findings. Vignettes and first-person accounts attest to the fact that adolescents are not only capable of but eager to participate in critical discussions about texts, both narrative and expository (Alvermann et al., 1999). We understand the predilection of youth for criticism as not different from our own, though perhaps more constrained by our permissions.

MEDIA LITERACIES

The connection between technology and adolescent literacy is ubiquitous, if not isomorphic. Media-based literacies enable the use of popular culture texts. Media that resonate with adolescents are readily available. Availability promotes agency. What individuals value can easily be imported into classrooms. Technology has provided youth with new forms of literacy that they have championed, mastered, and, at times, used against their teachers. In fact, there are now more outlets with Internet writing spaces than ever before. With the appearance of MySpace.com, YouTube.com, and Internet poetry sites, there are limitless opportunities for publication. More traditional approaches to literacy have followed a more canonical mainstream approach of draft, submit to authority, revise, resubmit. The use of multimedia literacies enables multiple constructions of personal identities. Students (indeed, all of us) can construct themselves in variable modes. Traditional literacies have valued rigor, accuracy, and verifiability, however.

Dickinson (2001) pointed out that students are repeatedly trained to acquire information for their school-based texts from commercially sponsored Web sites. This would suggest a *quid pro quo*. Students get the information they need. Advertisers get the exposure they need. Yet we may not be teaching the critical approaches needed to resist this “marriage between literacy advertising” (Dickinson, 2001, p. 3). If students are taught to analyze critically the corporate persuasion that is visually delivered, will corporate sponsorship be maintained? Or does that effort simply up the ante for advertisers? When advertising is a constant presence, it eventually recedes to meaninglessness, with a subtextual effect.

Myers and Beach (2001) illustrated the productive use of several media platforms that students use as authoring tools. To support their claim that hypermedia promotes critical literacy, they propose immersing, identifying, contextualizing, representing, critiquing, and transforming. These strategies are simultaneous and mutually constitutive. Myers and Beach also suggested that the use of hypermedia challenges the more traditional pedagogies that aim to produce a single, coherent version of a text. They call for more divergent pedagogies of possibilities for texts. Yet the effect of hyperlinking is not all to the good. “Students may be so mesmerized or overwhelmed by navigating the many options and paths in these texts that they may focus more on structural cues for activating links than on critically responding to texts” (Myers & Beach, 2001, p. 543). We see this competence as one that is paramount and one that is easily incorporated into critical analysis of the structures of multimedia literacies.

Albright, Purohit, and Walsh (2002) made a case for the reformulation of readers’ responses to narratives that usually occur in classroom literature circles (Daniel, 2002) when analogous responses to literature occur in chat rooms. While the language features vary from more traditional discourses of classroom-based literature circles, Albright and colleagues (2002) pointed out that the strategies of reader response that occur in classrooms also occur in chat rooms. Albright et al.’s example is a reminder of the transmediation that occurs across different texts. What is acquired in a chat room as a strategy can then be deployed in other media contexts such as a standardized test of reading ability. In fact, proponents of new literacies argue that the measured illiteracy of, for example, urban youth is more a product of sociocultural factors that have been attached to literacy than the lack of intellectual capabilities of the students. Much research sets out to document the literacies of various groups of marginalized youth (Moje, 2000; O’Brien, 1998). From a new literacies perspective, these youth are literate, just not in the ways that count in schools. Since literate operations are strategic, the learning strategies that have been acquired through interaction in popular culture texts should transfer to the more canonical texts of institutional literacies. To that end, Morrell (2002) suggested that learning

literacy strategies can be accomplished with hip-hop culture texts, through popular films, and with television and media. Given our current investments in media literacies, we would add that these *should* be taught.

WHAT DO THESE THEMES MEAN TO US?

The first implication from this review is that our findings are not definitive; they are descriptive. Our discourse analysis of definitions, influences, and intents was a recursive process that continually returned to the critical theory that frames critical literacy work. Analyzing the literature in this manner allowed for an understanding of the manners in which critical theory has been applied to literacy education of adolescents. If the themes that we have formulated are to be useful, it will be in their interpolated relationship with each other; that is, the patterns that we teased from our review of critical literacy with adolescents are mutually interdependent. In fact, one way we participated in testing out the economy of our model was to play the categories against each other. For example, not all project-based learning in literacy for adolescents is critically conceived. If the other five characteristics are included with the intent to engage in projects that lead to literacy learning, it is reasonable that these projects would be more critically inclined. Projects that consider students' identities, offer student choice, and potentially lead to student empowerment would be characteristics of a critical literacy project. If a project engages students with popular culture texts, resists censorship, and reverses power dynamics between teachers and students, it is more likely a critical literacy piece. Furthermore, if the project reflexively analyzes media, reads for the subtexts, and returns those interpretations to the context, it is more likely critical. If the project works within technological approaches to literacy and involves students in the production of fast literacies for public consumption beyond the classroom, it is more likely critical literacy. If the same analysis began with the intent to focus on student identity, that factor could also be played against the other five so that the assumption of identities would more likely be the work of critical literacy.

Our aim for this chapter was to continue to engage the field of adolescent literacy in praxis. Our analysis focused on how critical theory influences practice. In turn, our analysis of practices needs to be turned back onto the theory. We accomplished this in a sense when we talked about dilemmas. Perhaps critical theory as it applies to literacy education needs to be revisited to address the real-world struggles of enacting the theory in today's schools.

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Chapter Twelve

I USED TO TREAT ALL THE BOYS AND GIRLS THE SAME: GENDER AND LITERACY

Heather Blair

As a classroom teacher, I used to believe that we should treat all our children the same. I knew that the boys and girls sometimes responded differently to literature, games, and activities in the classroom, but it never crossed my mind that their differences were something that required significant attention. This chapter is a reflection on my teaching in rural and urban coeducational classes from 4th to 9th grade. I am also writing this chapter from my perspective as a researcher conducting observational and longitudinal research on literacy inside and outside of school in a coed, 8th-grade classroom. I have conducted research on classrooms that included all girls or all boys and on single-gender middle years programs. Most recently, I have studied a group of early adolescent boys over a five-year period. This chapter will also include what other researchers have written about gender and literacy.

It was the girls in the single-gender classroom over a decade ago who first made me conscious of the powerful role of gender in classrooms. In the context of a single-gender program, gender becomes extremely salient. In this study of children's practices, the teachers and I became critically aware of the gender realities of classrooms, the gendered (stereotypical by gender) nature of literacy, and the many complexities of literacy. I hope that this chapter will bring awareness of differences, realities, myths, and ways of thinking about addressing the complexities of boys' and girls' literacy practices that I never realized when I taught adolescent youth.

Andrew is one of those boys who disrupted every stereotype about boys not wanting to read and write. When I first met him in 3rd grade, he was a voracious

reader and loved to write. He wrote a 500-word story in 4th grade with chapters, a prologue, and a drawing system that accompanied each page. His story, which chronicled a monster teleported from place to place in the year 3005, was full of action, adventure, mythical characters, and intrigue. He drew on his knowledge from video games, picture and chapter books, toys, movies, and his everyday world. As was typical of Andrew, he did it to fulfill his teacher's curricular expectations, which he far exceeded, yet at the same time, he integrated his understanding of popular culture into his academic work. He orchestrated multiple worlds in this way in his fictional writing, and although the story lines puzzled his female teacher, the writing quality was rewarded by good grades. He knew how to derive some fun from this exercise, while he met his teacher's expectations.

At the same time, Andrew moved very fluidly in a boy's world. He played soccer, took swimming lessons, traded Yu-Gi-Oh! cards, and engaged with his friends in numerous games on his computer at home. Even at this age, he was very adept on a computer; had games he loved, such as Baldur's Gate II and Ancient Empires; and believed that he was learning many strategies that he could apply to real life. Andrew taught me much about a boy's world and what it means to be literate in multiple ways in the digital age.

Tanis also taught me a great deal about what it is like to be an early-adolescent girl in an inner-city community who is also literate in multiple ways and loves to write. Like Andrew, Tanis also did not fit into the stereotype of girls' literacy practices and products and what they like to read or write. As a child of mixed-race parentage, she had had many experiences in a multicultural world, she knew what it was like to be poor and discriminated against, and she wove these life experiences into her writing. Tanis had ample ideas, trusted her own writing decisions, and reflected on her own work. She admired other writers and read daily for enjoyment. She had a vivid imagination, and her fictional reading could be traced in her writing.

Contrary to what some say about girls' writing, Tanis's stories were often action-packed murder mysteries that contained a great deal of violence. The main characters were all young women, and each had some act of violence inflicted on her. Interestingly, these female characters all reacted to the violence with violence. Tanis believed in the importance of a good ending to a story and liked to leave the reader wondering what happened to a character. She also wrote poetry about love, friendship, and world issues.

Tanis was also an avid reader, but she did not have the same proclivity for digital texts that Andrew had. That is not to say that she was any more or less literate than Andrew; they were just different. They remind me that we need to be very cognizant that difference is not constructed as a deficit or as one display of literacy that is better or worse than another. These differences do not imply potential failure on anyone's part, unless teachers and parents allow biases and limited understandings to construct them as such.

Diversity, democracy, and equity are issues addressed in schools, yet issues of gender continue to be marginalized. For example, an equality framework has prevailed in much of the educational thinking that upholds the belief that same means equal. We also know that men and women, boys and girls, do not experience their worlds in the same ways. It is important to interrogate these issues and continue to ask questions such as, How do we understand the gendered experiences of our children? What are we doing to rethink what we do as teachers or parents in terms of these differences?

I hope that this chapter and the discussion here challenges the reader to examine issues of gender, the construction of gendered identities, the gendered aspects of literacy, and the spaces in schools and curricula for gender specificity and gender neutrality. It is important to listen to all boys and girls to understand how they are unique and what commonalities they share as literate youth. The late Myra Sadker (Sadker & Sadker, 1994), an advocate of improving education for girls, said,

If the cure for breast cancer is forming in the mind of one of our daughters, it is far less likely to become a reality than if it is forming in the mind of one of our sons. Until this changes, everyone loses. (p. 14)

Concerns about equity apply to all subjects across school curricula and in our homes and to the potential for all children, boys and girls, to reach their potential.

WHAT IS GENDER, AND WHY DOES IT MATTER?

Gender is not just a biological entity; it is socially constructed from a very young age. Watch preschool-aged children, and think about the genderedness of their play. How do a group of same-gender children play together, and how do they interact across genders? Gender, for the most part, is not something that we do alone; we construct our gender in relation to those around us. Thus it helps to have an other from whom we can be different.¹ All children come with multiple identities; they are impacted by race, class, ethnicity, culture, language, position, and lived experiences, and within the subgroups of boys or girls, they are not all the same.

Researchers from numerous disciplines have contributed to our understanding of these issues of gender. Anthropologists, particularly those involved in linguistic and educational anthropology, have done foundational work in gender, language, and power that informs our thinking. Researchers such as Tannen (1991) have helped to delineate how we maintain power differentials through talk and how the child is socialized into a gendered being. She discussed differences in discourse and gender privileging and documented how men and boys often gain and maintain control of talk in mixed-gender groups.

Others taking up Tannen's ideas have suggested that language is one of the contributing factors to some girls' failing to fulfill their potential in school.

Educational anthropologists, such as Mehan (1979) and Fine and Zane (1989), described how the structure of schools and classroom talk differentiates between children. Fine and Zane reminded readers of how insidious it is that "public schools are marbled by social class, race and ethnicity, and gender, yet they are laminated in denial, represented as if race, class and gender neutral" (p. 24). They found that girls were silenced in classrooms. Mehan (1979) made the point that "to be successful in the classroom students must not only master academic subject matter, but also learn the appropriate form in which to cast their academic knowledge. Classroom competence thus involves matters of form as well as content" (p. 49). Are there particular ways to demonstrate knowledge for different subjects, and if so, what are they? What, for example, are the appropriate forms to cast literacy knowledge? Do boys and girls represent their understandings differently, and how are they interpreted?

Psychologists have concerned themselves with gender. The self-esteem and success of teenage girls in schools was a topic under scrutiny during the 1980s and 1990s. Researchers discussed how, as girls move from the elementary grades into junior high and high school, they seem to lose confidence in themselves as scholars. The American Association of University Women's (1992) research report "How Schools Shortchange Girls" reinforced this finding:

On average, 69 percent of elementary school boys and 60 percent of elementary school girls reported that they were "happy the way I am"; among high school students, the percentages were 46 percent for boys, and only 29 percent for girls. (p. 12)

Clearly students' attitudes change during the middle years, and this time is particularly important for girls.

More recently, there has been discussion of the limited repertoires of ways to be a boy in our schools and the problems of identity that this may bring. Pollack (1998) suggested that many boys are in crisis, and although they may appear tough on the outside, they may remain lonely and confused on the inside. Others have critiqued the limited ways that boys are allowed to display their masculinities in schools and society today and have suggested that we need to open avenues to cast new ways to be a boy. It becomes obvious from the range of disparities among educational outcomes that the gendered experience is different for boys and girls and has real consequences. Girls and boys not only succeed differently, but also perceive their success differently.

In talking about Discourse, Gee (2001) provided a framework to think about what all these components of who we are mean in terms of literacy configurations. He defined *Discourse* as ways of being in the world as "ways of talking, listening, writing, reading, acting, interacting, believing, valuing, and

feeling” (p. 719). Given this perspective, Discourse is a key overarching construct in examining gender and literacy.

GENDER AS DISCOURSE IN THE CLASSROOM

The ways of being a girl in the world are evident in classrooms. The girls in my 8th-grade class were continually constructing their gender identities as they chose their attire, adornments, hairstyles, and cosmetics. It was not an accident that they carried themselves in the manner that they did and used particular gestures and facial expressions. The way they talked, to whom they talked, how much private and public talk they took part in, the terms they used, the topics of their talk, when and how they interrupted the talk of others—these were all part of their construction of gender.

The ways of being a boy in the world are very different from those of being a girl. In a study of early adolescents, Cherland (1994) found that

only three or four of the 21 sixth-grade boys dressed carefully. In doing so, they established their gender by appropriating a “look” for boys that they had seen advertised on television and on sale at the mall. But the boys who did not put any effort into their dress were also proclaiming a gendered message. Their dress said, “I don’t care what I look like because appearance isn’t important for me. I am free to be comfortable and attend to other things.” While this was an acceptable fashion statement for a boy to make, it was not acceptable for a girl, and only one of the sixth grade girls occasionally neglected her appearance. (p. 35)

Others have recorded the stereotypical image of a boy as rough and tough to be considered masculine. Then there are those boys who do not so easily fit into the typical boy-gendered identity. Think of the small boys and the more effeminate boys in classrooms. What does it mean for them if there is one very strict way to be accepted as a boy in school? If it is so important to be gendered to be accepted and to be gendered in a particular way to fit in, what happens to the kids who are not displaying typical notions of gender? The suicide rates of gay and lesbian adolescents are about 10 times the rate of other adolescents. Obviously, nontraditional gender roles are hard to live out in classrooms. This is an important reminder.

In reality, we all “do gender” every day, and this is something that we need to understand to determine whether gender identities, gendered roles, the differentiation of genders, and the discourse of girls and boys are all part of the inequities in classrooms and schools. Why is it so important to fit into one category or the other? Why has this dichotomy been established? How are adults contributing to this in interactions with children? It is time to think seriously about how some of the tightly constructed categories might be opened up and how children can be allowed the space to be themselves in the world to take on

new ways of being in positive and helpful ways. Discussing the permeability of these borders with children could be helpful. It is possible to embrace difference and let children know that they do not have to behave in stereotypical ways to be accepted.

INTERSECTIONS OF GENDER AND LITERACY

Many definitions of literacy have been discussed in the earlier chapters of this book, and I will highlight a few that connect to issues of gender. Many terms are used for literacy: *media literacy*, *technological literacy*, *computer literacy*, *digital literacy*, *cultural literacy*, the *new literacies*, *visual literacy*, *multimodal literacy*, and *critical literacy*, to name a few. Most researchers acknowledge that these frames all represent one component of this illusive entity called literacy. There are multiple definitions of literacy and multiple paths to literacy. Most literacy researchers today prefer to think of these literacies as some complex combination of these domains that varies with context: literacy as a mix of visual, print, and other communication systems, in particular, cultural and contextual situations.

One of the major tenets of this expanded view is that literacy is not “a single essentialist thing with predictable consequences for individual and social development. Instead there are multiple literacies that vary with time and place and are embedded in specific cultural practices” (Street, 1997, p. 48). It then follows that if the sociocultural practices of boys and girls differ, so too do their literacies vary.

From the research over the past decade, it is clear that there are many ways that literacy is gendered. Boys and girls display differences in their talk, writing preferences and practices, and reading practices and preferences. Males and females have distinct hidden literacies and unique relationships with popular culture, and these different genders interact differently with digital texts. Boys and girls may experience visual representation in different ways as well, although this is less well documented.

Genderlects: Boy Talk and Girl Talk

I use the term *genderlects* (Blair, 2000) to delineate a variety of talk within any language that is distinct to a gendered group, similarly to how a dialect is specific to a regional or cultural group. This is the kind of talk in which boys and girls engage that is representative of their gender, and, at the same time, their talk contributes to the construction and maintenance of their gendered identities. “Boy talk” and “girl talk” include both the topics of talk (what they talk about) and the tools of talk (the way they talk) that can be specific to their gender or to the group to which they feel they belong. Boy talk and girl

talk can also impact classroom discourse dynamics and contribute to who gets heard in the classroom.

Genderlects are like dialects and have their own set of social rules: rules for what, when, and how we talk; when it is right to talk or not talk; what silence is; and who gets the floor to speak. These are key components of how students see themselves as gendered male or female, boy or girl. Boy talk and girl talk are used to establish and maintain relations among members of a group and between groups. These power differentials are obvious in classrooms. For example, in one 8th-grade classroom that I observed, it became evident early in the school year that the gendered dynamics of talk were established clearly: those who spoke first and the loudest, interrupted the most, made side comments to classmates, or mocked previous ideas were most often boys. This public talk to establish status was a tool that the boys had learned; they used it, and it worked to maintain their dominance in the classroom talk.

Boy talk in this classroom also included numerous homophobic references. This draws attention to the need to understand the complexities of the constructions of masculinities that these particular adolescent boys experienced and the prevalence of the image of an able-bodied, white, heterosexual guy as the norm. There was little room for any other interpretation of ways to be a boy, and name-calling worked as a reminder. It also eroded the classroom cohesion, silenced the voices of many of the girls, and disrupted the comfort of the quieter and more effeminate boys. Talk remains a very important component of classroom participation, and if this access to talk is closed for some, there can be a number of ramifications for the ways that youth get to develop their literacy and demonstrate their learning.

Genderprints: Boys' and Girls' Writing Preferences and Practices

Numerous authors, such as Newkirk (2000), Smith and Wilhelm (2002), and Barbieri (1995), argued that gender and literacy are tightly interwoven and that boys and girls are differently literate. This has been more clearly defined for young children, and the essentials of these differences and the congruency of findings have not been fully explored with adolescents. Barrs (2000) suggested that we need to understand the respective discourse and genre strengths of adolescents. In her estimation, boys' stories have more pace and action than girls', whereas the girls write more about social and moral issues. She suggested that girls are more thoughtful about keeping their readers involved. In my own study of early-adolescent girls' writing (Blair, 1998), I found that the girls I observed liked to write about their feelings, fears, angers, and difficulties in their lives. The multiple realities of their lives as girls are evident in their written texts. Their lives as young women in a multiracial,

working-class neighborhood with numerous media influences were continually reflected in their texts. These girls wrote primarily in the genres they liked to read about topics such as friendship, romance, and love; life and death; and social issues such as family violence.

According to Newkirk (2000), research during in the 1990s outlined numerous differences that framed boys as lacking particular traits in their writing that are expected in schools and found in girls' writing. Newkirk suggested that these should not be viewed as deficits for boys; rather, he recommended that researchers and teachers look further at how boys are actually using action and plot development in their stories to engage readers. He urged teachers and parents not to equate boys' use of violence in their writing with an intention to be vicious, and he maintained that the ways in which boys mediate this violence with humor and a kind of detachment show that they are dealing with these incongruencies. One end result for the boys is camaraderie and relationship building with their friends. Boys are indexing their multiple worlds, virtual and real, and, as Andrew taught me, bringing these complexities to their stories. The fact that they are different from girls and perhaps more connected to their out-of-school literacies does not make them less literate.

Writing is essentially about audience for both adolescent boys and girls. I have found that some girls are reluctant to share their work when the audience includes boys because they fear ridicule from the boys. Their written discourse is a private or semiprivate event, and, in contrast to oral discourse, if not made public, they had less chance of being pressured by boys about what they had to say. The boys in my study (Blair & Sanford, 2004) also censored their writing because they knew that their teachers were their primary audience and might disapprove. Their secondary audience was their friends, and they knew that they would find approval. They took ideas, characters, plots, strategies, actions, and resolutions into their school writing from what they read, played, and experienced outside of school. They enjoyed these adventure and fantasy worlds among themselves and did not expect the same of girls or teachers. They then morphed their written texts to make them more acceptable to teachers in their desire to get a decent grade.

Boy Books and Girls Books: Reading and Representing

The genderedness of reading practices has been talked about quite extensively. It has been suggested that there are boy books and girl books, and that there is a need to provide both boys and girls with appropriate choices of fiction. This implies that boys tend to like more action and adventure, whereas girls like stories about relationships, friendship, and love. Although not everyone agrees on the value of these books, it is generally thought that as well as giving youth the opportunity to select the kind of books they prefer, there is a

need to expose them to quality literature that they might not necessarily select. Discussions with adolescents about the qualities and gendered perspectives of the stories can be an opening point for explorations of how each gender is represented or misrepresented.

There is some thought that girls are more versatile in their reading than boys. One of the girls in my study, when asked about girls and boys reading books with male or female protagonists, thought that girls read more of both, whereas boys preferred male characters. She suggested that girls would wear both jeans and skirts, but boys would wear only jeans. Therefore girls are gaining a broader understanding than boys not only of literature, but also of the lives depicted in literature. Classrooms should offer a variety of choices.

All fiction also needs to be analyzed critically with young people to discuss the complications and critique the notion of simple dichotomies. All children's experiences with books need to be thoughtful. Literature should provide them with opportunities to empathize, enjoy, and connect to others, taking into consideration their proclivities, interests, and comfort.

Nonfiction has been much overlooked in the discussions of gender. Boys tend to like nonfiction and are drawn to it in libraries and classrooms. They have nonfiction selections in their desks and book bags and pore over them with their friends. This kind of reading to take away information and ideas has a certain appeal to adolescent boys that may very well serve them in high school and college. There does not seem to be the same quality of nonfiction books or attraction to it for adolescent girls, with the exception of magazines. Given the interests and strengths of youth from each gender, there needs to be a balance of fiction and nonfiction in classrooms so that both boys and girls can find their interests represented.

NONCURRICULAR LITERACIES

Research on girls' literacy practices has brought to light a range of underground or private literacies inside and outside of school that are not considered part of school curricula. These may include note writing, diary writing, graffiti writing, magazine reading, and the writing of teen zines (self-published alternative magazines). Girls engage in these underground literacies with same-aged peers as a way of developing and bonding friendships. For example, when a note is written in a classroom and passed from girl to girl to its final destination, they know who it is written to, and the informal code of privacy is in place. Girls simply do not read a note intended for someone else in their social circle; it is a way of cementing trust and relationship. It is also a way to resist classroom rules and adult authority because note passing is forbidden.

Boys' underground literacies include their engagements with video, computer, card, and figurine games. In my research with Kathy Sanford (Blair &

Sanford, 2004, in press), we documented the ways that boys enthusiastically engage in these literacies, including gaming and digital literacies, and suggested that these findings show that many boys are enthusiastically engaged in some gaming activities, and many are able to sustain their interest for extended periods of time in each game or level of the game. Even the boys whom their teachers believed could not maintain focus on a topic were able and willing to spend numerous consecutive hours playing one game, leaving it, and coming back the next day immediately to resume their focus. They kept memory records of their own progress as well as the progress of each opponent, either virtual or real. When they played with their Yu-Gi-Oh! cards, for example, they counted up and subtracted points in the thousands in their heads as they proceeded through the game. They read the symbols on the cards, knew the histories of each of the characters, and knew what each was capable of doing. They were able to remember and explain the many intricate rules of the game that they had learned by reading magazines, watching others play, trading cards, and sharing understandings among themselves. Street (2005) reminded us that in examining boys' literacies, it is essential to build on the richness and complexity of their prior knowledge and consider these out-of-school literacies not as deficits, but as connected to their sense of self and their ways of knowing and engaging in the world.

The literacy events and practices in which boys and girls participate both inside and outside of school must be examined with gender in mind. This examination should recognize that there is a wide range of literacy practices that are strengths for these children. Boys and girls should be encouraged to explore new literacy practices.

DIGITAL LITERACIES

The new literacies in this digital age are affecting children in very powerful and nuanced ways. With these shifts in technology and media, the meaning of literacy is rapidly evolving. It appears that boys are taking these up more quickly and in more depth than girls. The boys in the Blair and Sanford (in press) study embraced a great number of digital texts in a variety of forms. Their digital text preferences were similar to their interests in literature and fell into several categories or genres, with action, adventure, sports, racing, science fiction, and fantasy at the forefront. These boys' life interests tended to align with their game interests, as was evident when more rural than urban boys identified sports, car, and racing games as their favorites. These were boys who had more access to motorized and all-terrain vehicles than city boys and tended to play in all their small-town sporting events.

The boys in this five-year study were involved in playing various generations of these games for many years. They were not newly literate in these genres.

They learned to read and play them shortly after they learned to read more conventional texts in 1st or 2nd grade, and they grew out of some games and moved on to new ones. Their favorite digital texts, like their literacy practices, were continually changing.

Girls, on the other hand, appear to be lagging behind. In *Tech-Savvy: Educating Girls in the New Computer Age*, the American Association of University Women (2000) reported that girls have reservations about computer culture and are not using computers as much at home or taking advanced computer courses at school. In this report, girls asserted that they can use computers, but do not want to do so. The association concluded that girls are not keeping up with boys on today's standards of computer literacy and posed the question of what this may mean for the future. This is a very serious concern as the world and workforce become more dependent on these literacies every day. Where will this leave girls if they remain on the impoverished side of the digital divide? It is not possible to think about these digital literacies without considering the economic possibilities.

It is essential that both girls and boys be given access to computer technologies that will enhance their futures and opportunities to consider these new visual and technical literacies through a critical lens. All children need to be well versed in the power of the Internet to inform, persuade, and misinform. They need to acquire the savvy not only to use, but also to critique it.

These new literacy practices have impacted learning in classrooms, and researchers need to explore how students read these visual texts. They should explore more than just the question of whether one type of digital text is more attractive to one group or another, but also how students are taking up the writing of these digital genres. It has been suggested that as new technologies and digitized formats continue to replace books, magazines, and newspapers as the most efficient and up-to-date ways to communicate and share knowledge, those who use these technologies will have the upper hand in knowledge exchange and participation in a global economy.

Although they were very well versed in reading and manipulating digital text, the early-adolescent boys in our study were not yet constructing or writing their own digital Web sites or computer games. A few had built a simple Web page as a class project, and one boy had created a Web page at home with downloaded software. They were, however, gaining a fair degree of knowledge and/or speculating about these digital formats, how the effects were created, and what is possible. In response to a question on how games are designed, one boy explained,

Basically there's a 3-D format, and it's a black screen or sometimes a white screen, and if they were going to make a pen, then they'd have the tip here; they'd put a little dot there, a dot there, a dot there, a dot there and they'd have lines; then they

add texture, color, etc., until it was a good full image. Basically it's a lot like that. Sometimes they use 3-D models, add light onto them, and then scan them into the computer, then go from there; add things, take away things, like that. (Personal interview, April 18, 2003)

It appeared to us as we spoke with boys that they were acquiring conceptual knowledge and that as they gained more technical expertise and opportunity, they would begin to build, write, and compose in the digital world. In discussing the technological savvy of *Artemis Fowl* (the starring character in a popular adolescent fiction series), one boy clearly explained how Artemis could capture images on his digital camera, download a file to his laptop, and e-mail the data from anywhere in the world to his server at his home in Ireland, and then have access to it from wherever he was. Although this boy had never done this himself, he completely understood and was at ease in explaining the process in detail.

Microsoft Network provides an instant messaging system that has become a preferred communication tool for adolescents. Girls see it as an important place to connect with their friends; it is inexpensive, and they can text message concurrently with other tasks such as doing homework. The conversations are immediate, short, and snappy and do not require a great deal of effort. These instant messaging platforms may be replacing telephone conversations among teens as they exchange events of the day or week and pass on important notices. This genre appears to have been taken up by both boys and girls of this age and often in cross-gendered groups. The compacted and invented text gives them a genre of their own.

GENDER AND LITERACY ASSESSMENT

Although assessment has been addressed in a previous chapter, the ways in which boys' and girls' literacy practices and products are assessed need careful reconsideration in terms of gender implications. Street (2005) suggested that traditional standardized tests cannot actually measure with any degree of accuracy the extent of the child's learning, nor can they assess what learning is not being examined or recognized. Large-scale standardized tests can provide a basis from which to compare a narrow range of literacy activities—for example, reading for comprehension, writing to substantiate a perspective—but they do not begin to assess the wide range of literacy practices or recognize gender or cultural differences. These large-scale tests have in some cases shown that girls are faring better on reading and writing than boys.

This raises questions: How might test items favor one gender or another? What can standardized measures actually reveal about the literacy learning of boys and girls, taking into account race or social-class realities? These are important considerations because what is tested is often what is valued and

taught. Therefore an examination of tests is crucial. There is clear evidence to support the premise that not all girls are faring well in school and not all boys are doing poorly. A great deal has yet to be known to fully understand this topic.

Newkirk (2000) suggested that boys see school definitions of literacy as excluding their preferences and that in-school literacies are girlish. This perception may account for some of their disengagement and differences in performance scores. Girls, on the other hand, are generally thought to be more compliant when it comes to performing school tasks, more willing to follow adult directions, and better at “doing school.” This does not mean that one group is more capable than the other; rather, they may just demonstrate their learning differently.

Differential achievements are just one small piece of a much bigger puzzle. Close examinations are needed, and caution must be used not to misread gender differences. It is necessary to understand the literacies of both boys and girls and to work to ensure that all children do well; it is not enough for one group to do well at the expense of the other.

CONCLUSION

It is important not to essentialize notions of gender by putting children into rigid categories of what it is supposed to be like to be a girl or a boy. Gender is a social construction and not a biological distinction, and these social constructions come in many forms. By reducing discussions of gender and literacy to simplistic binaries, such as those reported in large-scale comparative reports, there is a tendency to perpetuate the myths created through generalizations. In addition, identifying achievement differences between boys and girls does not imply that one group has more ability in an area than the other. The diversity of masculinities and femininities and issues of race and class need to be interwoven throughout discussions of boys and girls and their literacy learning and success. There is clear evidence to suggest that schools in low socioeconomic areas have lower test scores on literacy measures than schools in areas of affluence and advantage.

It is important to challenge past definitions and work toward shaping future definitions and create purposes for literacy that are open and accessible to all students. As readers and texts change in ways that appear to be particular to boys or girls, all children must be included in all kinds of literacy practices, while being challenged at the same time. Many boys are teaching themselves to read the new digital literacies and may be gaining more experience in a range of modes of representation: print, video, and graphic images in multi-modal ways; visual and verbal; spoken and written; narrative; and display. It is important to figure out the essentials from this array that will also be useful

for girls. These multimodal literacies will need to be accessible to all children in the future.

Researchers need to explore further the literate lives of adolescents to enable connections to children's experiences in both in- and out-of-school literacies. The literacies of young people are intricately connected to popular culture, and these new forms of literacies and the cultures that accompany them need to be recognized. Teachers and parents are in a cultural lag when it comes to the new literacies and have a great deal to learn to catch up to young people. Adults can learn a lot from adolescents and need to be open to learning and asking youth to teach them.

There is a role for quality adolescent literature in middle school and high school classrooms. All youth can benefit from the experience of enjoying a story, finding themselves in the shoes of another person, and living through other people's possibilities. They also need to be able to read to acquire information and take away ideas from a nonfiction text. Good books can take readers into many experiences that they might not otherwise have in their lives and draw on their understandings of others—including books that might be considered boy books or girl books. Empathy and compassion can be evoked in a fictionalized account of someone else's lived experiences. Adventure may lead to problem-solving, and fantasy may take the reader to a place of exploring the unknown simply for the intrigue. These are experiences that are important for all children. More adolescent literature from a range of perspectives, positions, and cultures with more varied roles across all genres is needed. There is much to accomplish in moving past gender stereotypes. Both boys and girls can learn from a further understanding of each other's experiences in literature by coming to understand experiences other than their own.

All writers write best from the place they know best, and this is also true of adolescent boys and girls when they write. It is important to give young people an opportunity to write from their places of strength and explore new possibilities. If boys have fun in their expressive writing, have a penchant for action, and can use this cultural material to become better writers, this is an asset. Girls' writing preferences, which originate from their hearts and feelings, also need to be explored, valued, and extended. Rewriting a story in an unfamiliar genre from a different gender perspective could give them an opportunity to examine other ways of being.

In a world that is rapidly evolving, with new literacies emerging almost daily, today's adolescents will need to adapt and innovate to deal with these changes. At this time in their lives, young people need opportunities to explore new literacies across their various identities as students, game players, bloggers, and so on, without some being privileged over others. They need the chance to demonstrate their literacy learning in fair and equitable ways. They need to understand that there are many ways to be a girl or a boy in school and still be

successful and accepted. Young people need to realize that they will encounter many complexities in life ahead and will need to move beyond dichotomies. It is essential to model possibilities and support young people in their growing understandings.

NOTE

1. At this point, I must clarify that although I am referring here to two principal gender constructions, boys and girls, these categories are not necessarily mutually exclusive. There are children who do not tidily fit into one group or the other, but that is a discussion for another chapter.

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Part Three

ADOLESCENT LITERACY BEYOND THE CLASSROOM

Chapter Thirteen

DIGITAL LITERACIES

Cynthia Lewis, Kevin Leander, and Xiqiao Wang

In a recently published newspaper article on the use of so-called text speak or Web language, 9th-grade English teacher Lindsey Martin bemoaned how the Internet was “destroying [her students’] grammar skills,” stating, “Students cannot spell, they don’t capitalize proper nouns and they have no idea how to use commas or semi-colons” (Sarrío, 2007). Ms. Martins’s complaint was supported by other teachers in the article. Similar statements about the Internet’s negative influence on literacy are echoed across elementary and secondary school classrooms in the United States and beyond. Young people are changing the face of literacy through their online reading and writing practices. Questions about the nature of literacy—what counts as literacy? What counts as a text? Whose literacies are most legitimate?—have always been hotly contested, but new literacies have interrupted all our dependable theories about literacy practices and texts, leaving those of us who teach and study reading and writing in a quandary.

What stance should educators take on these new literacy practices and their relationship to the literacies traditionally developed in school? However educators choose to answer this question, the answers must be informed by an understanding of the actual literacy practices of young people. As teachers and researchers, we must face our own anxieties that youth often are ahead of us as writers and readers of online texts. Moreover, a key challenge in achieving a deep understanding of youth literacies is to move past the surface features of texts. For although texts do tell something, they also are often stubborn at hiding how they were made, and for whom, and toward what ends, and in

what circumstances. In short, once they arrive on the scene of classrooms, texts tell little about how they have been used within complex social practices. This ability of texts (as surfaces) to hide their own social uses and social lives seems to be all the more true with digital texts.

Literacy researchers and educators have dealt with these developments by trying to understand more about what young people do when they read and write online, attempting to learn more about digital literacies as social practices. Given a decade or so of such empirical research, much has been learned about online reading and writing practices.

In this chapter, we will discuss three significant changes in literacy practices that have implications for the teaching and learning of English and language arts in digitally mediated times. To do so, we will use examples from our own and others' research on the uses of Internet communication technologies among young people. We argue that literacy educators need to consider these new dimensions of practice in rethinking teaching and learning literacy in digitally mediated times. Technological tools cannot simply be imported into classrooms because doing so would change the objectives and motives of the activity, the roles of the young people engaging in that activity, and the group norms associated with it. One of the reasons that youth use online literacies productively is that they are very clear about these aspects of the activity. This heightened awareness leads to strategic and analytic uses of literacy outside of school. Although we believe that it would be misguided to try to replicate in school the digital literacy tools and practices that young people select to participate in outside of school, we do believe that a better understanding of the changing dimensions of literacy practice based on our own and others' studies of young people engaged in online literacies will help educators reconceptualize the teaching of reading and writing around these new dimensions of practice.

ADDRESSIVITY AND VOICE

Writers in digital environments frequently address and are addressed by multiple audiences simultaneously, and consequently, discerning expectations and social codes can be complicated. Instant messaging (IM) is a case in point. IM is a form of computer-mediated communication (CMC) that allows two or more participants to create a synchronous written conversation. IM users each have one or more lists of buddies, or frequent contacts, some of whom they regularly talk to online, and others they talk to more occasionally. The list allows users to track whether their buddies are on- or offline at any given time and talk to those who are online. In 2005, 65 percent of American teens, and 75 percent of American teens who were online, used IM, most on a daily basis. To manage the complexity of IM communication, users have to draw

on the intertextual chains (New London Group, 2000) that exist through the textual history of each exchange and the larger textual network. One of the participants in a study of young people's uses of IM (Lewis & Fabos, 2005) demonstrated her lived understanding of these intertextual chains in her ability to shift her voice and stance almost instantaneously. She would shift from sympathetic friend to casual acquaintance to flirty teen, depending on the tone and stance of her buddies, with whom she sometimes carried on conversations all at once. Although face-to-face interaction and writing offline also involves addressivity, the need to fluidly shift stances from audience to audience is unique to the dyadic yet nearly simultaneous nature of online communication.

Addressivity online often involves performing an identity that appears to be required for a particular exchange. This identity can be entirely fictional but still dependent on a careful reading of the situation, including the audience, tone, and purpose. For example, one of the young people in Thomas's (2004) study reported making conscious linguistic choices to perform alternative identities online and playfully trick her friends. Instead of gender swapping in their role-playing, however, most of these young people chose avatars that represented idealized notions of being female through their talk about appearance and the body. Similarly, in the IM study mentioned earlier, one of these young people chose to pose as blonde haired and blue eyed, in keeping with her vision of what it means to be the idealized female. These are examples of young girls being influenced by stereotypical notions of femininity. Addressivity, in this case, is not directly related to particular audiences, but to particular cultural expectations. Although such expectations and performances of gender are not limited to life online, answering the address is almost effortless in online spaces given the potential for anonymity and the relative ease of posing or disguising oneself.

Youth's performance of identities in digital environments often involves addressing a massive audience of readers and viewers through the creative use of resources from multiple media. Consider, for example, the new Internet phenomenon, YouTube.com, a tool that mediates and promotes youth's understanding, experimenting, and making of their identities, beliefs, and attitudes toward a wide range of social issues. YouTube.com is a so-called consumer media company that offers free hosting for videos. With "Broadcast Yourself" as its slogan, YouTube.com is designed to enable simple, fast, and free sharing and viewing of videos online. Among the more than 12 million videos uploaded each day, many are personal, original productions, such as home movies, video blogs, and amateur film works. It is a tool for social networking as well as a user-generated database containing a wide range of information related to users' backgrounds and motivations. Through YouTube.com and other digital tools, youth experiment with issues relevant to their identity

making and develop beliefs and attitudes toward sexuality, morality, legality, and political engagement.

Young people experimenting with materials drawn from their routine lives and from the remixing of images from various media often form very complex rearrangements of a wide array of old and new symbols and meanings. One example of remixing that has been widely circulated on the Internet is a short video consisting of edited news footage of President George W. Bush and British prime minister Tony Blair appearing to gaze adoringly at one another as they sing "Endless Love." This remix of news footage with the hit duet originally sung by Lionel Richie and Diana Ross makes a powerful political statement. Similarly, in their video blogs, youth combine a variety of genres, forms of communication, and discourses to accomplish particular effects, such as parody, humor, or social commentary.

Video-sharing sites can be good sites for investigating how youth learn to create and share their productions and how they accomplish participation and social acceptance in a community mediated through a specific technology. Finding acceptance within this community demands that users address the expectations and social codes of the community, display their knowledge of images and footages that are most *de rigueur*, and remix and parody for others in the know about the content. The user is thus a knowledgeable receiver of digital media, someone who understands the intertextual references and parodies, and, often, a dynamically resourceful producer of digital media, someone who alters the content or remixes elements of the production to make his or her own statement.

Voice in online writing is closely connected to addressivity. The fluid shifting of tone and stance that has emerged out of the need to address different audiences and discourses almost simultaneously has called into question what it means to have an authentic or personal voice as a writer. Envisioning voice as authentic or personal privileges stability across texts, rather than the dynamic, fluid concept of voice exhibited by online writers as they enact identities that depend on a running analysis of complicated online and offline contexts. Thiel (2005) studied adolescent girls' uses of IM and found that her participants presented themselves differently as they shifted from conversation to conversation with different buddies. For example, one of her participants presented herself as tempted by physical relationships with boys when talking with a girlfriend; however, a short time later, she presented herself as serious about religion and school when exchanging IMs with a boyfriend.

The technology of Internet communication is conducive to these shifts in identity. A case in point is the IM study by Lewis and Fabos (2005) mentioned earlier, in which the participant shifted seamlessly between being a sympathetic friend, casual acquaintance, and flirty teen, depending on the

nature of her relationship with each of her conversational partners. IM uses windows to display each evolving conversation between an IM writer and his or her buddy. A new window pops up with each new buddy who enters a conversation. The IM writer usually attempts to converse with each buddy as windows continue to pop up, sometimes at rapid speeds. If the writer's relationship is different with each buddy, as is often the case, then the tone and purpose of the conversation is also different. These shifts in tone—and often in self-representation, as already described—are enhanced by the technology of multiple windows. Other Internet communication technologies also add to the shifting voices that writers take up in such environments. For example, IM technologies allow users to stream in video as well as use different fonts, emoticons (symbols, such as smiley faces, to express emotions), and colors to express one's voice as a writer. Again, because conversations take place almost simultaneously, with writers jumping from window to window to sustain conversational exchanges with many buddies, it is important for users to develop dexterity in terms of writing voice or tone.

Black's (2007) study of a fan fiction writer who was an English language learner showed how the writer's sense of audience was very much connected to the voice that she took up in her writing of fan fiction. Fan fiction is fiction that is written by fans of a particular print or media series (such as *Star Trek*) or icon (such as Captain Kirk). Fan fiction includes some of the characters, settings, and plots of the original fiction, but builds on, substitutes, or otherwise alters the original works. The fan fiction writer in Black's study shifted her voice in her fan fiction about a character in a Japanese animation when she included an author's note that had both a public and personal voice, addressing specific readers with whom she had corresponded before as well as the larger group of readers affiliated with that particular fan fiction.

The hybrid nature of textuality in Internet communication also contributes to a dynamic view of voice. Often, Internet communication demands that the textuality of writing be used to perform the textual qualities of speech. This blending of spoken and written textuality results in hybrid language forms to represent the casual, insider exchanges of informal speech through written textual features. To achieve a speech-like quality, electronic writers use syntax, vocabulary, and grammar more common in speech and abbreviations to make for quick, speech-like exchanges and communicate paralinguistic features of face-to-face communication contexts.

This dynamic textual voice is significant as it relates to the kinds of social identities afforded through its use. As Thomas (2004) pointed out, "In the online context ... to write is to exist.... Writing is an essential component for performing identity" (p. 366). One of the young people in Thomas's study, Violetta, explained the strategies that she used to create interaction through

textuality (e.g., exclamation points, references to actions and facial expressions). Thomas made the link to identity performance:

What is rarely reported is that the linguistic variations of cybertalk are directly related to identity performance. Violetta revealed that her words had to look just so, and that she would vary her style of speech according to the persona she was performing. (p. 367)

The girls in the IM study by Lewis and Fabos (2005) mentioned earlier enacted identities through language that had to sound and look semiotically like speech but be accomplished through writing. One of the girls, Sam, wrote her way into the textual worlds of a new group to which she wanted to belong by hearing the cadences of their inside jokes and trying to sound right in her writing to that group. In interviews, Sam explicitly referred to her efforts to “talk like they do” when she posed as the friend of someone who accidentally got onto Sam’s own buddy list. She emulated the voice of this person to maintain the connection. “I’ll use the same exclamations where she uses them and I’ll try to talk like they do,” Sam told us. In adapting the tone and content of the anonymous correspondent’s message, Sam had to analyze how the girl’s tone worked and how it accomplished its purposes. Besides adapting her tone, Sam was also careful to adjust her subject matter according to her particular audience.

In this way, IM writers produce the sound of speech. According to another of the IMers we studied, however, this virtual speech takes on a life of its own, with adept IM writers using the disembodied textuality of writing to “sound smart and sophisticated” in ways that go beyond face-to-face. The virtual, it seems, may idealize the real, becoming the way that so-called real speech ought to sound, thus further interrupting any facile distinctions between the virtual and the real or between voice and self. Having a voice online involves performing multivocal textual repertoires with speed and flexibility. Online readers and writers are involved in the generative act of using texts in new ways by reconfiguring messages, cutting and pasting, parodying, and creating textual forms to fit their social needs.

SOCIALITY

In digital environments, writing is used far more often for the purpose of sustaining social relationships and friendships, but also for maintaining professional networks and creating learning opportunities. Some label today’s students as a Net-centric generation that has different expectations about social relations. Being raised in the “always on” world of interactive media, the Internet, digital messaging technologies, and online social networking environments, today’s students value their ability to use the Web to create

a self-paced, customized, on-demand learning path that includes multiple forms of interactive, social, and self-publishing media tools.

Short message service (SMS) mobile technologies, such as text messaging, have become a popular medium for casual online interaction in countries where technological means exist. SMS is a service available on most digital mobile phones that permits the exchange of concise, text-based messages between mobile phones. Considered by youth to be convenient, less expensive, and faster alternatives to traditional technologies, mobile technologies are popular with adolescents as they enable them to make time-shifted communications across geographical and national boundaries, make plans, and maintain contact with family and friends.

Young people's close engagement with social networking environments has also transformed their way of forming relationships, building complex communities, sharing musings and opinions, and discovering and using new information. MySpace.com and Facebook.com provide such an environment through interactive Web sites that include personal profiles, blogs, photos, music, and videos submitted by users for the purposes of networking with others who share their interests or social affiliations. These social networking Web sites affect all facets of students' campus experiences, ranging from forming social clubs and study groups, communicating with friends, keeping track of campus news, dating, or even researching roommates. It is possible to imagine a partnership between formal education and these social networking environments to facilitate collaboration and creation of multimedia projects. Some faculty members suggest that Facebook.com can be a medium for faculty, staff, and even administrators to create an easy networking space that leads to positive interaction with students.

Wikis are collaborative digital writing spaces that allow multiple authors to edit and revise the same document simultaneously. Always works in progress, wikis assume equal responsibilities among all users and represent individual as well as group perspectives. Since they both store and manage knowledge, wikis can be used in the classroom for collaborative writing projects such as group research reports or class newspapers. The fact that texts can be revised or removed without consultation requires students to grapple with ways of achieving agreement and resolving difference, leading to productive critical reading (Beach, Anson, Breuch, & Swiss, in press).

Blogging is another powerful digital writing tool that can serve as a useful platform to collect, organize, and share personal writing. As a form of journal writing, blogs value personal and dialogic expressions that are "spontaneous, subjective, exploratory, and even contradictory" (Beach et al., in press). The commenting feature helps to create conversational exchange, and critique presents opportunities for students to express opinions and creates a community based on shared interests (Watrall & Ellison, 2006). Writing in such

a community creates a sense of audience and purpose that is grounded in an enhanced understanding of different perspectives and content. Juxtaposition of inquiries, arguments, and investigations through links creates a site to examine not only consensus, but also dissonance. Such a conversation is also extended in both temporal and physical spaces. A common class blog can serve as a continuously updating teaching resource center of class materials.

In engaging these technologies, youth carry out complicated dances of online and offline relationships. They are situated *at once* within the technosocial space of the Internet and the socially embodied space offline. A few recent network phenomena have gained fast and tremendous popularity because of their capacity to accommodate this dance of online and offline social networking. First created as a campus face book within Harvard University in 2004, Facebook.com has quickly grown to be serving college, high school, university, and other network-based communities. As of December 2005, it had the largest number of registered users among college-focused sites (at over 7.5 million U.S. college student accounts created, with an additional 20,000 new accounts being created daily). MySpace.com currently ranks the fourth most popular English Web site, reporting 106 million accounts as of September 8, 2006, and reportedly attracting new registrations at a rate of 230,000 per day.

Users construct their online identities by using the multimedia affordances of such social networking technologies to perform their identities. A MySpace.com or Facebook.com user can update a profile that consists of a picture, brief biographical information, a list of favorite books and music, and an inspirational quote; one can post and import notes (blogs), photos, people tags, and comments; one can share with friends updated, personalized news stories through the News Feed and Mini Feed features; a user's status can be identified (at home, in exam, in dorm, etc.). Social interactions are enabled as individuals search for classmates, colleagues, and friends. Students form their own communities by adding and inviting friends to join existing or newly formed groups or can "poke" someone online (a way to say hi to someone that is not a mutually accepted friend) to make a new friend. Through postings, uploads, inside e-mails, and forums, students carry on conversations, share audio and video files, and catch up with each other. Young people who regularly use social networking Web sites can also use these digital environments to realize offline social functions such as creating social events, sending out invitations, and making announcements about upcoming social events. Although they usually use such technologies to maintain existing social relations, they can extend their social network by taking advantage of the mobile and media services. For example, MySpace.com hosts films, songs, and other works from various musicians, filmmakers, and comedians. Also, MySpace.com is currently working with American mobile phone provider Helio to develop MySpace Mobile, a service enabling one to use a cell phone to access and edit one's

profile, communicate with other members, and view others' profiles. This process, already popular in Japan, is called *moblogging*.

In their article on the past and future of Internet research, Leander and McKim (2003) destabilized the offline/online binary that underlies much research on adolescents' uses of digital media and argued for methodologies that trace technosocial-embodied networks across contexts and bounded notions of time and space. Merchant's (2001) study of girls' participation in Internet chatrooms made the further point that while buddies actually chat online, providing advice and support to offline friends, they often converse online about things that they would find difficult to take up in face-to-face conversation. He illustrated this point with a conversation between a boy and a girl in which the girl advised the boy that he was "crowding" the girl he fancied, something that would be difficult to say in person. Writers in the IM environment are constituted in voices, their own and others, that merge and overlap within and across contexts as the writing self is addressed by and answerable to others.

In a large-scale study conducted by researchers in the United Kingdom, Livingstone and Bober (2004) investigated uses of the Internet among young people (ages 9–19) to find out how the Internet is shaping family life, peer cultures, and learning. These researchers found that one-third of the young people chatting with friends online, more often than not local friends, found this to be at least as satisfying as talking face-to-face. Many of these youth used Internet communication to engage in identity play involving some pretense about themselves (their age, appearance, etc.). Rather than thinking of offline and online spaces as separate social worlds, researchers have found that these spaces intersect and overlap. In fact, the maintenance of offline relationships is a documented feature of online communication (Leander & McKim, 2003). For many people, writing online is used so often for the purpose of sustaining social relationships that its ordinariness is taken for granted as a part of the fabric of daily social life (Wellman, 2004).

Leander and McKim (2003) suggested that examining how digital texts travel or circulate can lead to insights about the kinds of practices and relationships a particular technology affords. Being social online often means monitoring where friends are in online space. A simple and ubiquitous way of accomplishing this goal is through the commonly asked question, Who else are you talking to?, resulting in chat buddies having indirect exchanges with a wider range of people through other buddies (e.g., "Tell her ..."). This simple question allowed the question asker to have some degree of knowledge about and control over the movements and conversations of buddies outside of the immediate dyad.

In the IM mentioned earlier (Lewis & Fabos, 2005), conversations easily became part of other conversations within a given IM session. Participants

routinely cut and pasted elements of one conversation and shared them with another buddy—often without disclosing their actions with the first buddy, who may have done the same with someone else. Several of the girls also tried surreptitiously to discover who was currently talking to whom and what they happened to be talking about by IM inquiries to friends and asking them to report back. For example, one of the girls would report to her girlfriends to tell them about her conversations with boys, sometimes cutting and pasting the most important parts for her girlfriends' pleasure.

Being a competent participant in these patterns of circulation requires quick, in-process thinking. It requires that users swiftly assess the nature of the circulating text, the purpose or agenda that led to its circulation, the audiences involved, the allegiances it may foster or damage, and so forth. Participants perform identities in relation to these circulating texts. These patterns of circulation function to reinforce social connections, creating bonds between particular users, sometimes at the expense of others, adding intrigue to the IM experience.

In her book on young people's uses of new media, Livingstone (2002) pointed out that Internet spaces are more often "based on bricolage or juxtaposition" (p. 3). As already discussed, Internet sites blend and remix old and new images, sounds, and words to achieve particular effects. This kind of creativity, much valued in Internet spaces, is a representational style keyed to new ways of being and thinking (Lankshear & Knobel, 2003). I would argue that these new ways of being and thinking are related to new practices of sociality, which depend on a cut-and-paste, remixed style for production and exchange.

SPACE AND TIME

One common yet difficult to understand aspect of emerging digital literacy practices is how they transform experiences of space and time. Even from the advent of the early public Internet, there was a sense that experiences of space and time might shift with a resource that crossed national and cultural borders and moved information and communication at such speeds. Some spatiotemporal changes influenced by the Internet may not have been predicted in advance, however. For citizens of small countries such as Trinidad, for instance, we might have predicted that practices of national identity online would have been swamped by the overwhelming practices of more powerful nations, cultures, and corporations. As documented in the work of Miller and Slater (2000), however, despite the manner in which Trinidadians are spread across the globe and do not all share a common physical geography, and despite the ways in which powerful forms of globally circulating popular culture may be seen as a threat to local cultures, Trinidadians use the Internet to practice and reinforce their national identities, and they consume the Internet as a

source of national pride and national identification. For example, the home pages of Trinidadians are often replete with core nationalistic symbols such as flags, crests, maps, and national statistics. Web pages, online chat, and news groups are also used to practice cultural identities through language play (*lym-ing*), Trini-style jokes, and even explanations for outsiders to help them learn about Trinidadian culture.

Trinidadians—including those physically located within the country as well as those who are digitally connected, living thousands of miles abroad—celebrate national identification in ways that run counter to the threats posed by some early theorists of the Internet and global cultural shift. One primary threat, for example, was that nation-states, regions, or other geographical-political places might lose their local identities and have them substituted with global forms of cultural identification (e.g., Castells, 1996). Currently, the picture is much more complex than this, as we see the Internet being used to reinforce national and community identities, even as it is used to spread global cultural practices, forms, and identities.

Lam (2004) developed case studies of Chinese immigrant youth, analyzing their school-based and online literacy practices. This work was, at least in part, motivated by seeing different social-spatial arrangements among Chinese immigrant youth online than are possible in school. For instance, while these youth often experienced de facto segregation in school as well as social disparagement for their accented speech, in online environments, such as the Hong Kong Chat Room, they practiced a very large degree of freedom to shift between English and romanized Cantonese. This blend of language use and social alignments created a social space that allowed much more free play of identity and literacy development than did school contexts for these students.

The mismatch between how youth experience space and time in school and out of school in online contexts is evident in a broad range of literacy practices and even confuses some of the received views of divisions between such practices, including orality in contrast to literacy. As discussed earlier in the section on addressivity and voice, using writing to talk in real time (IM/chat) challenges the oral/literate divide as well as assumptions about context being less important in writing than in talk. As Merchant (2001) argued, “traditional distinctions between speech as synchronous face-to-face communication in a shared location and writing as a means of communicating through time and space are challenged by new technology” (p. 299).

Jones (2005) discussed how digital literacies become overly “schooled” in his discussion of Hong Kong classrooms. Schooling can be understood as the control of space and time from a particular mind-set and group of schooled practices. To understand this mind-set and associated practices, it is necessary to look beyond the obvious walled divisions of classrooms and the separation

of the school day into 50- or 55-minute periods. Jones contrasted the school's perspective as essentially monochronic (treating time as linear and tangible, and divisible), in contrast to the students' perspectives, as informed by digital culture, as essentially polychromic (seeing time as more fluid, layered, and simultaneous). In the monochromic orientation, one action occupies time to the exclusion of all other actions, an approach to activity that would be quite foreign to many cultural contexts, including much of the modern workplace (Gee et al., 1996).

Jones's (2005) findings in Hong Kong closely parallel those of another study, which analyzed the practices of girls in a private school where a wireless network had been installed and the girls carried laptops with them from class to class and to home at night (Leander, 2007). Despite a very large investment by the school and parents into the laptop program, Leander found that the following principles of space and time overwhelmingly described how the laptops were used in the school:

Defined plans precede resources and activity; students and teachers know what they need or are seeking in advance.

Sequential activity is dominant, and everyone follows the same sequential path.

Asynchronous communication is primary to synchronous communication (e.g., e-mail or Web searching is more "schooled" than instant messaging).

A single space is dominant (and under surveillance) for each task; "task" is monospacial, and "off-task" is partially defined as departure into another social space.

Public social spaces, including the Internet, must be bracketed for student use; school needs to produce kindergartens of public spaces for students to understand them, learn within them, and be safe within them.

Material print texts and print spaces (the built environment) are primary and are authorized, while virtual texts are unauthorized and supplemental.

The Internet is primarily a tool for information rather than a tool for communication. Information and communication technologies (ICTs) are primarily ITs in school.

Given this background, it may come as no surprise that the most prevalent literacy practices in using the laptops at the school included the following:

writing process pedagogies

students' note taking

an online newsletter for the school community, produced by the central office

distributing assignments and submitting work

keeping absent students up to date

quick searches for online information

With the exception of the last two practices, the most common uses of the laptops either did not require a wireless network or were simply online versions of former print technologies and distributions (e.g., the school newsletter).

In rethinking schooling and its relation to digital literacies, it may be necessary to place less emphasis on the introduction of new tools and networks and reconsider how online practices challenge very familiar and well-schooled experiences of space and time. In online contexts, plans often develop within activities, and people seek out materials they need in the very course of their action. Moving across multiple, simultaneous activities is also often considered normative, as evidenced in the earlier section on IM. As such, synchronous communication or other simultaneous activity involves monitoring and responding to fluctuating demands of different activities as they emerge over time, rather than merely planning in advance. A single social space is often not considered dominant. Hence digital environments are often developed to increase the movements of participants across different fields of action and communication, rather than keeping everyone on a single, stable task. Another key difference is that information seeking and communication are highly integrated in many digital practices. Whereas in school, information seeking is often set apart as a special activity of “research,” in online practices, the social space and time of research is often highly integrated into the space and time of communication as a relatively seamless movement.

Because much of the conversation around space and time and digital literacy practices can become quickly abstract, in the following example, we take you briefly into one youth’s play of a massively multiplayer online role player game. We use this example from research (Leander & Lovvorn, 2006) especially to make evident how gamers often experience a macro view, or big picture, of their current activity, while simultaneously experiencing a micro, or small picture, view. This dual view stands in stark contrast to that of school, where students often are only aware of the small picture and are not clear on its relation to top-level goals.

In this case, we focus on 13-year-old Brian’s use of a skills screen and experience points (XPs) in the game *Star Wars Galaxies: An Empire Divided* (Lucasarts and Sony Online Entertainment, 2003). The skills screen and XPs were not merely passively present in local activity, or referred to as “summaries” following activity, but were made to circulate constantly in the midst of the real-time play in such a way as to facilitate an “active, critical learning principle” (Barton et al., 1999).

During the course of his first three weeks of play, Brian became increasingly involved in monitoring XPs, skill acquisition, and title or profession acquisition. *Profession* in the game, as described in the guide packed with it, refers to a “collection of skills and titles.” In creating Tiombe, his game character, or avatar, Brian initially selected the profession of brawler, but after a few days of game play, he began to direct his effort to what is termed a *hybrid profession*, or one requiring the player to attain the titles of Master Marksman and Master Scout. (The game guide lists 25 different possible elite professions and

hybrid professions for game players to pursue.) Skills screens consist of 16 boxes, distributed in four columns, each one of which describes a skill that one needs to complete en route to the chosen profession. When a particular skill is completed, the color of the box listing that skill changes on the chart. To become a Master Scout, a player needs to fill in four skill levels in exploration, trapping, hunting, and survival. In his third week of game play, Brian's skills screen told him that he had yet to demonstrate skills in Survival IV: Special Techniques, Hunting III: Trandoshan Methodology, and four other skill sets (10 of the 16 skills completed). Thus the skills screen serves a dynamic model of identity-in-the-making.

In Brian's play, and in particular, during the hunting episodes, he repeatedly shifted his perspective between the immediacy of Tiumbe in the scene of action (typically, a hunt) and the hypermediated perspective given by the skills screens for Master Scout and Master Marksman. The skills screens functioned as a record of Brian's history in the game that was called up into the present. Brian's after-hunt talk—what Barton et al. (1999) would call his “metalevel thinking”—included his thinking aloud for the observing researcher and his chat with hunting partners. These conversations were dominated by self-evaluation concerning how many XPs he had just earned, and of which type.

On the skills screen, the past actions of Brian translated into XPs and then retranslated into skills—mobilized, organized on a chart, and indexed as a particular form of becoming. The game, in this manner, was recruiting Brian not just as a generic player of Star Wars Galaxies, but as a player building a particular, organized set of experiences, distributed and yet coherently organized with representations. The skills screens were also a form of prolepsis (Wertsch & Stone, 1985) or projected identity, a particular account about who Brian might become in the future in relation to his avatar. These screens presented a tidy and colorful version of a hybrid actual and potential life timeline and could be pulled up instantly with the Control + S keys.

The skills screens influenced Brian's activity in a number of ways. For instance, on one occasion, Brian was hunting (through his character Tiumbe) with a friend, Ben. Brian explained that he was hunting that day with a pistol, rather than a more appropriate rifle, because he was trying to get more pistol experience points. In this case and many others, Brian's decisions about particular weapons or traps to use, or game to hunt, were guided by the skills screen and not by what might be considered to be practical, commonsensical, or a most efficient means in locally embodied activity; rather, the skills screen, and its own particular sensibility for advancement, structured goals and sub-goals that influenced Brian to shape his experiences in particular ways that would “give good experience,” where *good* was defined as filling in particular slots for future goals.

FINAL THOUGHTS

In the research we have conducted and in our reading of others' research, the three changing dimensions of practice described in this chapter—audience-voice, sociality, and space-time—are central to adolescents' uses of digital literacies. We would argue that these changing practices are more fundamental to reading and writing online than any change in tools (journal to blog) or conventions such as those that the teacher at the start of this chapter holds dear.

If educators hope to make school literacy more engaging for students and more meaningful to their present and future lives in a digitally mediated world, then they need to understand the shifts in practices and belief systems that have taken place and consider how these shifts should inform the teaching of reading and writing. The research we reviewed for this chapter can better inform these shifts in practice and the fears associated with them. The process of researching digital literacies today is much like the beginnings of writing research some 50 years ago. We are, in many ways, witnessing the making of a discipline (which is, of course, interdisciplinary at its core). As such, it will involve reenvisioning what will count as literacy in digitally mediated times and how new conceptions should shape the teaching and learning of literacy in schools.

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Chapter Fourteen

LINKING POPULAR CULTURE TO LITERACY LEARNING AND TEACHING IN THE TWENTY-FIRST CENTURY

Margaret C. Hagood

Literacy Rap

It's not like it's literacy that we hate,
It's all those methods that are outta date.
Give us something we like to do,
And you better believe we'll succeed too.
Before school's been just a bore,
And language arts is always a chore,
Then some teachers gave us what we're lookin' for.
We love hip-hop music and rap,
Not some old worn-out textbook full of crap.
If you'll only teach us using what we know,
You'll see our literacy knowledge really start to grow.
We like using African-American Vernacular,
But no one at this school thinks it's so spectacular.
Just give us a chance to teach you how to rhyme,
And we'll learn about literacy while having a good time.
If you'll start using hip-hop in our class,
We'll be sure to come and sure enough we'll pass.
Somebody give me a rhythm fast or slow,
Let us rhyme and let us start to flow.
(Beat Box)
Teacher, look I'm an in-divid-ual,
So quit using practices that are so re-sid-u-al.
Believe it or not, I'm smarter than you'd know,
Give me a shot, and I'll let it show.
Old school practices are to blame,

They treat everyone as if they are the same.
All right, here I stand, ready when you are,
Let's get together and change the way things are.

Rachel Kahn, an undergraduate preservice teacher in an elementary education program, wrote this rap at the end of a semester-long course on teaching literacy in the twenty-first century. While in this class, she learned that literacy is all about the social context and must be coupled with students' interests and experiences to be meaningful to them. If students cannot, do not, or will not connect to the text and content being taught, then they run the risk of disconnecting from school and from learning the literacy content important for success in school.

This chapter discusses how to teach literacy in schools while valuing the personal literacies that students bring with them. This chapter covers three points. First, I describe the current context of teaching literacy in the United States. Then I examine how the teaching of literacy is enhanced with the inclusion of students' literacies, as seen in various literacy activities. Finally, I share examples of how to draw from students' out-of-school literacies related to popular culture to understand the connections to school-based literacies and classroom instruction. Assumed within this discussion is the premise that the educational process can be enhanced when teachers learn about the everyday lived contexts of their students' lives.

WHAT'S THE BIG DEAL ABOUT STUDENTS' LIVES?

U.S. classrooms today are more diverse than ever and are projected to become more so. Not only are there significantly more children in schools today than compared to populations from 1970, but the student population is more diverse (Feller, 2005). In 2005, nearly 20 percent of the U.S. population lived in a household where a second language (other than English) was spoken (Provasnik & Dorfman, 2005). Also, 22 percent of students had at least one foreign-born parent, including 91 percent of Asian children and 66 percent of Hispanic youngsters (Feller, 2005). That number differs tremendously from the student population of the 1970s, where only 2 out of 10 students recorded any status other than white. As of 2003, the kindergarten through grade 12 population in U.S. schools comprised 60 percent white non-Hispanic and nearly 40 percent minority (nearly 16% black, nearly 18% Hispanic, 1% American Indian/Native Alaskan, and 3% Asian/Pacific Islander; National Center for Education Statistics, 2006).

The teaching profession in the United States is faced with a huge dilemma. In contrast to the rich ethnic and racial diversity of the population of students prevalent in U.S. classrooms, most teachers are ill prepared to teach children with diverse cultures, languages, and academic abilities. Currently, the teaching

population in K–12 U.S. schools is 75 percent female (Provasnik & Dorfman, 2005), and 83 percent of all teachers are white, while 17 percent are minority (National Center for Education Statistics, 2006). In short, most teachers are white and monolingual (Davis-Wiley, 2002). The experiences they draw on to teach their students often differ widely from students' own lives. One such area of difference involves students' multiliteracies. Multiliteracies include both a multiplicity of different forms of communication and media and the cultural and linguistic diversity of the ways that learners use these literacies to live and work in their communities (Cope & Kalantzis, 2000). A specific strand of these multiliteracies is considered *new literacies*.

New literacies have been conceptualized in many different ways. For the purpose of this chapter, I implement Lankshear and Knobel's (2003) definition of new literacies based on two overarching categories: (1) posttypographic new literacies associated with digital literacies and (2) "literacies that are comparatively new in chronological terms and/or that are (or will be) new to being recognized as literacies" (p. 25). These literacies may or may not have anything to do with digital technologies. It is this second category of new literacies, and specifically the literacies associated with popular culture, that I will address in this chapter.

Popular culture is the culture of the people. It differs by groups of people and comprises the daily practices that hold people together. It can include any number of texts, from music to clothing to entertainment (such as movies and sports) and literature. People use popular culture as a way to connect with others, to be a part of a group, and to take on identities and to construct their own perceptions of self or ideas about who they would like to be through their uses of popular culture. Often contrasted with the literacy practices considered as high culture that are found in school curricula (e.g., reading Shakespeare, listening to Bach, creating realistic art), popular culture is seen in conjunction with the mass circulation of texts and ideas, which run counter to school-based literacies that address high culture (see Alvermann & Xu, 2003).

The popular culture texts children use in the twenty-first century are the new literacies texts of today's learners. From a new literacies perspective, it is no longer appropriate to think of reading as the ability to read print-based text. Instead, literacy must be understood in light of the kinds of texts children use on a daily basis. These texts include television, Internet, movies, music, magazines, text messages, and video games. Children spend an average of six and one-half hours a day using these texts (Rideout, Roberts, & Foehr, 2005).

Today's teachers must consider these literacies and teach literacy standards with all sorts of texts (print, audio, visual, Internet, video, etc.) and use these texts to help children understand, construct, and create comprehension of the world around them. Thus a broadened notion of text—one that encapsulates texts of popular culture—acknowledges how the subject of *reading* has shifted

to the subject of *literacy* and has changed for students. Rather than focus solely on reading and writing print-based texts, an approach with new literacies builds on students' out-of-school competencies in all literacies: reading, writing, listening, speaking, and viewing. Many of these literacies are associated with popular culture.

Often, teachers assume that their students' out-of-school literacies do not reflect valid school-based literacy practices. Teachers rarely connect students' interests in and uses of media and popular culture texts to their in-school reading abilities (Vasquez, 2003). When teachers do not realize the sophisticated literacy competencies that their students exhibit in out-of-school contexts, they miss valuable opportunities to tap into the out-of-school literacy practices that students have at their disposal. Moreover, teachers often overlook important literacy competencies that could assist in developing their students' in-school reading performance.

Research shows that many teachers are unaware of new literacies and the best practices that couple learning strategies with students' sociocultural literate identities to improve their literacy performance (Marsh & Millard, 2006). Research suggests, however, that when teachers understand and respect students' cultural backgrounds and draw on their out-of-school literacies, they can build on students' cultural resources to improve their academic performance and higher-order thinking skills (Mraz, Heron, & Wood, 2003). For example, Brown (2003) documented how urban teachers designed culturally responsive styles that included showing care for all students, while at the same time acting with authority. Brown further noted the importance of using communication patterns that matched students' cultural backgrounds.

More specifically, research has shown that when teachers draw on adolescents' out-of-school literacies as scaffolds for learning, students' in-school reading interest and proficiency increase significantly (Hull & Schultz, 2002). For example, Morrell (2002) drew on his urban students' cultural backgrounds and interests to improve their comprehension of poetry by relating the genre to their competencies with understanding hip-hop culture. Chandler-Olcott and Mahar (2001) drew on adolescents' interests in writing fan fiction (author's use of published texts for the jumping off point of their own creative writing of a new story line) to teach them how to write particular academic texts. Other research in new literacies has addressed how using adolescents' out-of-school media and popular culture interests improve their engagement with and uses of in-school learning tasks (e.g., Guzzetti & Gamboa, 2004; O'Brien, 2001; Skinner, 2006).

Another challenge in the literacy classroom is the perceived or real disconnect between teachers and students (Noguera, 2006). This disconnect is often related to issues of sociocultural identity (e.g., race, class, gender, or ethnicity) and to the mismatch between literacies used outside of school and those that

are taught and valued in school (Mahiri, 2004). A new literacies perspective recognizes that students' identities are closely tied to their out-of-school and personal literacies (Gee, 2000), which they use to build relationships with others and to demonstrate their literacy competencies among peers (Dimitriadis, 2002).

So what does all this mean? Teachers need to be more aware of and in tune with students' out-of-school literacies, and those specifically related to popular culture, to help them make connections to in-school literacies and standards that must be taught.

CONNECTING THE NEW TO THE KNOWN: IT IS REALLY NOT A NEW IDEA

Attention to students' out-of-school literacies—their new literacies—in school is actually not novel or unusual. The idea of bridging students' own lives and knowledge with those of school curricula standards is not unlike other well-known, respected, and successful approaches. Examples such as the use of the funds of knowledge language experience approach and invented spelling all point to ways to connect in- and out-of-school literacy competencies for teachers' and students' benefit. Below, I briefly define and describe these approaches and then connect them to approaches of acknowledging literacy competencies through students' popular culture interests in schools.

The Funds of Knowledge for Teaching Project (Gonzalez, Moll, & Tenery, 1995) is a well-known and supported research design that helps teachers better understand their students' literacy lives. Begun in Arizona, this project was designed to help teachers connect better with students. Teachers conduct home visits for the sole purpose of identifying and documenting the repositories of knowledge used in Latino homes so that this information can augment and enrich classroom practices. Classroom teachers use ethnographic research methods whereby they study closely and in depth the child through home context observing, interviewing, and reflecting on their detailed notes taken to glean a deeper understanding of the child's and family's multiliteracies.

The teacher researchers in the project found that these home visits, coupled with their reflections from regular meetings with other teacher researchers, gave rise to transformative shifts in relationships between teachers and parents and ultimately between schools and homes/communities. What teachers found through their inquiries into students' out-of-school literacies became known as funds of knowledge. *Funds of knowledge* refers to historically developed and accumulated strategies (e.g., skills, abilities, ideas, practices) and practical bodies of knowledge that are essential to a household's functioning and well-being (Moll, 1994). Thus funds of knowledge are central aspects of

life in the home and are the tools children bring to school for understanding and engaging in a different environment.

The concept of using children's personal, out-of-school literacies both to understand their rich literacy lives and to connect with school-based literacy practices has been used in other projects, too. For example, Dworin (2006) found that 4th-grade Latino students in a bilingual classroom were more successful with school-based literacy writing tasks when prompted to write stories that involved their home lives and use of their native language. He noted that the children's biliteracy to write in both Spanish and English was a central social and cultural tool in the process that made the assignments relevant to their lives, facilitated their comprehension, and ultimately, promoted their writing abilities.

A second approach that has been well regarded and used in early childhood literacy instruction as well as with English as a second language (ESL) students is the language experience approach (LEA). This approach was developed almost a half century ago as a means to capitalize on students' oral language to connect to writing (Dixon & Nessel, 1983). A LEA draws on students' natural language, which has developed in their out-of-school lives, and on their language development to facilitate school-based literacy activities. This approach to literacy instruction values children's desires to discuss the matters of their world. A more knowledgeable other (the teacher) then scribes the students' words, helping the children see the relationship between speech and print. It is a small steps approach to help the students see the connections between their world and schooling, starting with their overall ideas, then moving on to spoken words, and ultimately to printed messages. These small steps always begin with the students' thinking, which is most often a reflection of their out-of-school identities and experiences. Like students' funds of knowledge, this approach validates students' literacy tools and resources to engage in the print-based literacy activity. The teacher in this approach provides the support for the students, assisting them in their thinking and writing students' thoughts.

This approach to literacy instruction is prevalent in early childhood classrooms and with ESL students, where children have much to add orally to the literacy discussion but do not yet have the conventional print skills to relay their detailed thoughts in writing. This approach has also been successful for struggling readers and writers. Fisher and Frey (2003) found that through a gradual release of responsibility, struggling 9th-grade students made significant gains in their reading and writing abilities over a semester. In this class, the authors began using LEA to help students begin writing and focus their thoughts. What they found was that the students' discussions before writing often related to their personal lives, their cultural identities, and their views of the world. Using LEA allowed the teachers to work with the students' natural

language and help the students translate oral language conventions into standards-based print conventions.

Finally, this approach is helpful when teachers are working with students of various backgrounds to ascertain the personal connections that the students make to the text (Dorr, 2006). As Dorr found when working with 3rd-grade students, language experience helped the teacher grasp the students' background knowledge and connect their prior experiences with the information to be written. Bringing together students' personal, out-of-school literacies with in-school writing offers opportunities to create meaningful connections between individual learners and course content.

A third approach that capitalizes on students' own knowledge to connect to schooled, conventional modes of communication is the use of invented spelling in classrooms. Invented spelling (also known as developmental spelling) has become a method for assisting children in spelling development, while also fostering their writing. In this approach, researchers and teachers let children show what they can do and what they know, rather than what they have not yet mastered. Clark's (1988) research indicated that children's writing and the ability to spell words conventionally are developed by invented spelling. Closely connected to this positive emphasis is the idea that children are empowered by teachers' acceptance of their invented spelling. They are able to write purposefully and with communicative intent from the very beginning of school (Sipe, 2001). When students use invented spelling in their writing, they bring to bear their current understanding of sound and letter relationships. The students' approximations of conventional spellings are accepted by the teacher, while at the same time, the teacher must assist in furthering students' understandings of the principles of spelling (Bear, Invernizzi, Templeton, & Johnston, 2003). In this way, invented spelling shows the developmental process of learning to write conventionally. The teacher does not just accept the students' approximations, but rather uses students' spellings to teach and assess phonemic awareness and regular phonics patterns, while also assisting the student in identifying key sounds or patterns that will be addressed to spell conventionally (Gentry, 2000).

All three of these approaches to literacy share a few common traits. First, all strive to connect children to school-based literacy learning, and more specifically, to affirm children's cultural identities and help them understand their experiences in relation to school practices. Second, all share a foundation in the sociocultural nature of knowledge development and the connection between personal identities and school identities. These approaches recognize that children's broad base of knowledge and experiences comes first and, primarily, from their everyday lives, and not from the classroom. Third, teachers in all these approaches have a responsibility to help bridge students' out-of-school literacies to help students see connections to their in-school literacy learning. In short,

educators who enact these practices believe that it is crucial to connect course content to students' lives.

These premises are also central to the premise of studying children's literacies related to popular culture. Often adults, and consequently, children, take a narrow view of literacy and think that literacy only applies to reading and writing print-based texts. With the prevalence of this viewpoint, children begin to believe similarly, and the literacies of reading, writing, listening, speaking, and viewing outside of school are seen as subordinate to school texts and are likely to be perceived not as the reading of texts at all, but as visual and auditory entertainment. Actually, research has shown that students' identities and self-perceptions are often tied up with out-of-school literacy interests (Chandler-Olcott & Mahar, 2003; Mahar, 2003). If those interests are only engaged and expounded on in out-of-school contexts, children often lose motivation to engage with literacy activities in school.

TEACHING USING POPULAR CULTURE AND YOUTH CULTURE

Many literacy researchers and educators advocate for making use of children's personal literacies, promoting different types of literacies as strengths, rather than as deficits (e.g., Au, 1993; Heath, 1983; Moll, 1994). One of these forms of personal literacies happens to be popular culture. Children use popular culture in their everyday lives to create meaning of the world and of themselves. Students' interests in popular culture reflect their cultural and social perceptions and give insight into students' identities, both those used at school and those used outside of school.

What are the connections between popular culture and school-based learning? What follows is a description of a preservice teacher candidate's popular culture project, which was for partial fulfillment of a literacy course for teaching in grades 2–8. A preservice teacher's final project using the televisual text *The Suite Life of Zack and Cody* illustrates the connections between out-of-school and in-school literacies. *The Suite Life of Zack and Cody* is a sitcom that appeals to children between the ages of 8 and 14 and stars a set of adolescent, white twin boys who live in an upscale Boston hotel as a result of their mother's job there (Kallis & Geoghan, 2005).

Teaching Literacies Grades 2–8 is a course that I teach to students who are studying to become classroom teachers. In this course, students learn about new literacies theories, research, and related literacy instructional practices and engage in several new literacies projects. One project includes the in-depth study of children's out-of-school popular culture literacies and connections to in-school literacy standards. During a 14-week field experience that meets for three hours once a week in a local urban school that is coupled with the course, class participants study children's popular culture lives. Goals of this project include devel-

opment in several areas: (1) ethnographic inquiry of children's popular culture interests, (2) reflective analyses of similarities and differences between teacher and student identities related to their popular culture literacy interests (based on age, race, gender, and ethnicity), (3) in-depth research on one popular culture text that is selected from the children's interests but is relatively unknown to the teacher candidate, and (4) analyses of the popular culture texts for relations between literacies used with the text and school-based literacy standards.

Preservice teachers begin this project by conducting a survey. They first answer the survey themselves, then they query the children in their field placement classroom, and finally, they ask their cooperating teacher the same questions, recording the answers on a questionnaire table (see Table 14.1).

Afterward, the preservice teachers analyze the similarities and differences between and among the groups, examining how identities of each of the groups (preservice teacher, students, cooperating teacher) factor into each group's affinities for its popular culture interests. Preservice teachers must analyze the data to see how much or little they have in common with their cooperating teacher and with the children they have to teach that semester.

Table 14.1
Popular Culture Survey

Popular Culture Survey			
Your name _____ Date: _____			
Student demographics: ___ female ___ male School: _____			
Races represented: _____ Grade level _____			
SES represented: _____			
Your interests	Students' interests	Cooperating teacher's interests	Analyses of similarities and differences
TV shows			
Movies			
Music			
Best sellers			
Magazines			
Web sites			
Video games			
Trading cards			
Other (computer, shopping/fashion, hobbies, sports)			

One example illustrates this process. Elizabeth was a white, middle-class, mid-twenties preservice teacher whose field placement, which was coupled with the literacy course, was in a combined 4th/5th-grade class in an urban, public charter school. The classroom teacher was a 60-year-old African American woman. Of the 17 students in the class, 11 were female and 6 were male. All were African American. From the survey data, Elizabeth found few similarities between her students', her cooperating teacher's, and her own popular culture interests. Of all the categories, she shared overlapping interests with her students in music, magazines, and Web sites, but really shared no interests with her cooperating teacher. Likewise, the cooperating teacher had no similar interests with her students. Elizabeth's analyses revealed that the differences in preferences likely resulted from differences in gender, age, race, and ethnicity.

In the next part of the project, the preservice teacher candidates choose a popular culture text from the students' survey, one that is unfamiliar to them. They spend several weeks researching this text (which could be a print or media text). They interview the students in the classroom, asking and recording answers to the following questions: (1) What do you like about this text? (2) Who uses this text with you? (3) What don't you like about this text? (4) Who might not like this text? Why do you think that?

This source of data gathering helps preservice teachers determine how critically aware students are of various identities and engagement with the text. For example, the preservice teachers must consider from the interview how aware the child is of multiple perspectives of who might be offended by a text or might not like it because of a person's affiliation with a particular identity (e.g., older people might not like a Disney sitcom because they have a different sense of humor).

Afterward, preservice teachers research the students' text on their own, as part of their out-of-school literacy practice. They watch related movies and/or television shows, read reviews, blogs, and magazine and newspaper articles, listen to podcasts, play video games, surf the Web, and discuss the text with others (children, teachers, parents) to develop a deeper understanding and multifaceted perspective of the text. They record their findings in a learning log, describing how they researched the text, their findings from their research, when they used it, for how long they engaged it, and what they thought of it.

Elizabeth chose the television show *The Suite Life of Zach and Cody*. In her learning log, she wrote,

Zach and Cody are twin, White boys who live in a hotel. The boys are raised by their mother (also White), their dad has appeared in one episode. The hotel is the center of all the action. It has a variety of characters that either work or live in the

hotel. Maddie (White girl) works in the hotel and is the typical girl next door. Landon's father owns the hotel, and Landon (White boy) is spoiled. Both Maddie and Landon are friends with Zach and Cody. The story follows a common story line of plot, setting, character development, problem, and resolution.

When interviewing a group of students, Elizabeth recorded the following:

ELIZABETH: What do you like about *The Suite Life*?

STUDENT: Zach is funny, does crazy things and a funny dancing thing [which he demonstrated]. Cody is smart, talented and like being the school leader. Cody wanted to be the president, and Zach won. Landon has a lot of credit cards and likes clothes.

ELIZABETH: Why do you like this show better than other shows?

STUDENT: Not boring, like news, and everyone is nice to everyone.

ELIZABETH: Who do you watch it with?

STUDENT: When I go to nanny's house [grandmother]. With my mom and brother.

ELIZABETH: What don't you like about the show?

STUDENT: Cody tries to be president and Zach takes over.

ELIZABETH: So you don't like that particular show?

STUDENT: No.

ELIZABETH: Are there many black people in it?

STUDENT: No. Oh, Mr. Mosely, the hotel man.

ELIZABETH: Is that OK with you?

STUDENT: Yeah.

ELIZABETH: Are there a lot of adults?

STUDENT: No. I want more kids than adults.

ELIZABETH: Who might not like *Suite Life*?

STUDENT: Nanny doesn't like it because they sing and talk too much.

ELIZABETH: Anyone else?

STUDENT: My teacher.

ELIZABETH: Why?

STUDENT: She don't like the comedy shows like that cuz she don't like too much little kids. It's a boring show for old people.

Preservice teachers then use their findings from the interviews with students and their research on students' text choices to analyze the kinds of literacy activities children engage in when they use the texts in out-of-school settings. Then they take the children's out-of-school uses and connect the text to curriculum standards. They engage in this portion of the project to understand the implicit literacy links between out-of-school and in-school literacies and to better understand how students engage literacies with texts beyond reading and writing print. Finally, they use this analysis to consider ways that they can assist their students in connecting school-based literacy standards to students' personal literacy competencies, which are often ignored at school.

Table 14.2 is an example of Elizabeth's analyses of out-of-school literacy uses of *The Suite Life of Zach and Cody* compared with the state standards and to hypothetical in-school literacy uses of reading, writing, listening, speaking, and viewing.

Finally, preservice teachers reflect on the overall project and on their perceptions of the value of inquiring into students' literacies related to popular culture. Elizabeth wrote the following:

I believe popular culture is a powerful medium with kids. However, I feel it must be used appropriately and strategically. Like any other activity, in excess or without thought, popular culture can be as ineffective as drill and kill worksheets. None-

Table 14.2
Out-of-School and In-School Literacy Connections in *Suite Life*

Out-of-school literacy uses	SC state literacy standards (4th and 5th grades)	In-school literacy uses
Watch the show.	The students will recognize, demonstrate, and analyze the qualities of effective communication.	Discuss the show as a group; address how characters communicated to solve a problem, and why it was good or bad.
Predict how the show will end.	The student will comprehend and analyze information received from nonprint sources.	In a journal, predict how a situation using Zach and Cody will end, and give reasons for their thinking.
Talk with parents and friends about their views of the show.	Demonstrate a variety of strategies to derive meaning from texts.	Do prereading of a show on the Internet and gather multiple predictions of what might happen.
Summarize the show to friends/family who missed the episode.	Demonstrate the ability to summarize the main idea of a particular text. Demonstrate the ability to recall details in texts.	Watch the show and summarize it as a homework assignment, and then review as a class.
Send fan mail (e-mail on the Web site) and ask specific questions about the show.	Demonstrate the ability to ask and answer questions about texts.	Make a list of questions using the language experience approach to ask online. Students role-play the answers before posting the questions online.
Watch the show, and discuss the problem and solution with other episodes.	Demonstrate the ability to identify conflict in a literary work; begin comparing and contrasting conflicts in a variety of literary works.	Compare and contrast conflict and resolution in several episodes in a small-group discussion.

theless, I think overall it is a great way to reach kids and empower them to be the experts. . . . If they can help chart their learning through texts they are more versed in, they will be more dedicated and loyal to the process of learning. Unfortunately, the perceived “wildness” of popular culture turns adults away from using it. Kids are no different from adults, in that they want to connect, to understand and respond to someone who is giving back on the other end. How can we commend students’ respect and attention without some curiosity and compassion for their life? (p. 9).

Delving into Popular Culture As Literacy Texts: Why Do It?

Researchers and educators of new literacies describe the necessity of acknowledging and addressing the increasingly diverse cultural contexts that students and teachers encounter. As Lankshear and Knobel (2003) explained, one form of the new literacies is perhaps not new at all, but is new to being a form of literacy. Popular culture fits that description. Like the other approaches to literacy described earlier (funds of knowledge, LEA, and invented/developmental spelling), examining popular culture as a form of literacy recognizes the holistic, cultural, and social nature of literacy learning that must be included when living and teaching in a diverse world. In all these approaches, children’s worldviews, interests, and schemas are accounted for as children show more engagement with school literacy when their identities are considered. Teachers take strides to acknowledge the richness of out-of-school literacies and connect them to in-school practices, and teachers act as pattern recognizers by scaffolding children’s learning to make explicit connections between their sociocultural understandings—whether those are based on language or visual texts—and their in-school literacy learning.

These approaches to teaching and learning can only occur when teachers explore how social and cultural tools and activities mediate learning and development across contexts. As demonstrated across these methods, and in the literacy rap that opens this chapter, teachers must be vigilant in their efforts to value students’ out-of-school literacy practices.

As Gee (2004) explained,

learning does not work well when learners are forced to check their bodies at the schoolroom door like guns in the old West. School learning is often about disembodied minds learning outside any context of decisions and actions. (p. 39)

What children read is often related to their out-of-school literacies and to their popular culture interests. As forms of new literacies, students implicitly understand that they are working with non-print-based media. These new literacies and the practices children use need to be considered in school so that students’ in-school literacy competencies can be as bountiful as their out-of-school literacy lives.

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Chapter Fifteen

IN THEIR WORDS, SOUNDS, AND IMAGES: AFTER-SCHOOL LITERACY PROGRAMS FOR URBAN YOUTH

Eliane Rubinstein-Avila

Although later literacy development is often associated with school-based forms of literacy, some after-school programs are playing a pivotal role in “widen[ing] the lens of what we consider literacy and literate activities” (Schultz & Hull, 2002, p. 11). The four programs highlighted in this chapter also reveal the essential role literacy practices play in young people’s construction of identities and in broadening their conceptions of citizenship. In fact, the following statement by a young woman is illustrative of the power of organized after-school programs to broaden adolescents’ and young adults’ horizons—especially low-income youth, who are often also students of color and the most likely to attend crowded, underresourced, and low-performing schools:

At [high] school, my body was in the classroom, but my mind and heart were nowhere to be found.... Then, I walked into Youth Radio. (Chavez & Soep, 2005, p. 411)

Kate, a 17-year-old participant in another after-school program, a journalism apprenticeship, provided a glimpse of her evolving understanding of citizenship. As a result of her inquiry into a local activist group comprising solely young people, Kate wrote an article titled “Imagining a Better World.” The following excerpt from her article was published in the second annual issue of *110 Degrees* magazine (Thompson, 2002):

After seeing such enthusiasm about peace here in Tucson, I realize that I don’t have to join the Peace Corps to make a positive difference in this world. Many Tucsonans realize they can make a difference. Among them are many young people. (p. 10)

These excerpts illustrate the power of literacy-based after-school programs to enact alternative pedagogies (Chavez & Soep, 2005) that are meaningful and potentially transformative such as the participatory approach suggested by Alvermann (2004); this approach relies on learners' authentic involvement in and ownership of the learning process across an array of modalities: print, aural, visual, and digital. Literacy-based programs, such as the ones highlighted in this chapter, foster urban adults' feelings of recognition and inclusion by acknowledging and building on their cultural and linguistic funds of knowledge (Moll & Gonzalez, 1994) and provide young adults with opportunities to negotiate their layered identities as they find and hone their voices through multiple media. Informal but structured literacy learning environments recognize, value, and build on urban youth's experiences. The mentors across these sites value participants' metalinguistic resources, such as the command of two or more languages or codes; the rhetorical strategies they employ; and the many ways in which urban adolescents engage creatively with language in and out of school (Lee, 2004).

The Proliferation of Informal Learning Environments

While investment in urban public schools was stymied during the 1990s, a federal initiative, the Twenty-first-Century Community Learning Centers (CCLC), allocated \$1 billion for after-school programs. The goal was to supplement the educational experiences and improve the academic performance of children and youth attending low-performing urban and rural schools (Miller, 2001). This initiative resulted in the proliferation of citywide after-school programs across large urban centers. The initiative also facilitated unprecedented partnerships among the federal government, states, cities, corporations, and private foundations for funding nonprofit organizations and community centers to serve low-income youths after school hours.

Since budget cuts practically decimated arts programs, including literacy-based creative writing and performing arts programs in low-income schools, after-school programs and community arts spaces have become one of the few outlets for creative expression in many urban communities (Miller, 2001). In fact, within the past five years, there has been a sizable increase in both school- and community-based after-school programs that aim to support positive youth development, that is, to encourage academic, physical, social, and emotional well-being among urban and rural youths (Hamilton & Hamilton, 2004).

After-school programs that target young people vary in size, foci, goals, objectives, and the ways in which they are implemented. Most programs rely on open enrollment, where participants are welcome to drop in. Other programs recruit participants to engage in particular projects, according to certain

criteria stipulated by funding agencies. Although participation is voluntary, these programs expect a commitment from participants for the duration of the program cycle (anywhere from several weeks to one academic year). Programs that include a career development component sometimes offer youth a stipend for their continuous participation.

Theoretical Roots (Often Implicit)

Rather than viewing literacy as a set of individual cognitive skills measured through tests, these programs approach literacy from a broader sociocultural perspective that takes into account the multiple roles literacy plays in communities' day-to-day social practices. As suggested by the new literacy studies (NLS), this broader view of literacy entails not only blurring "communicative boundaries—spoken, and written language, performance and other semiotic modes of communication" (Street, 2005, p. 420), but also addressing the social uses, meanings, and power dimensions of literacy practices. Rather than viewing its participants as at risk, the adults across these programs recognize that urban youth's expertise, strategies, and cultural capital are often overlooked, and even marginalized, across the formal educational system.

Literacy-Based After-School Programs

Given the surge in organized but informal learning settings after school, researchers from several fields, such as human development, family studies, community psychology, sociology, and education, have been exploring the conditions that yield positive youth development. Studies on these informal contexts vary as much as the programs that they portray. Although many studies seem to evaluate the degree to which the programs influence participants' academic achievements and high school completion rates, more scholars have begun to explore the processes, not only outcomes, by which after-school programs are supporting what has come to be known as the five Cs of positive youth development: competence, confidence, connections, character, and caring (Hamilton & Hamilton, 2004).

More recently, scholars in the field of language and literacy have underscored the role of particular after-school programs in supporting urban youth's meaning making through language and literacy (e.g., Blackburn, 2003; Rubinstein-Ávila, 2006). The four urban after-school programs I describe in this chapter engage young people in authentic, multimodal, and purposeful literacy practices. Through researching, photographing, videotaping, and writing, participants are encouraged to express their feelings, reflect on their identities, explore their concerns and those of their communities, and share their work with a broader audience.

Across the programs described below, participants work in collaboration with adult mentors to complete a final product: a radio program, a zine (an author-published alternative to commercial magazines), a digital story, or a 100-page published magazine.

YOUTH RADIO, SAN FRANCISCO, CALIFORNIA

The mission of Youth Radio is to provide young people with professional training by teaching them the basics of broadcasting and other media-related careers. The goal is to strengthen youth's verbal and written expression, access to technology, critical thinking, and conflict resolution through journalism education. Youth's interests and concerns are the major focus of Youth Radio.

For those who cannot reach the primary site, Youth Radio offers several workshops after school and during the summer months in schools and community-based organizations. One such workshop is for incarcerated young men at Camp Sweeney, in San Leandro, California. Other workshops include a six-month community action program (CAP), during which local youth are trained as peer educators in radio broadcast, music production, journalism, and graphic production, and an eight-week program for young women in San Francisco's Mission district, Mission Girls, focusing on creative writing and providing participants an opportunity to address issues such as sexuality, race, and identity.

During the summer of 2006, Youth Radio's first Spanish language workshop took place in Oakland's Fruitvale Public Library. Nine participants explored the ways in which mainstream media covered issues addressing the Latino immigrant community. Participating youth produced several bilingual service announcements, addressing issues such as immigration protests and learning English as an additional language; the youth also broadcasted a story on the United States–Mexico border on May 24, 2004, through All Things Considered, one of the leading programs heard on National Public Radio.

HORIZON YOUTH PROGRAM (CENTER ON HALSTED), CHICAGO, ILLINOIS

The increased visibility of gay, lesbian, bisexual, and transgender (GLBT) people in our society has no doubt encouraged GLBT youth to find the courage to reveal their gender identities at younger ages. Nevertheless, GLBT youth are not immune to negative reactions, which sometimes result in rejection from their family members and friends. GLBT youth are overrepresented in dropout rates and suicide attempts and make up 25–40 percent of the homeless youth population in New York City and many other large cities across the country. In fact, they also suffer from greater levels of violence and trauma and higher rates of HIV infection.

Horizon Youth Program is located in the Center on Halsted in Chicago; this large space offers the GLBT community a myriad of services such as a cyber center, health screening and education, basketball courts, a library, a café, meeting spaces, and so on. The program was designed to serve GLBT youth and allies 13–24 years of age by providing a safe and supportive space for youth to meet, express their feelings, develop self-esteem, access health information, learn communication skills, and develop leadership skills. The program is open to youth during after-school hours on weekdays and on Saturday afternoons. Funding is provided by the city of Chicago and several private foundations.

Although participants are welcome to drop in, the Horizon Youth Program offers weekly scheduled programs and activities. For example, once a week, on Wednesday evenings, the Young Women's Group of the Horizon Youth Program offers lesbian, bi, and transgender women ages 14–24 a space to meet, discuss, and share their writing. This program is one of the few to target young GLBT women of color.

Recently, the members of the Young Women's Group collected their compositions into a 30-page personal zine, also available electronically (<http://www.centeronhalsted.org>). The zine, titled *Reflections of Herself*, features an array of personal texts such as collages, drawings, poems, photos, short essays, and excerpts of interviews with its members. The following is an example of an excerpt from an interview published in the zine. The interview was conducted between two group members and addressed “views on being in the closet.” LaToya, the young woman who was interviewed and is quoted below, was asked to explain her decision not to come out to her peers in college:

Yeah, since it [engineering] is a predominately white male field, and I'm a black woman; I'm kind of like a triple threat minority. Because I'm black, I'm female and I'm gay! I have enough hurdles to jump as it is, and I feel like being gay is only going to make things harder than it has to be. (p. 12)

A collage addressed the issue of women's body image from the perspective of young women of color, and another interview addressed dating a transgender person. This illustrates the power of the zine to provide the participating young women with an opportunity to be heard. These topics, of great importance to the young women, are not encouraged or sanctioned within the confines of the classroom.

VOICES: COMMUNITY STORIES PAST AND PRESENT, TUCSON, ARIZONA

Voices Inc. is a small nonprofit organization founded by Regina Kelly of Tucson, Arizona. Kelly's intent was to train low-income youth (14–21 years old)

to document local stories, preserve and celebrate local cultures, and facilitate the improvement of young people's academic, artistic, and professional skills. Two of their projects, which involved youth at all steps in the process, sought to deepen intergenerational relationships and tighten youth's connection to the communities in which they lived. *Snapped on the Street* (1999), the first book published as a result of Voices' youth and the staff collaborative inquiry, reported on the heyday of downtown Tucson, Arizona, during the mid-twentieth century, prior to urban sprawl. It included over 200 street photographs taken between the 1930s and 1960s. Another book, *Don't Look at Me Different/No Me Veas Diferente* (2001), published entirely in both English and Spanish, conveyed the oral history of Tucson's first housing projects through interviews and historic and contemporary photographs shot by the young participants. This account from young and senior residents dispelled the mostly negative stereotypes about public housing, revealing the complexities of an intricately connected community from the perspective of the adolescents, some of whom resided in public housing.

Moreover, Voices Inc. has been extremely successful with the ongoing after-school youth program 110 Degrees, now in its sixth year of operation. The main goals of this program are to apprentice low-income young adults as staff writers. In collaboration with two youth workers/mentors, a freelance writer/editor, and a photographer, the participants compose and publish an annual issue of a magazine titled *110 Degrees*.

Every fall, 20 low-income youth are recruited at local public high schools and hired through stipends contingent on their continuous participation. The program operates Monday through Thursday afternoon through an eight-month cycle. The young staff writers research, photograph, and write about topics that impact their peers and communities. They conduct journalistic research on their own neighborhoods, often addressing issues such as gentrification, revitalization, and racial profiling. Full-feature magazine articles rely on interviews and archival sources that address topics such as the United States–Mexico border, youth homelessness, teen parenthood, and young people's participation in the democratic process.

The young staff writers are also provided opportunities to present their work in local bookstores and invited presentations. Within the past few years, the *Arizona Daily Star* has printed a special newspaper issue entirely composed by the young participants, in collaboration with their mentors. The publication is now free and has a broad readership. Each annual issue is celebrated in an evening performance by the youth that draws a large and diverse crowd, including city officials.

DIGITAL UNDERGROUND STORYTELLING FOR YOUTH (DUSTY), OAKLAND, CALIFORNIA

This after-school program for middle and high school youth is a partnership between the College of Education at the University of California at

Berkeley and Oakland's Joseph Prescott Center for Community Enhancement. The program brings together low-income, underserved, mostly (about 75%) black youth and an expanding population (about 20%) of Latinos with university undergraduates, graduate students, and community members, who serve as tutors and mentors for the participants. According to the Digital Underground Storytelling for Youth (DUSTY) Web site (<http://oaklanddusty.org/index>), 80 percent of participating youth "struggle with literacy," and 25 percent are either learning English as an additional language and/or have parents who are non-English speakers.

This program's four main goals are (1) to provide underserved youth access to new digital technologies not available to them at school or at home for self-expression; (2) to encourage and foster literacy development and creativity through a technology-rich context; (3) to bridge the dichotomous worlds of formal and informal learning; and (4) to foster intergenerational communication and community building. In this informal learning environment, participants, with the assistance of youth workers, combine print literacy, photography, video, and audio to create digital stories.

At DUSTY, young people learn how to use programs such as iMovie, Adobe Premiere, Fruity Loops, and Acid Pro to compose their digital stories. DUSTY not only provides participating youth with access to new technologies, but the tutors and mentors also provide youth with the necessary support to use the technologies in culturally relevant and empowering ways that resonate with youth's concerns and lives. The designers of this program realized that in spite of the crucial role that visualization plays in reading and writing, schools are not likely to provide students with sustained attention to the visual aspect of new literacies (Hull, 2003, p. 231).

This program encourages adolescents to compose multimodal and personal digital accounts, which in Hull's (2003) words "challenge logocentric habits of mind" (p. 230). This often entails removing text, images, and sounds from their historical or original contexts and repositioning and appropriating them. For example, one young man's multimedia composition included juxtaposition and what Hull calls the "recontextualization of images" (such as images of pyramids, Malcolm X, Tupac Shakur, and Marcus Garvey, among others) to create a context with a "powerful authorial agency" through which to express his own social world in Oakland (23).

These new literacies, afforded by the rapid introduction of new technologies, not usually available in low-income, underresourced schools, encourage youth to create multimodal texts "without denying the importance of traditional alphabetic literacies" (Hull, 2003, p. 233). DUSTY's participants are also provided opportunities to share their digital, multimedia compositions with their extended families, members of their communities, and university affiliates.

THE ROLE OF YOUTH WORKERS ACROSS INFORMAL LEARNING CONTEXTS

Studies across organized but informal learning environments underscore the role of the rapport established between youth workers and participating youth. Youth workers are staff hired by programs as mentors, informal instructors, and coaches. Youth workers are more likely than teachers to share the youth's racial, ethnic, and socioeconomic backgrounds and experiences; to live in the same communities as the youth they serve; and to be closer in age to the youth. As one youth worker said, youth workers "know where the kids are coming from" (Halpren, Barker, & Mollard, 2000, p. 490). In fact, in their examination of six youth programs deemed successful by the youth who participated in them, McLaughlin, Irby, and Langman (1994) found that youth workers' personalities, charisma, and the rapport that they established with the youths they served were essential to determining a program's success.

For many youths, informal learning environments provide a unique opportunity to engage with caring adults, who are neither family members nor teachers, and who make a positive impact in their lives (McLaughlin & Heath, 1993). Nevertheless, it is also important to understand the conditions that support the successful bond between youth workers and youth and explore potential limitations. For example, Halpren and colleagues (2000) pointed out that too often, youth workers' own experiences with formal education are at times limited to high school completion and that youth workers' experiences with the public school system are often marred by mixed or negative experiences. Thus it is suggested that potential inexperience with higher education may limit the type of guidance and social networks that youth workers are able to provide to the participants. High rates of mobility among youth workers, while understandable, are also likely to be barriers for forging long-lasting and caring relationships. Given the low pay, the low status, the absence of medical benefits, and the lack of training opportunities and job advancement, programs struggle to keep stability among hired staff (Halpren et al., 2000).

The role of youth workers is accepted as a key to the success of youth programs. Nevertheless, little is known about the nature of the relationships that youth workers forge with the young adults they serve. One of the most solid findings across the literature is that youth workers are likely to view youth from a perspective of strength than from a perspective of deficit and are highly sensitive to power relations and the constant changing dynamics in their interactions with youth. In fact, mentors often describe their relationships with young people as ones in which roles alternate; a youth worker may act as a guide or mentor, but at other times, he or she may fulfill the role of a friend, a counselor, a parent, a teacher, or simply a sounding board.

The relationships between participants and mentors in after-school programs are not free from the power relations that exist between youth and adults,

nor are these relationships free from the co-constructed, social representation of gender, race, and class, but they are intense, dynamic, and reciprocal. In my ethnographic study of a literacy-based youth program (Rubinstein-Ávila, 2006), a highly educated youth worker who was a freelance photographer described his interactions with participants as a sensitive balancing act. Evoking the imagery of jugglers as he reflected on his four years with the program, he described his and their cocreation of the final product (the publication of a magazine) as “moment-to-moment” scenes between a group of jugglers who together manipulate several objects at once, most of which are, or at least seem to be, suspended precariously in midair (Rubinstein-Ávila, in progress).

BRIDGING OF INFORMAL AND FORMAL LEARNING

While the goals of these after-school programs do not include replicating school curricula or pedagogies, support for youth’s academic achievement is included in their objectives. To extend youth’s exposure to schools’ rather narrow, and even limiting, literacy experiences, two of the programs described in this chapter attempt to bridge informal and formal learning through partnerships with schools that are willing to adopt alternative pedagogies. For example, the staff at Youth Radio have recently released an online curriculum resource that provides interested classroom teachers with suggestions about aligning the stories produced by the participants to national standards across content areas. This Internet resource also provides tips on media production techniques and the biographies of the young reporters. The pilot program also invites teachers who are using the Youth Radio curriculum to submit their students’ stories, inspiring students’ writing through authentic practices and thereby enabling students to reach broader audiences.

Another example of a partnership between informal and formal learning is Tucson’s Voices Inc.’s collaborative project with a local public middle school. For several years, once a week, several staff members of Voices Inc. worked with a teacher and approximately 40 of her students on an oral history project in which students interviewed over 100 local seniors who had served in World War II. The process of this authentic inquiry and its results—the many intergenerational lessons learned by the students and the participating seniors—are reported in a culminating book titled *They Opened Their Hearts: Tucson Elders Tell World War II Stories to Tucson Youth* (2005).

CONCLUSION

Although the objective of after-school programs may be to supplement formal learning, successful youth programs and successful schools seem to share a great deal of characteristics. They provide youth opportunities to partake in effective leadership; maintain a unique identity structure; maintain a strong

and productive peer culture; and establish clear, fair, and articulate goals and rules. They engage youth in challenging activities of significance to them and their communities, and they engage young people in structured, open-ended activities. They provide adolescents with exposure and access to a world outside their immediate boundaries. In essence, what makes both types of institutions successful is their ability to “reach, motivate and promote young people, who many dismiss as unreachable, irredeemable, or hopeless” (McLaughlin et al., 1994, p. xvii).

The four youth programs highlighted in this chapter view participating urban youth as knowers; young adults are defined by their strengths, creativity, talents, and amazing perseverance, not labeled as students who resist mainstream schooling nor defined by the competencies they may lack. These youth programs encourage youth-centered inquiry and youth decision making. They celebrate and encourage multimodal, critical literacy practices by encouraging students to question the texts of their worlds. Across these four programs, youth and adult mentors work together to cocreate narratives that resonate with a broader audience—beyond the participants’ own peer or geographical communities. In addition, mentors and youth workers in these programs understand that young people’s identity work is inextricable from their learning and becoming. More importantly, these programs accomplish a great deal more than encouraging the five Cs of positive youth development (competence, confidence, connection, character, and caring).

Unlike the uncritical color/class-blind approach to multicultural education commonly found in schools, the youth programs highlighted in this chapter support discussions on issues pertaining to race and discrimination that are outside of the mainstream comfort zone. These after-school programs provide a safe and fertile space for urban youth to tackle issues that impact their day-to-day lives and the well-being of their communities. I argue that these programs are successful precisely because they encourage critical inquiry into the intersections of race, ethnicity, culture, class, sexuality, and issues of power, discrimination, and marginalization.

Implications for the Development of (New) Literacies and Active Citizenship

Even if not explicitly stated in their goals, ultimately, the four after-school programs presented in this chapter are committed to unleashing, supporting, encouraging, and broadening youth’s literacies within youth’s sociocultural and sociopolitical contexts. Rather than equating language and literacy proficiencies with privilege and class, and rather than devaluing the interactional nature of spoken language and visual literacies, these programs, in line with the theoretical conceptualization of NLS, embrace school literacy and the literacies

in youth's everyday lives. These programs also support interactive talk and the cocreation of knowledge among youth peers and between adults and youth. In addition, these programs have appeal because they embrace young people's integration of popular culture (Alvermann, Hagood, & Williams, 2001).

In the spirit of Paulo Freire, the late Brazilian educational philosopher, these programs provide urban youth with opportunities to have their views expressed and their voices heard, read, and viewed by a broad audience. Just as these programs have demonstrated, after-school, multimodal youth spaces can move beyond supporting adolescents' reading of the word and the world, as was suggested by Freire and Macedo (1987). They can also provide the world with an alternative view into urban youth's words, images, and worlds. Thus after-school, literacy-based youth programs are able to accomplish a great deal more than raising urban youth's test scores. Some after-school programs may be better equipped than schools to support and develop youth's technological, visual, and informational literacies and intertextual understandings or the competencies to make meaning from an array of texts.

Finally, I hope that this chapter helped underscore the important role literacy-based after-school programs can play in broadening youth's language and literacy practices, in encouraging young people's expressions of their agentive selves (Hull & Katz, 2006), and in expanding young people's democratic participation and pursuit of social justice.

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Chapter Sixteen

BRIDGING THE CONTINENTS OF DIFFERENCE: FAMILY LITERACY WITH ADOLESCENTS

Sharon Kane

INTRODUCTION: THE NEED FOR BRIDGES

“Carried down on the ... escalator, mother and daughter, one step apart, but separated by a continent of difference” (Smith, 2005, p. 103). When I read this description of a shopping expedition in Alexander McCall Smith’s *44 Scotland Street*, I thought it captured perfectly the distance almost universally felt by the parents and teens I know. Though I have only sons, I have been there, walking in the mall a few steps behind a boy who needs his mother’s credit card but certainly does not want the world to think we belong together.

Although I understood the need for my teenagers to separate from me, I still felt nostalgic for those times when they would sit on either side of me, squishing me as they peered at pictures of storybook characters: Tigger and Piglet, Lucy and Aslan, or the Boxcar children. I was especially unnerved when I realized that Patrick had reached a stage where he was embarrassed even by his mother’s *literacy*. “You’re the only mother who comes to my soccer games with magazines,” he’d say scornfully. “The other parents watch the game.” Didn’t he understand about time-outs? I could read whole articles when there was no action on the field.

Literacy had been a strong bond between me and each of my sons before adolescence robbed me of my library buddies. I learned I could no longer greet new friends they brought home with, “So, what’s your favorite book?” When I came home from conferences with books autographed by Jane Yolen, Avi, Theodore Taylor, Jerry Spinelli, Walter Dean Myers, and Sharon Creech, the boys did not respond as ecstatically as they had in years past. Had I made

a mistake by attaching such importance to books through their childhood years? Would they reject reading and writing in an effort to establish their own identities?

I turned to my literary mentors for answers as to how I might narrow the distance I felt growing between my children and me. Katherine Paterson (1981) provided one answer:

It occurs to me that I have spent a good part of my life trying to construct bridges.... There were so many chasms I saw that needed bridging—chasms of time and culture and disparate human nature—that I began sawing and hammering at the rough wood planks for my children and for any other children who might read what I had written.... I discovered gradually and not without a little pain that you don't put together a bridge for a child. You become one—you lay yourself across the chasm. (p. 113)

The scholarly literature on adolescent literacy confirms that our teenagers need adults in their lives who will lay the planks, be the bridges. One of the principles of the International Reading Association's (1999) position statement on adolescent literacy states, "Adolescents deserve homes, communities, and a nation that will support their efforts to achieve advanced levels of literacy and provide the support necessary for them to achieve" (p. 9). The variety of teens in our nation and their concerns is great; some of our teens are in drug rehabilitation, others in prison. Some teens literally have no family or home; for others, family literacy is taking on new meaning as they read Dr. Seuss to their own infants and toddlers. Much of the research and other scholarly literature relating to family literacy have focused on young children. This chapter will explore some of the ways families can nurture literacy during the crucial developmental stage of adolescence. Though I will use the term *parents* throughout, I really mean to extend that term to guardians, grandparents, siblings, aunts and uncles, teachers, and other adults who interact in caring ways with teens.

BRIDGING THROUGH BOOKS

Books have been connecting the generations for centuries; they certainly can continue this function now. Rather than parents fretting over their children leaving the world of children's literature that they have inhabited together for so long, they can welcome their children into adolescence through the genre of young adult literature. Parents can communicate with teachers to find out what their children will be reading in their middle and high school classes and read along so that they can discuss the literature with their daughters and sons, sharing perspectives and evaluations. Many teachers are happy to invite parents to read along with their children who participate in reading-writing

workshops; they will send home reading lists, Internet sources, and newsletters highlighting students' responses and recommendations. They will let families know where audio versions or Spanish translations of the books can be procured.

In addition, parents can provide books for pleasure reading. I still remember the pride I felt in 8th grade when my mother deemed me ready to read her favorites: *Jane Eyre* (Bronte, 1987), *Rebecca* (du Maurier, 1993), *The Silver Chalice* (Costain, 1952). Today, the choices might include *The Da Vinci Code* (Brown, 2003), John Grisham books, and treasures by Barbara Kingsolver and Isabelle Allende. Parents can get the audio versions of books so that family members can enjoy them together in the car as adults transport teens to sports practice, school events, jobs, college visits, and recreational activities. Books can be chosen based on mutual interests. They can be fiction, such as *The Curious Incident of Dog in the Night-time* by Mark Haddon (2003), whose narrator lets us into his mind as an adolescent with autism. Others can be nonfiction, such as *The Lady and the Panda* (Croke, 2005), the adventure of a woman who overcame many obstacles to capture a live panda in Tibet and subsequently faced an ethical dilemma she had to resolve. Both of these are examples of what librarians call *crossover* books, which appeal to both older children and adults. Or parents and teenagers can listen to Selected Shorts on National Public Radio (also available on CD). Teenagers will let their parents know what types of literature they prefer for shared listening.

One family tradition could be to celebrate the end of each school year with a gift of books for summer reading involving main characters who are in the grade the adolescent will be entering in the fall. Imagine Mario, who has just graduated from middle school. He comes home to find the following books on his bedside table: *Speak*, by Laurie Halse Anderson (1999), narrated by 9th-grader Melinda, who finds herself excluded by her peers and struggling to recover from a traumatic event that happened over the summer; *Nothing but the Truth*, by Avi (2004), a story told in multiple voices about 9th-grader Philip Malloy, who has been suspended from school after disobeying the school rule requiring silence during the playing of the national anthem; and *Sleeping Freshmen Never Lie*, by David Lubar (2005), whose main character writes about his school year in his journal. Table 16.1 shows titles of books whose settings are in the middle and high school grade levels.

One of my former students began a family book discussion club when she was in my methods course for preservice teachers. Heather's parents, cousins, grandparents, aunts, and uncles meet monthly to discuss a book read in common. The book club is now in its third year, and the responsibility and privilege of selecting the books rotates among the members. An age range of several decades is represented, so the chosen titles represent great variety. There is potential for benefits on many levels when intergenerational family members

Table 16.1
Books about Characters in Various Grade Levels

GRADE 7

- Bloor, E. (1997). *Tangerine*. San Diego: Harcourt Brace.
- Boles, P. M. (2006). *Little divas*. New York: HarperCollins/Amistad.
- Goldschmidt, J. (2005). *The secret blog of Raisin Rodriguez: A novel*. New York: Razorbill.
- Howe, J. (2001). *The misfits*. New York: Simon and Schuster/Aladdin.
- Howe, J. (2005). *Totally Joe*. New York: Atheneum.
- Pollet, A. (2004). *Nobody was here: Seventh grade in the life of me, Penelope*. New York: Orchard Books.
- Rosenbloom, F. (2005). *You are so not invited to my bat mitzvah!* New York: Hyperion.
- Spinelli, J. (2004). *Space station seventh grade*. New York: Little, Brown.
- Vega, D. (2005). *Click here: (to find out how I survived seventh grade), a novel*. New York: Little, Brown.
- Wallace, R. (2006). *Southparv*. New York: Viking.

GRADE 8

- Evangelista, B. (2005). *Gifted*. New York: Walker.
- Feinstein, J. (2005). *Last shot: A final four mystery*. New York: Knopf.
- Little, J. (1989). *Hey, world, here I am!* (S. Truesdell, Illus.). New York: Harper and Row.
- Mills, C. (2005). *Makeovers by Marcia*. New York: Farrar, Straus, and Giroux.
- Peck, R. (2006). *Here lies the librarian*. New York: Dial Books.
- Pollett, A. (2005). *The pity party: 8th grade in the life of me, Cass*. London: Orchard Books.
- Van Draanen, W. (2001). *Flipped*. New York: Alfred A. Knopf.
- Wittinger, E. (2005). *Sandpiper*. Simon and Schuster.

GRADE 9

- Bernstein, M. W., & Kaufmann, Y. (Eds.). (2004). *How to survive your freshman year*. Atlanta, GA: Hundreds of Heads Books.
- Naylor, P. R. (2000). *The grooming of Alice*. New York: Atheneum Books.
- Voigt, C. (2006). *When bad things happen to bad people*. New York: Atheneum Books.
- Yavin, T. S. (2007). *All-star season* (C. Orback, Illus.). Minneapolis, MN: Kar-Ben.

GRADE 10

- Atkins, C. (2003). *Alt ed*. New York: G. P. Putnam's Sons.
- Graham, R. (2005). *Thou shalt not dump the skater dude and other commandments I have broken*. New York: Viking.
- Koja, K. (2003). *Buddha boy*. Waterville, ME: Thorndike Press.
- Portman, F. (2006). *King dork*. New York: Delacorte Press.
- Serros, M. (2006). *Goy crazy*. New York: Hyperion.
- Spinelli, J. (2000). *Stargirl*. New York: Knopf.
- Vail, R. (2006). *You, maybe: The profound asymmetry of love in high school*. New York: HarperCollins.
- Walters, E. (2005). *Juice*. Victoria, BC: Orca.

(Continued)

Table 16.1
(continued)

GRADE 11

- Brashares, A. (2001). *The sisterhood of the traveling pants*. New York: Delacorte Press.
 Hemphill, S. (2005). *Things left unsaid: A novel in poems*. New York: Hyperion.
 Kulpa, K. (Ed.). (1996). *Juniors: Fourteen short stories by eleventh graders*. East Greenwich, RI: Merlyn's Press.
 Myracle, L. (2006). *Tfjn*. New York: Amulet Books.

GRADE 12

- Anderson, L. H. (2002). *Catalyst*. New York: Viking.
 Anderson, L. H. (2005). *Prom*. Waterville, ME: Thorndike Press.
 Nelson, R. A. (2005). *Teach me: A novel*. New York: Razorbill.
 Sanchez, A. (2001). *Rainbow boys*. New York: Simon and Schuster.
 Sanchez, A. (2003). *Rainbow high*. New York: Simon and Schuster.
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gather, formally or informally, to discuss books, whether they be fantasy or informational; political or romantic; humorous or apt to evoke tears and sobs; or any combination of the above. Everyone can feel valued and listened to; new insights about the literature and about each other are almost bound to occur. One of my students, Diana, wrote about a memory that demonstrates this:

One moment that always sticks in my mind is when I had to stay at my grandmother's house while my parents were out of town. I was probably twelve or thirteen and I was really into Stephen King. I had just finished reading *The Shining* [1977] and my grandmother picked it up and read the whole thing that night. While some of the language may have been offensive to her, she thought he was a terrific writer who used very vivid descriptions. I was surprised that my sixty-something Latin-teaching grandmother was so cool.

Adolescence is a time of questioning, of figuring out one's identity in relation to peers, family, society, and the world. Parents can provide books that deal with many facets of relationships, including those between parents and teens, whose values do not always match. There are many ways authors let us know about the tensions between teens and parents, but the shopping and clothing metaphors seem to be prevalent. For example, the title of Deborah Tannen's (2006) nonfiction book about mother-daughter communication says it all: *You're Wearing That?* In the fictional *The Second Summer of the Sisterhood* (Brashares, 2003), Lena feels trapped as she reluctantly accompanies her mother on errands. "This was how her mom secured quality mother-daughter time—through stealth and trickery" (p. 26). At one point, Lena waits in the car, but that is no fun, either. "It was too hot for sunroofs. It was too hot for

parking lots. It was too hot for mothers” (p. 26). In the store, Lena’s perception of her mother is reflected in her disdain for everything involved in the event:

Her mother went right for the racks of beige-colored clothing. On the first pass she picked out a pair of beige linen pants and a beige shirt. “Cute, no?” ... Lena shrugged. They were so boring they made her eyes glaze over. ... Her mother’s clothing vocabulary made her wince. “Slacks ... blouse ... cream ... ecru ... taupe.” Lena fled to the front of the store. (p. 27)

Sometimes the parents in novels are truly horrible; in Chris Crutcher’s (1995) *Ironman*, for example, Bo Brewster’s father is abusive. In *Speak*, Melinda’s parents are busy with their own lives to the point of being negligent, completely unaware of her pain and her needs. In other novels, parents are loving but flawed. There are several novels in which a teen needs desperately to learn about a parent who is gone (through death or abandonment), yet the remaining parent refuses to talk about the missing person. These include *Following Fake Man* by Barbara Ware Holmes (2001), *Because of Winn-Dixie* by Kate Di Camillo (2003), *A Solitary Blue* by Cynthia Voigt (2005), and *Park’s Quest* by Katherine Paterson (1988). In each of these stories, the main character comes to realize that the parent who is the caregiver is also dealing with grief and is not deliberately behaving in ways to make the adolescent’s life miserable.

In many young adult novels, the parents as well as the teen protagonists develop throughout the plot, resulting in better understanding and improved relationships. In others, the parent is unwilling or unable to grow, but the teen learns to accept the parent’s limitation or to get beyond the sorrow of the untenable or unattainable relationship and approach adulthood with the help of other mentors. Books can help our teen readers perceive parents as real people and think about their own family relationships in more complex ways. Table 16.2 gives additional titles of novels and nonfiction works that deal with parent-teen relationships.

Nonfiction books can be very helpful as we strive to keep both literacy bridges and emotional bridges between ourselves and our teenagers intact, as illustrated in books about teen-parent relationships such as those written by Amy Tan and Tim Russert. There are many more ways to connect with teenagers through literature. It might be difficult to keep up with children’s devouring of the thousands of pages of Harry Potter’s adventures at Hogwarts Academy or their travels to an alternative universe in the popular fantasy series *His Dark Materials*, by Philip Pullman. Besides, they might not want us to go along for the total ride. But our contribution could be, while admitting we are the Muggles that J. K. Rowling pokes fun at, bringing home informational books, such as *The Science of Harry Potter* by R. Highfield (2002) and *The Science of Philip Pullman’s His Dark Materials* by M. Gribben and J. Gribben (2003), which can offer new insights and extend the conversation among family members

Table 16.2
Books Dealing with Parent-Teen Relationships

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- Brashares, A. (2001). *The sisterhood of the traveling pants*. New York: Delacorte.
 Four girls help each other with problems involving parents—suicide, divorce, new baby.
- Benham, E. (2005). *Helicopter man*. New York: Bloomsbury.
 Father is homeless and schizophrenic.
- Gantos, J. (2002). *What would Joey do?* New York: Farrar, Straus and Giroux.
 Both mother and father have so many personal problems that they are unable to be good parents.
- Gillot, S., & Sibiril, V. (2005). *Dealing with mom: How to understand your changing relationship* (T. Shaw, Ed., & A. Tschiegg, Illus.). New York: Amulet Books.
- Henkes, K. (2003). *Olive's ocean*. New York: Greenwillow Books.
 Teenager wants to be a writer, like her father.
- Johnson, A. (2003). *The first part last*. New York: Simon and Schuster/Pulse.
 Narrated by a 16-year-old father.
- Mackler, C. (2003). *The earth, my butt, and other big round things*. Cambridge, MA: Candlewick Press.
 Parents pressure young girl to be thin and successful according to their traditional norms.
- McBride, J. (1996). *The color of water: A black man's tribute to his white mother*. New York: Riverhead Books.
 Describes author's relationship with his mother.
- McCourt, F. (1996). *Angela's ashes: A memoir*. New York: Scribner.
 Describes author's relationship with his mother.
- Mikaelsen, B. (2001). *Touching spirit bear*. New York: HarperTrophy.
 Father has been abusive.
- Picoult, J. (2004). *My sister's keeper: A novel*. New York: Atria.
 Main character sues when her parents ask her to donate a kidney to her sister.
- Russert, T. (2004). *Big Russ and me: Father and son, lessons of life*. New York: Miramax Books.
 A memoir written by a son.
- Russert, T. (2006). *Wisdom of our fathers: Lessons and letters from daughters and sons*. New York: Random House.
- Ryan, P. M. (2004). *Becoming Naomi Leon*. New York: Scholastic.
 Mother only wants one of her children, and that is for an ulterior motive.
- Stratton, A. (2004). *Chanda's secrets*. Toronto: Annick Press.
 A teen in Africa cares for her mother, who has AIDS.
- Weeks, S. (2004). *So B. it*. New York: Scholastic.
 Mother has a developmental disability.
-

about the fantasy books themselves. There are also numerous articles written about both the Rowling and Pullman series such as “What American Schools Can Learn from Hogwarts School of Witchcraft and Wizardry” (Booth & Booth, 2003), “Harry Potter and the Magic of Mathematics” (McShea, Vogel, & Yarnevich, 2005), and “Moving beyond Censorship: What Will Educators Do If a Controversy over *His Dark Materials* Erupts?” (Glanzer, 2005).

If children pick up these materials parents have left around and show an interest in discussing the issues, parents can be available. Parents can also have

books lying around that could help initiate discussion on topics our teens might find sensitive or be reluctant to talk about. In addition, books, magazines, music, art, and Web sites can offer ways to help adolescents learn about their heritage and the lands and cultures of their parents, grandparents, or more distant ancestors. Table 16.3 gives examples of nonfiction titles relating to topics of potential interest to teenagers and to curricular topics they may be studying in school.

BRIDGING THROUGH MULTILITERACIES

Everyday experience, along with the scholarly literature from experts (e.g., Alvermann, 2004; Leu, Leu, & Coiro, 2004; Masny, 2005; New London Group, 1996), makes it clear that literacy is changing rapidly and that looking

Table 16.3
Nonfiction Books to Match the Needs and Interests of Teenagers

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- Bardin, M., & Fine, S. (2005). *Zen in the art of the SAT: How to think, focus, and achieve your highest score*. Boston: Houghton Mifflin.
- Borden, S., Miller, S., Strikeleather, A., Valladares, M., & Yeltonwrote, M. (2005). *Middle school: How to deal* (Y. Hatori, Illus.). San Francisco: Chronicle.
- Brockman, J. (2004). *Curious minds: Twenty-seven scientists describe what inspired them to choose their paths*. New York: Pantheon Books.
- Budhos, M. (1999). *Remix: Conversations with immigrant teenagers*. New York: Henry Holt.
- Burnett, B. (2002). *Cool careers without college for math and science wizards*. New York: Rosen.
- Carlson, L. M. (Ed.). (2005). *Red hot salsa: Bilingual poems about growing up Latino in the United States*. New York: Henry Holt.
- Chopra, D. (2006). *Teens ask Deepok: All the right questions*. New York: Simon Pulse.
- Gelb, M. J. (2003). *Discover your genius: How to think like history's ten most revolutionary minds*. New York: Quill.
- Goldsmith, C. (2006). *Invisible invaders: Dangerous infectious diseases*. Minneapolis, MN: Twenty-first Century Books.
- Hill, J. B. (2000). *The legacy of Luna: The story of a tree, a woman, and the struggle to save the redwoods*. San Francisco: HarperSanFrancisco.
- Huegel, K. (2003). *GLBTQ: The survival guide of queer and questioning teens*. Minneapolis, MN: Free Spirit.
- Kidder, T. (2003). *Mountains beyond mountains: The quest of Dr. Paul Farmer, a man who would cure the world*. New York: Random House.
- Kittleston, M. J. (Ed.), Haley, J., & Stein, W. (2005). *The truth about abuse*. New York: Facts on File.
- Zimmerman, K., Hyneman, J., & Savage, A. (2005). *Mythbusters: The explosive truth behind 30 of the most perplexing urban legends of all time*. New York: Simon Spotlight Entertainment.
-

at teenagers' out-of-school literacies is very important if we want to understand them and support them in their academic and personal growth. Parents can find ways to relate to their children as teens react to and create multimodal texts and as they negotiate the world of pop culture they inhabit, participate in, and contribute to.

Computer technologies have made it possible for our children to lay some planks from their end of the parent-child bridge. For the first time in history, children often know more than their parents about digital literacies, a major part of the present world, thus providing a unique opportunity for a role reversal as they teach their parents about the new literacies (Dresang, 1999). Many parents are humbly, and with good humor, asking for help as they search the Internet, join the instant messaging (IM) crowd, try text messaging, and download music and images. If parents are lucky, their adolescent children will allow them, at least to some extent, into their world of blogging, fan fiction, manga and anime (Japanese forms of comics and animation), multimedia digital storytelling, and game playing. I have several friends who tell me that their teenagers will talk about issues with them through text messaging or IM that they would not discuss with them in person.

Denny Taylor's (1997) *Many Families, Many Literacies* reminds us to think of family literacy broadly, beyond just print media. Keene (2003) exemplifies this as she shares a story of a visit she and her daughter made to the National Gallery of Art. They entered together but toured the Van Gogh exhibit separately, the daughter with artist's pad to sketch, the mother with journal to write down reflections. They met up later and talked about their experiences as well as their understanding of Van Gogh and his subjects. Keene concludes,

I would argue that our verbal, written, and artistic struggle to understand better represented what it is to understand than any packet the museum might have created to guide us. I would argue that the conversation, our writing, her art, and the content of the exhibit—so worthy of our struggle to understand—helped us develop insights that influence our thinking to this day in ways seen and unseen. (p. 29)

I would argue that the experience Keene describes and analyzes shows family literacy at its best. There is no competition involved, no pressuring to conform. There is a respect for each other's need for space; there is mutual giving of flexibility and freedom in terms of modes of learning and expressing what has been learned.

Any time adults share reading, writing, speaking, listening, or viewing in any form with their children, they are engaged in family literacy. Watching a movie together and then talking about the issues, the characters and actors, the visual effects, and emotional responses can support relationships and nurture thinking on everyone's part. (Actually, my sons started monitoring and

censoring my film watching. Patrick once said, "You have to rent *Saving Private Ryan*, but fast forward through the first half hour; you couldn't handle the violence.") Shooting one-line e-mails back and forth each day, or forwarding jokes and cartoons, or giving compliments and encouragement can strengthen bonds. Sharing newspaper articles (whether hard copy or online) on topics related to the interests of family members is an authentic way to enhance literacy. Searching Web sites together for information on sporting equipment, concerts, a sports-related injury, college scholarships, a vacation destination, used cars, local politics, or other issues that come up during the family's daily routine can be beneficial. Clothing catalogues and college catalogues can be perused together or looked at individually and left around the house for others to explore.

Advances in technology can assist parents as they support their children with their academic responsibilities. Many schools have some sort of homework hotline, and many teachers have Web sites parents can visit to find out the curriculum being taught, assignments and projects, and possibly even avenues for interaction with the teacher and/or class. Giulia is a young girl who tends to freeze when her parents stand over her shoulder or look at her homework in progress, but she willingly e-mails drafts of papers via attachments to her father at his workplace and accepts the editing suggestions that he sends back electronically.

Literacy can be instrumental as families confront issues of social justice, whether those issues involve individuals or groups being treated disrespectfully at school, or countries in other parts of the world. My son Christopher encouraged me to write to my state representatives before the start of the war in Iraq and to attend rallies for peace, at which literacy was present in the form of posters and placards, speeches, and circulating petitions. Chris now forwards me information on issues relating to sustainable farming, poverty and politics, and animal rights.

There are dangers connected with the Internet, and children need to be cognizant of them and protected from them. Preaching and giving warnings will not always work, especially since teenagers often think that they know more than their parents—and in the case of technology, this may be true. The best way to deal with the potential for harm might be to investigate the Internet together. A parent I know asked her daughter to show her a sample of what she reads and writes on the popular blogging site MySpace.com. She was able to explain rationally some of the potential ramifications of posting personal information and messages. Parent and child communicated as two people weighing the plusses and drawbacks of a technology. The key to communication was that the mother let the adolescent lead the way; the discussion was contextualized, not forced on the daughter, and not laced with threats or demands.

CONCLUSION

Some caveats relating to family literacy are in order. One caution is that it is possible, in an effort to remain close to teens, to try too hard, thereby pushing them more than they wish. It is important to remember that adolescents need to separate from their parents, and in some ways, they need to find, or craft, their own identities. Where they go, parents are not always welcome to follow. For example, rock musician Kurt Cobain died when my Christopher was a teen. He did not need me to mourn in the same way he and his friends did. Later, however, I cut out newspaper editorials written by columnists about Cobain's death and its effect on his family, friends, fans, and the music industry; I left the articles lying around for him. That effort gave the message that I cared and that I knew he was hurting, even though I had not been a fan of the musician in the same way he had been. He gave signals that he did not want me encroaching on his personal grief, so I stayed apart, but connected through a literacy bridge. Most teens do not want parents to be a friend, an equal—they do not want parents to IM them and their friends or wear their clothes. So it stands to reason that the literacies of parent and child will not be identical, or totally shared.

We must also be careful not to turn literacy opportunities into lessons. Parents should try to refrain from giving lame or didactic books and must not try to tell teens what a text is supposed to mean, for, as Katherine Paterson (1997) states,

A good story is alive, ever changing and growing as it meets each listener or reader in a spirited and unique encounter, while the moralistic tale is not only dead on arrival, it's already been embalmed.... [Children] may not behave, but they certainly already know what is meant by behaving. And a book that tries to rub it in succeeds only in rubbing them the wrong way. (pp. 7–8)

Here is a final example of a mother and daughter shopping, one which conveys a hint that underneath all the tension between parents and teens, we are all *trying* to accommodate the other, and there is really much that is positive. In Lynne Rae Perkins's (2005) Newbery winner *Criss Cross*, two friends are changing clothes in the rhododendrons on the way to school. One of them, Debbie, had been shopping with her mother for jeans recently and found that her mother "was opposed to spending money on something that was going to drag on the ground and get ruined. She could not hear the siren call of the dragging jeans" (p. 45). After trying on many, many pairs of jeans that were wrong, Debbie finally tried on a pair that, while they did have an embroidered bunny nibbling on a bunch of carrots, were at least the right length by her standards:

"I can hem them," she said.... She was fibbing, but it was a noble fib, because she was really saying, "I love you. I want us to be having fun." She was also saying, "If you really love me, you won't make me hem them." (p. 48)

This family could have used a copy of *The Blue Jean Book: The Story Behind the Seams* by T. L. Kyi (2005). The good news is that teenagers are only teenagers for seven years; adolescence is self-limiting. In an article I wrote when my boys were young teens, I recommended sneaking literacy into home discussions by paying attention to newspaper articles relating to individual interests of our children, nonchalantly saying, "Hey, listen to this!" and proceeding to read the beginning of an article on an eclipse, a field trip to an amusement park to study the physics of rides, or a pop culture figure (Kane, 1995). Now, these adult sons employ a similar strategy as they communicate to me through e-mail. Recently, Patrick, a law school student at Wake Forest University, sent a message saying only "Check this out" and giving a link to a Web site advertising the Southern Writers Festival hosted by Duke University. I not only checked out the site, I went to North Carolina, meeting Patrick and his wife there to hear lectures on literature together. From another part of the country, Christopher kept connected electronically as he volunteered with the Buffalo Field Campaign, a group based in Montana and dedicated to rescuing the wild buffalo living in Yellowstone from harassment and slaughter. He put me on the organization's e-mail list, he sent me a video, and he asked me to write letters and make phone calls to politicians. Here is the text of his most recent e-mail to me, which mentions books we read together during his childhood and taps into our lifelong shared interest in illustration:

Do you know my friend Jeff Mack? I met him last night. He grew up in Skaneateles, graduated from SUNY Oswego, and now illustrates children's books for a living. Most recently he did the illustrations for the new Bunnica series.

So at this point, the boys are using multimodal forms of literacy to communicate with me. Traffic is going both ways on the literacy bridge—a bridge that leads us to surprising new places, none of which, thank heaven, is a shopping mall.

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Chapter Seventeen

RESOURCES FOR ADOLESCENT LITERACY

Thomas W. Bean and Jennifer J. Wimmer

Adolescent literacy is the new kid on the block within the larger and well-established fields of content area literacy and secondary reading. In this chapter, we chronicle the relatively recent history of adolescent literacy and consider the impact of globalization and technology on adolescents' literacy lives. In addition, we list critical resources that will be useful in supporting work with adolescents and provide annotated recommended readings and key Web sites for adolescent literacy. Specifically, we provide selected resources and annotations for the following topic areas: adolescent literacy books, Web sites, funding sources, and program examples; policy documents; adolescents and new literacies; struggling readers; adolescent literacy journals; and young adult literature and critical literacy.

Briefly defined, adolescent literacy refers to extending literacy beyond school and textbook-based literacy to include multiple literacies such as reading online material as well as multiple texts including popular music, instant messages, blogs, television, magazines, and other text forms (Readence, Bean, & Baldwin, 2004). Thus adolescent literacy acknowledges both in-school and out-of-school literacies and, as a field, argues for better connections between the two.

ADOLESCENTS AND ADOLESCENT LITERACY

Nearly 10 years ago, the International Reading Association created the Commission on Adolescent Literacy, resulting in the publication of "Adolescent Literacy: A Position Statement" (Moore, Bean, Birdyshaw, & Rycik, 1999). At that point in time, adolescent literacy initiatives were largely with-

out the funding support typical of K–3 literacy efforts, and the commission set out to highlight the plight of adolescent learners. Professional organizations offered themed journal issues devoted to adolescent literacy (e.g., Bean & Readence, 2002), and edited collections began to appear, aimed at helping educators work with struggling adolescent readers (e.g., Moore, Alvermann, & Hinchman, 2000). All these resources remain valuable; the realm of adolescent literacy continues to flourish with a growing array of published articles, books, and documents.

Clearly some of the impetus for the growing interest in adolescent literacy is due to the high-stakes testing movement and greater scrutiny of adolescents' performance on state achievement measures. For example, the National Assessment of Educational Progress data revealed that adolescent learners are proficient at decoding predictable words and answering factual-level questions (Sturtevant et al., 2006). They are far less able to engage the advanced levels of reading necessary for understanding more complicated subject area texts, however. In addition, recent analyses of adolescents' dropout rates are cause for alarm. More than 3,000 students drop out of high school in the United States each day (Biancarosa & Snow, 2004). While alternate routes to graduation (e.g., credit recovery, GED, etc.) are possible, and large-scale intervention efforts, funded by programs like the U.S. Department of Education Striving Readers (USDOE, 2006) grants, as well as funded projects devoted to the integration of science, mathematics, and content area literacy (e.g., Bean, 2006) may help, these dropout data suggest that adolescents are struggling under the weight of assessments, second language acquisition, and increasingly complex and multimodal texts (Wilder & Dressman, 2006).

A recent review of research on marginalized adolescent readers found that effective programs for these students (often referred to as struggling readers) were characterized by a departure from traditional literary texts and a move toward using shorter, youth-friendly materials and curricula (Franzak, 2006). Greater student choice in reading material that interested and engaged struggling readers, particularly boys, included magazines, ads, music lyrics, comics, cartoons, and Internet-based texts. The use of multiple texts in teaching English, economics, and other subject areas contributes to students' ability to make conceptual connections across texts (Walker, Bean, & Dillard, 2005). This ability to read and link ideas across texts is crucial given the vast array of material available on the Internet and the increasing emphasis on information- and knowledge-related careers. Being able to analyze and critique multiple perspectives on an issue or problem requires teachers skilled in orchestrating lessons that encompass a variety of materials ranging from traditional print-based texts to nonprint media, including videos, television clips, ads, music, and so on (Sturtevant et al., 2006). In addition, in the case of struggling readers, the use of multiple texts that include high-interest materials produces a

sense of competence and control that is often missing when students are only permitted to read traditional texts (Franzak, 2006).

To get a better picture of the changing nature of literacy and the increasing demands of advanced literacy, definitions of both adolescent literacy and content area (subject-based literacy) are needed. For example, the National Council of Teachers of English (NCTE) has a glossary of terms devoted to adolescent literacy stating that “this term includes the idea that adolescents have multiple literacies, expanded ideas about texts, their literacies shape their emerging sense of self, and they need school-based opportunities to explore multiple literacies.”

Bean (2001) acknowledged the need for a definition of content area literacy that accounts for the multiple forms of texts adolescents encounter in and out of school:

Content area literacy is a cognitive and social practice involving the ability to read and write about multiple forms of print. These multiple forms of print include textbooks, novels, magazines, Internet material and other sociotechnical sign systems conveying information, emotional content, and ideas to be considered from a critical stance. (para. 3)

What these definitions of adolescent literacy and content area literacy suggest is the changing and expanding scope of what it means to be literate in the twenty-first century. Communications technology and multimedia forms of text, including the Internet, smart phones that include calendars, e-mail capability, and other features such as navigational aids, instant messaging (IM), text messaging, wireless communication, and extensive music and video files on iPods, present contemporary adolescents with a huge array of information (Bean & Harper, in press). Although often bypassed in school curricular contexts, pop culture interests in music and other pop culture forms intersect with literacy development through adolescents' critical reading and writing (Guzzetti & Gamboa, 2004). Being able to make intertextual connections across multiple forms of texts (e.g., print and film) will be crucial (Walker, Bean, & Dillard, 2005). More importantly, being able to discern critically important, accurate, and reliable information from misinformation as well as being able to deconstruct the underlying ideologies and positions represented in various forms of texts will be essential for functioning as global citizens (Harper & Bean, 2006; Stevens & Bean, 2007).

ADOLESCENT LITERACY IN THE NEW TIMES AND NEW LITERACIES

Globalization and the changing nature of work both suggest a critical need for more advanced literacy development for adolescents. The award-winning

New York Times columnist Thomas Friedman (2005) argued that twenty-first-century citizens must be able to critique the propaganda that is widely disseminated on the Internet. Environmental disasters, including tsunamis, global warming, bird flu, and other worldwide risks, demand a world citizenry capable of careful, detailed reading, analysis, and critique. The nature of involvement in a democratic society will be influenced by adolescents' literacies, literacies that call for more sophistication than those literacy abilities tested on standardized reading tests. Indeed, democracy is complex and requires world citizens who not only manipulate huge quantities of information, but also know how to question effectively the value and underlying beliefs in any form of discourse (Harper & Bean, 2006).

Toward that end, we offer recommended readings at the close of the chapter that will help advance adolescents' critical literacy through the use of young adult literature and other forms of text. This is especially important given the rapid increase in new forms of texts. Often labeled new literacies (Kist, 2005), these newer forms of texts include IMing, blogging, e-zines, and various Internet Web pages (O'Brien, 2006). Although the term *new literacies* encompasses much more than information and communication technologies (ICT), advances in technology greatly impact how adolescents read. O'Brien (2006) noted that adolescents' multimodal channel switching, evidenced when young people seamlessly shift in and out of real and virtual worlds through such simultaneous processes as word processing, using multiple screens, making cell phone calls, and playing MP3 music files, produces new competencies.

Kress (2003) noted a shift from print-based reading as a dominant form to reading on the online screen as predominant. He argued that the dominance of the screen has changed literacy; reading is now a distinctly different activity from what it was in the era of the traditional print literacy. With each day, technologies are outdated, Web sites are shut down, and software is updated. Therefore literacy education must be receptive to these changes and willing to keep up with the "neckbreak speed" at which technologies are occurring (International Reading Association, 2002). Yet it is likely that new literacies of technology (sometimes called technoliteracies) are not new to adolescents. ICT continues to be such an integral part of adolescents' lives that they are likely to take these elements for granted. Moorman (2006) distinguished immigrant from native users of technology. Immigrant users are those individuals from the Baby Boomer generation who did not grow up with digital literacies. Adolescents with access to technological devices have, in many cases, grown up with these tools as native users. Although adolescents may not make connections between the reading and writing they engage in as they navigate chat rooms, Web pages, and IM, the literacies they use are extensive as they read, critique, and make meaning while interacting with computer-based texts.

The shift from the page to the screen has greatly impacted what it means to read. The movement from print-based texts to the incorporation of new literacies has expanded current definitions of text and reading. Kress (2003) defined a text as any form of communication. Given this definition, the traditional linear reading path in Western culture, with a direct sequence from top to bottom and left to right, is not sufficient or effective when reading on the Internet, particularly because of the dominance of images. Kress (2003) argued that "*the world told* is a different world to *the world shown*" (p. 1). The texts of today's world are reliant on image and use text as a support. Because images do not need to be read in the traditional reading path of left to right and top to bottom, other reading paths are made possible. Reading paths are determined by the reader's sense of what is relevant on the screen (Kress, 2003). As a result, the number of reading paths is infinite. The reader has greater opportunities to construct his or her own knowledge that is most relevant for the issue or problem under consideration. McNabb (2006) cautioned that online texts require sophisticated and often idiosyncratic navigational paths that are quite different from predictable and familiar print-based text structures. In addition, the sheer volume of texts and information on any topic available online offers multiple perspectives and multiple biases, calling for careful reading and critique.

Advances in technology present limitless learning opportunities for students. Information is now available with a click of a button. With the daily advances of ICT, the possibilities are challenging yet offer exciting opportunities for classrooms. To investigate further the occurrence of new literacies in the classroom, Kist (2000) sought to define and characterize new literacies classrooms across the United States and Canada. Kist's (2005) most recent work is a book containing multiple case studies, describing new literacies classrooms and practices. In defining new literacies, Kist looked for the following five classroom characteristics: (1) daily work in multiple forms of representation; (2) explicit discussions of the merits of using certain symbol systems; (3) metadialogues by the teacher who models problem-solving; (4) a mixture of individual and collaborative activities; and (5) engaging contexts where students achieve flow state.

Using these characteristics, Kist (2005) was able to identify and observe classrooms where teachers were drawing on students' knowledge of technology and extending their learning through collaboration, creativity, and higher-level thinking skills. Among many elements present in the classrooms Kist observed, collaboration was paramount to the success of students' multimedia projects. Thus learning how to work effectively and productively with others was an important byproduct of being a student in a new literacies classroom. In addition, students reported a stronger sense of agency and voice when they were engaged in collaboratively constructing a product such as a film festival at San Fernando High School in southern California. From a teacher's

perspective, working on new literacies projects is likely to improve students' communication skills as well as their ability to plan and manage time. Multiple text forms were present in these classrooms such that students saw a link between their video productions and the supporting material underpinning these productions (e.g., written rationales and title cards explaining the intent of a video, sometimes in both English and Spanish).

Current research offers a glimpse of what is possible when new literacies are part of classroom instruction. Adolescents using these technologies are collaborating, using technology, creating, and exploring their worlds in multiple forms (Alvermann & Hagood, 2000; Alvermann & Heron, 2001; Kist, 2000, 2002, 2005; O'Brien, 2006). Students in these classrooms are engaging in meaningful learning and are bringing their outside literacies into the school. Adolescents who may have been previously marginalized by print-based literacies may be enabled to find a space in a new literacies classroom because multiple ideas and skills are needed (Leu, Castek, Henry, Coiro, & McMullan, 2004). Adolescents must learn the needed literacy knowledge, skills, and dispositions to participate in their future lives, and therefore technology is not something that can be an add-on to a lesson every now and then; rather, technology must be infused into the daily curriculum (Lankshear & Knobel, 2004). Nevertheless, traditional print literacy skill influences how struggling readers engage digital texts. For example, Wilder and Dressman (2006) conducted a study of six 9th-grade students in a cultural geography class. Three of the students were struggling readers reading below grade level, while three were in the college preparation curriculum. On the basis of this study, the researchers cautioned that print literacy remains an important prerequisite for successful navigation of Web-based sites. When one of the struggling readers misspelled the name of an international island site, his search bogged down in misinformation. Struggling readers in the study, when confronted with extensive information and lengthy text passages, began skimming. They ultimately opted out of these sites for shorter, often less informative Web sites. Wilder and Dressman concluded that although most students were proficient in the mechanics of conducting searches or typing in URLs of Web sites, the level of (print) literacy demanded by a particular Web site visited or searched closely matched their general level of literate proficiency.

READING AND BOYS

Recent and somewhat alarmist concern about boys and their reading achievement has prompted a developing area of research and resources devoted to this topic. Although much less voluminous than the array of studies on girls and reading produced in the 1990s, research around adolescent masculinity and reading is developing rapidly. For example, Brozo (2002) recommended

directly introducing adolescent boys to archetypal literature featuring male characters who challenge narrow notions of what it means to be male. Well-known novels and films like *Holes* (Sachar, 1998), with its healer archetype, or the freedom-loving archetype in *Brian's Winter* (Paulsen, 1996) are but two examples. Others recommend using young adult literature as a vehicle for critiquing gendered practices (e.g., men do not cry; Bean & Harper, in press). In interviews with Australian adolescent boys, many of the students mentioned that they wanted to read books that dealt realistically with relationships in their lives (Martino & Pallotta-Chiarolli, 2003), suggesting that books that simply valorized rugged individuals and loners failed to capture their broader interests. Similarly, work by Smith and Wilhelm (2002) countered the notion that boys see reading as a feminine pursuit. Their study, involving interviews with adolescent boys, showed that these students had a broad array of literacy interests that were not well represented in school. Some wrote poetry, others music, film scripts, and a host of other literacy-related practices, yet many struggled with school-sanctioned literacy practices and high-stakes testing. The developing work on boys and reading, particularly in the United States, Canada, and Australia, is likely to tap into a curriculum that acknowledges provisions for extra literacy support. A number of programs already exist that, while not centered exclusively on boys and reading, offer support mechanisms that encourage adolescents to think seriously about further study, particularly at the college and community college levels.

Support for adolescents' print-based literacies, especially for adolescents who may not have access to computer-based new literacies tools, remains crucial. Support programs like project Advancement Via Individual Determination (AVID) and Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR-UP), aimed at building adolescents' cultural capital (or dominant cultural resources) and school-based skills, offer a strong bridge to college study. Both funded projects are designed to assist students in mastering studying, time management, test-taking strategies, and ways of talking to teachers about their progress in a class. AVID is designed to ensure that underrepresented youth in high school develop the literacy and social skills needed to attend and graduate from college. GEAR-UP offers adolescents an array of summer programs, financial support, and information on college admissions and other resources. These programs are listed in the annotated bibliography at the close of the chapter, and their Web sites offer information on the characteristics of both programs.

Within a new literacies framework, an increasing number of virtual or hybrid online high schools coexist with more traditional high schools. Hybrid online high schools generally have one on campus face-to-face day with teachers, while the remainder of the week is devoted to online subject area study. Often developed as online charter schools, the advent of virtual schools offers

students who are homebound, wary of bullying in traditional high schools, incarcerated in jail or prison, or simply interested in the rich array of content area information available in digital formats an alternative learning experience. Research on the impact of virtual schools on student achievement shows that these alternative offerings are at least as good as face-to-face settings (Blomeyer & Dawson, 2005).

CRITICAL RESOURCES FOR SUPPORTING ADOLESCENT LITERACIES

A growing number of policy documents, books, book chapters, articles, and Web sites are devoted to supporting adolescent literacy (Franzak, 2006). While by no means exhaustive, the following annotated resources should provide a good springboard for additional exploration in adolescent literacy. In addition, the reference list for this chapter includes articles that chronicle ongoing work in adolescent literacy.

ANNOTATED BIBLIOGRAPHY

Adolescent Literacy Books

Alvermann, D. L., Hinchman, K. A., Moore, D. W., Phelps, S. F., & Waff, D. R. (Eds.). (2006). *Reconceptualizing the literacies in adolescents' lives* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

This recent edited volume addresses major topics in adolescent literacy, including supporting research and promising practices. The voices of many key figures in adolescent literacy are included, and the volume extends the ideas begun in the 1998 edition of this widely quoted book.

Jetton, T. L., & Dole, J. A. (Eds.). (2004). *Adolescent literacy: Research and practice*. New York: Guilford Press.

This comprehensive edited volume looks at the teaching of subject area literacy in a variety of areas, including English and science. In addition, there are sections and chapters on working with struggling readers and a consideration of critical issues in adolescent literacy, including assessment.

Rycik, J. A., & Irvin, J. L. (2001). *What adolescents deserve: A commitment to students' literacy learning*. Newark, DE: International Reading Association.

This edited volume features a wealth of information on programs for adolescents as well as foreshadowing more recent work in multiple literacies and new literacies. Information on second language learners, struggling readers, and middle school readers is included.

Sturtevant, E. G., Boyd, F. B., Brozo, W. G., Hinchman, K. A., Moore, D. W., & Alvermann, D. E. (2006). *Principled practices for adolescent literacy: A framework for instruction and policy*. Mahwah, NJ: Lawrence Erlbaum Associates.

Supported by a Carnegie Corporation grant, this volume chronicles vignettes of content area classrooms across the country where teachers of adolescents demon-

strated successful practices in literacy related to mathematics, science, English, and other subjects. These vignettes offer readers classroom examples of teachers using multiple texts and various approaches to engage adolescent learners in complex material.

Adolescent Literacy Web Sites

The 2006 International Reading Association Annual Convention featured an Institute on Praxis in Adolescent Literacy Instruction: The Interplay of Theory and Practice, cochaired by Jill Lewis and Gary Moorman. The Web site that grew out of this institute has a wealth of information applicable to policy issues and recommendations for practice. The Web site can be found at http://moormangb.ced.appstate.edu/ira_institute_06.

The more general International Reading Association Web site has numerous resources for adolescent literacy. This site can be found at <http://www.reading.org>.

The NCTE has a policy document on adolescent literacy available via the organization's homepage or at <http://www.ncte.org/library/files/Middle/NolanBrief.pdf>.

A Web site devoted to boys and reading is <http://guysread.com>.

Adolescent Literacy Funding Sources and Examples

The U.S. Department of Education (DOE) supports grants to states to improve teaching in science and mathematics. Formerly called Eisenhower grants, this funding source now supports projects that integrate content area literacy with mathematics and science teaching (e.g., Bean, 2006). Information on application procedures for these grants (termed NeCoTIP in Nevada) can be located at the U.S. DOE Web site under Mathematics and Science Partnerships: <http://www.ed.gov/programs/math-sci/index.html>.

Striving Readers Grants information can be found at the U.S. DOE site: <http://www.ed.gov/programs/strivingreaders/faq.html>. The Striving Reader Grants center on middle and secondary struggling reader interventions. Approximately nine grants were awarded to projects in Chicago, New Jersey, and elsewhere. It is expected that funding for this grant category will increase but remain highly competitive, with educational labs and other professional grant writing agencies developing proposals.

Adolescent Literacy Policy Documents

Moore, D. W., Bean, T. W., Birdyshaw, D., & Rycik, J. (1999). Adolescent literacy: A position statement. *Journal of Adolescent and Adult Literacy*, 43, 97–112.

This is the original policy document supporting work in adolescent literacy. Developed by the International Reading Association Adolescent Literacy Commission, the document is widely cited and used by school districts, principals, and literacy leaders. It can be retrieved online at <http://www.reading.org/pdf/1036.pdf>

In addition to this document, both the NCTE and the National Middle School Association have policy documents underpinning adolescent literacy. The NCTE document can be found at <http://www.ncte.org/edpolicy/literacy/about/122379.htm>

Adolescents and New Literacies

Alvermann, D. E. (Ed.). (2004). *Adolescents and literacies in a digital world*. New York: Peter Lang.

This edited text details the literacies that are necessary for adolescents to participate effectively in today's technologically advanced world. Each chapter discusses the challenges and possibilities that adolescents face as they interact with information and communication technologies both inside and outside the classroom.

Berge, Z. L., & Clark, T. (2005). *Virtual schools: Planning for success*. New York: Teachers College Press.

This edited volume features chapters detailing the impact of virtual learning. Hybrid models where students engage in both online and face-to-face learning configurations seem to result in high completion rates and learning that parallels face-to-face learning alone. The book is a good resource for educators planning to implement online learning.

Kist, W. (2005). *New literacies in action: Teaching and learning in multiple media*. New York: Teachers College Press.

This book provides a detailed description of the practices used in new literacy classrooms. Through multiple case studies, Kist describes the experiences of both teachers and students as they work with new literacies in various content areas.

Kress, G. (2003). *Literacy in the new media age*. London: Routledge.

This book describes the changes occurring in literacy as the emphasis shifts from print-based texts to the computer screen. Kress reports that traditional reading skills are insufficient to meet the needs of students as they interact with multimedia texts. Classroom examples are provided.

Lankshear, C., & Knobel, M. (2003). *New literacies: Changing knowledge and classroom learning*. Berkshire, UK: Open University Press.

This book argues for a shift in mind-set among educators due to the technological revolution. The authors argue that the use of new literacies in classrooms is essential to students' current and future lives.

Levesque, S. (2006, June). *Virtual historian*. London, ON: University of Western Ontario Faculty of Education.

This demonstration software project involved the development of a virtual learning environment that immerses students in the actual sites of historical events through interactive inquiry. A variety of multimedia supports students' learning of history. Students can manipulate visual links and move objects and troops in battle scenes to compare their thinking to that of leaders in history. In an age of interactive video games, this form of learning is a powerful alternative to static textbooks. For a look at this project, see <http://www.virtualhistorian.ca>.

McNabb, M. L. (2006). *Literacy learning in networked classrooms: Using the Internet with middle-level students*. Newark, DE: International Reading Association.

On the basis of research in middle-level classrooms, McNabb finds that more sophisticated navigation and critical reading skills are needed to prepare students for life in the networked world of the twenty-first century. Print-based literacy skills alone are inadequate in light of global networks. The book offers a number of useful Web sites related to digital literacies.

Adolescent Struggling Readers

Advancement via Individual Determination (AVID)

The AVID project is designed to ensure that underserved students increase their enrollment in four-year colleges to "become educated and responsible participants

and leaders in a democratic society” (p. 1). In terms of literacy support, AVID uses vocabulary concept mapping and comprehension strategies like “What I *know*, What I *want* to know, What I *learned*” (KWL), along with various note taking approaches, to scaffold students’ learning and develop independence. Students are served from grades 5–12 as they prepare for college. The program targets students who are not meeting their academic potential (i.e., receiving B grades or lower). Although AVID is not specifically designed to target struggling readers, it offers support mechanisms for increasing students’ likelihood of success in pursuing a college education. Schools associated with the AVID program receive extensive professional development and learn the writing, inquiry, collaboration, and reading (WIC-R) method to better meet the needs of students in content area classes. Research studies have shown that the implementation of the AVID program increases students’ test scores and also increases the number of students attending college. AVID is currently part of 2,200 middle schools and high schools in 36 states and 16 countries. More general information about AVID can be found at <http://www.avidonline.org>. To view an example of an AVID program, use your search engine to locate multiple sites, for example, <http://sths.ltusd.k12.ca.us/STHS%20AVID/shatisavid.htm>

Franzak, J. K. (2006). *Zoom: A review of the literature on marginalized adolescent readers, literacy theory, and policy implications*. *Review of Educational Research*, 76, 209–248. This review looks closely at three instructional approaches for struggling adolescent readers: reader response, strategic reading, and critical literacy. The author evaluates each approach with an eye toward advantages and disadvantages. Recommendations for policy changes aimed at serving adolescent struggling readers are advanced, including greater attention to adolescents’ expressed competencies and interests in literacy.

GEAR-UP Program: Gaining Early Awareness and Readiness for Undergraduate Programs

The GEAR-UP Program offers students support services to prepare for college, including summer internships, information on college admissions, and a host of other activities designed to interest adolescents in college enrollment. For an example, see <http://www.sccedu.org/gearup>.

Houge, T. T., Peyton, D., Geier, C., & Petrie, B. (in press). Adolescent literacy tutoring: Face-to-face and via web-cam technology. *Reading Psychology* 28 (3), 1–18.

This innovative tutorial program, developed at Northern State University in South Dakota, combines a content area literacy course for undergraduates with long-distance tutoring of struggling adolescent readers throughout rural South Dakota and beyond. The article reports on recent research comparing face-to-face and online tutoring in terms of adolescents’ reading growth. The value-added dimensions of this distance-tutoring model using technology is supported in the study.

Moore, D. W., Alvermann, D. E., & Hinchman, K. A. (Eds.). (2000). *Struggling adolescent readers: A collection of teaching strategies*. Newark, DE: International Reading Association.

This edited volume includes a wealth of articles on vocabulary and comprehension development and other topics that will be useful to educators interested in advancing struggling readers’ development.

NovaNET: Pearson Digital Learning

NovaNET is an online, standards-based curriculum for middle and high school learners offering a credit recovery program aimed at successful completion of content area courses. See additional information at <http://www.PearsonDigital.com>.

Journals

Journal of Adolescent and Adult Literacy

Published eight times a year by the International Reading Association, this is the premier journal devoted to adolescent literacy issues. It offers educators consistently valuable resources for working with adolescent learners, and it includes regular reviews of young adult novels and promising books.

Journal of Content Area Reading

This journal is supported by the Secondary Special Interest Group of the International Reading Association and features articles on promising practices in subject areas for adolescent literacy. The articles are generally short and highly readable.

Themed Issues of Selected Journals Devoted to Adolescent Literacy

Reading Research and Instruction

The spring 2001 issue of the College Reading Association's *Reading Research and Instruction* was a themed issue edited by John Readence and Tom Bean. It featured articles on second language learners, identity, and critical literacy, to name a few topics.

Reading Psychology

The fall 2006 issue of the international journal *Reading Psychology* was a themed issue on adolescent literacy. It included refereed articles on a variety of topics useful to educators working with adolescents. For example, the topic of boys and reading was considered, along with other topics in adolescent literacy.

Canadian Journal of Education

A 2007 themed issue of this journal will be coedited by Wayne Martino and Michael Kehler and devoted to boys, literacies, and schooling. Articles will include H. Harper's "Reading Masculinity in Books about Girls."

Young Adult Literature and Critical Literacy

The wealth of young adult literature now available to adolescent readers can be found at the American Library Association Web site as well as at the Web sites for the International Reading Association, the NCTE, and commercial bookstores, including Amazon.com and Barnes and Noble. Ongoing work in critical literacy centered on adolescents can be found in recent books, including the following:

Stevens, L. P., & Bean, T. W. (2007). *Critical literacy: Context and practice in the K-12 classroom*. Thousand Oaks, CA: Sage.

This book provides classroom examples and lists numerous other texts and Web sites aimed at developing students' understanding and application of critical literacy to a variety of print- and media-based texts carrying ideological content to be carefully scrutinized and critiqued.

This annotated bibliography is selective and is by no means meant to be an exhaustive list of all that is under way in the burgeoning area of adolescent literacy. By looking over these resources and sites, the reader can gain a working knowledge of essential policy issues and practices related to adolescent literacy. These resources show that this is an exciting era for adolescent literacy and a hopeful time for adolescents as learners in both traditional and nontraditional classroom settings.

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Literacy for the New Millennium

*I dedicate this series of books to all those who center their professional lives on
fostering the development and practice of literacy.*

LITERACY FOR THE NEW MILLENNIUM

Volume 4

Adult Literacy

Edited by Barbara J. Guzzetti

Praeger Perspectives

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SET PREFACE

This set of four volumes—*Literacy for the New Millennium: Early Literacy*; *Literacy for the New Millennium: Childhood Literacy*; *Literacy for the New Millennium: Adolescent Literacy*; and *Literacy for the New Millennium: Adult Literacy* presents a current and comprehensive overview of literacy assessment, instruction, practice, and issues across the life span. Each volume presents contemporary issues and trends, as well as classic topics associated with the ages and stages of literacy development and practice represented in that text. The chapters in each volume provide the reader with insights into policies and issues that influence literacy development and practice. Together, these volumes represent an informative and timely discussion of the broad field of literacy.

The definition of literacy on which each of these volumes is grounded is a current and expanded one. Literacy is defined in this set in a broad way by encompassing both traditional notions of literacy, such as reading, writing, listening, and speaking, as well as the consumption and production of nonprint texts, such as media and computer texts. Chapters on technology and popular culture in particular reflect this expanded definition of literacy to literacies that represents current trends in the field. This emphasis sets this set apart from other more traditional texts on literacy.

The authors who contributed to this set represent a combination of well-known researchers and educators in literacy, as well as those relatively new to the profession of literacy education and scholarship. Contributors to the set represent university professors, senior scientists at research institutions, practitioners, or consultants in the field, teacher educators, and researchers in literacy. Although the authors are experts in the field of literacy, they have

written their chapters to be reader friendly, by defining and explaining any professional jargon and by writing in an unpretentious and comprehensible style.

Each of the four volumes shaped by these authors has common features. Each of the texts is divided into three parts with the first part devoted to recent trends and issues affecting the field of literacy for that age range. The second part addresses issues in assessment and instruction. The final part presents issues beyond the classroom that affect literacy development and practice at that level. Each of the texts concludes with a chapter on literacy resources appropriate for the age group that the volume addresses. These include resources and materials from professional organizations, and a brief bibliography for further reading.

Each of the volumes has common topics, as well as a common structure. All the volumes address issues of federal legislation, funding, and policies that affect literacy assessment instruction and practice. Each volume addresses assessment issues in literacy for each age range represented in that text. As a result of the growing importance of technology for instruction, recreation, information acquisition, communication, and participation in a global economy, each book addresses some aspect of literacy in the digital age. Because of the importance of motivating students in literacy and bridging the gap between students' in-school literacy instruction and their out-of-school literacy practices, each text that addresses literacy for school-age children discusses the influence and incorporation of youth and popular culture in literacy instruction.

In short, these volumes are crafted to address the salient issues, policies, practices, and procedures in literacy that affect literacy development and practice. These texts provide a succinct yet inclusive overview of the field of literacy in a way that is easily accessible to readers with little or no prior knowledge of the field. Preservice teachers, educators, teacher trainers, librarians, policy makers, researchers, and the public will find a useful resource and reference guide in this set.

In conclusion, I would like to acknowledge the many people who have contributed to the creation of this set. First, I recognize the outstanding contributions of the contributors. Their writings not only reflect the most informative current trends and classic topics in the field but also present their subjects in ways that take bold stances. In doing so, they provide exciting future directions for the field.

Second, I acknowledge the contributions to the production of this set by staff at Arizona State University in the College of Education. My appreciation goes to Don Hutchins, director of computer support, for his organizational skills and assistance in the electronic production of this set. In addition, I

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Finally, I would like to thank the staff and editors at Praeger Publishers, who have provided guidance and support throughout the process of producing this set. In particular, I would like to thank Marie Ellen Larcada, who has since left the project but shared the conception of the set with me and supported me through the initial stages of production. My appreciation also goes to Elizabeth Potenza, who has guided this set into its final production, and without whose support this set would not have been possible. My kudos extend to you all.

Barbara J. Guzzetti

PREFACE

LITERACY FOR THE NEW MILLENNIUM: ADULT LITERACY

Adult literacy is an adult's ability to read, write, listen, and speak to accomplish daily activities in the community, in the family, and on the job. The Adult Performance Level Program popularized the idea of functional literacy, which the Adult Performance Level Program defined as reading and writing at a minimal level in day-to-day living. These functional literacies include everyday literacy practices, such as reading a newspaper or writing a check. This definition of adult literacy is based on economic growth.

A social view of adult literacy extends this definition by emphasizing the critical thinking and reading, writing, speaking, and listening skills needed to participate in a democratic society. This view of literacy stresses social power, action, and change. This perspective sees literacy as not merely an autonomous set of skills and practices predetermined by others. Rather, this view is one of literacy as embedded in culture, and socially and politically constructed.

This book is based on a blend of these two views of adult literacy. Chapters in this text address both the cognitive and social perspectives on and aspects of adult literacy. The text encompasses traditional topics of adult literacy, such as assessment and adult education programs, while also examining topics related to literacy in the new millennium, such as the incorporation of technology, the changing demands of workplace literacy, and family literacy.

The text is divided into three parts. Each part consists of two to five chapters that provide a broad overview of issues, trends, programs, assessment, and instruction related to adult literacy in everyday life. Together, these chapters

address adult literacy in family and workplace settings across the stages of adulthood.

Part I, “Issues and Trends in Adult Literacy,” provides an overview of recent topics and concerns in the field, beginning with a chapter by Laurie Elish-Piper in which she examines changing definitions of and historical influences on adult literacy. Elish-Piper then discusses the current expectations for adult literacy, including prose literacy, document literacy, quantitative literacy, and health literacy, while presenting characteristics of adult learners and their difficulties with reading. The chapter concludes with a brief overview of literacy instruction for adults.

In the second chapter, Alisa Belzer and Ralf St. Clair explore the ways in which powerful political, social, and economic factors influence adult literacy education. They have coined a term—“anthropolicy”—that allows them to argue for the importance of analyzing the ways in which policies are influenced by these forces and, in doing so, provide the perspectives of practitioners. Their interviews with two teachers and a program administrator working in adult literacy illustrate the ways in which the field has changed. These narratives highlight three policy themes that have had a critical effect on practice, including literacy as a workforce development strategy, assessment, accountability and standards, and increased and more specialized funding.

Part II, “Adult Literacy Instruction and Assessment,” addresses topics related to the nature of adult learning and development and appropriate instructional methods and programs for adult literacy learners. This part begins with a chapter by M. Cecil Smith, who describes teaching and learning in adult literacy education. Smith notes that the system of adult education is different from that of pre-kindergarten through 12th-grade education, and therefore, the preparation and qualifications of adult literacy teachers are distinct from those of teachers in elementary and secondary schools. The author provides information about the preparation of adult basic education teachers and the roles and responsibilities of volunteer tutors and discusses instruction in reading, writing, and mathematics, particularly through computer-assisted instruction. Smith also describes the benefits that adults derive from their participation in basic literacy skills programs.

Chapter 4 complements the preceding chapter by describing the structure of adult literacy programs and how they operate. Hal Beder discusses adult literacy programs as well as the inherent problems in their structure. According to Beder, these programs are generally grant funded and typically sponsored by organizations that primarily serve children and youths with high drop-out rates and part-time teachers who make them structurally marginal in comparison to K–12 schools and institutions of higher education.

In the third chapter of part II, John Strucker offers a picture of the adult basic education and English-as-a-second-language population and describes

the economic and social importance of acquiring English skills. He identifies problems associated with wide ranges of funding levels, funding sources and providers, and personnel. He summarizes best practices in adult literacy education and discusses challenges to the system in providing those practices. He concludes with a discussion of important reforms for the future.

In the final chapter of this section, chapter, Irwin Kirsh, Marylou Lennon, and Claudia Tamassia argue that adult education programs have been recognized as increasingly important in a changing United States where rewards for education and skills are increasing. This recognition led to the development of the Adult Education Program Survey, which gathered information about the skills and characteristics of participants in federally funded adult education programs. The authors present data that together with economic and social trends call into question the resources allocated to adult learners that are needed to meet current and future challenges.

Part II, “Adult Literacy beyond the Classroom,” addresses adults’ literacy needs and practices in settings outside adult education programs and examines the needs and practices of adults as they enter their senior years. This part begins with a chapter on family literacy by Victoria Purcell-Gates, who explores the notion of family literacy by defining it and relating it to children’s success in school. She provides a background on the interest in family literacy and describes the ways in which policy makers have appropriated the term and created a call for family literacy programs. Purcell-Gates describes family literacy programs and provides evidence of the effectiveness of these programs. She concludes her chapter by discussing implications from research for school and parents and offering suggestions for teachers and parents for literacy activities to encourage children in becoming independent readers and writers.

In the next chapter, Larry Mikulecky defines workplace literacy and describes how workplace literacy programs emerged due to concerns about literacy skills in the military. Mikulecky describes the influence of immigration, the need for new certification programs in industry, and the necessity of retraining workers to meet the demands of a changing digital world. He provides examples of workplace literacy and concludes with a discussion of issues associated with the field and the future of workplace literacy.

In the next chapter, Anne DiPardo argues that while older adults’ literacy practices are shaped by society’s conceptions of aging, these practices can also serve to challenge and revise popular notions of later life. DiPardo makes the case that an increasingly powerful contingent of older adults is engaging in a range of literacy activities for multiple purposes. These include both traditional pursuits, such as life reviews and memoir writing, and innovative programs that foster intergenerational connections and social activism. DiPardo concludes by making the point that changing technologies are also facilitating

new literacy practices for older adults as they join their younger counterparts in using new forms of texts and textual practices to sustain relationships and influence the world.

In the following chapter, David J. Rosen writes about how technology can be integrated into adult literacy classes and computer labs and how technology can supplement distance learning at home. Rosen writes about computer-assisted instruction but also makes a case for using technology as tools and for project-based approaches to learning that can take advantage of technology. He concludes the chapter by describing new uses of technology, such as podcasts, wikis, and mobile learning, in adult literacy education and reminds readers of the usefulness of developing a state plan for incorporating technology into adult literacy education.

The book concludes with a chapter by Jackie Taylor in which she outlines the availability of adult literacy resources. In doing so, Taylor describes instructional resources, program resources, and advocacy tools for leveraging resources. She includes resources for locating research and professional advice for the lay public, as well as those involved in adult literacy education and research.

Part One

ISSUES AND TRENDS IN ADULT LITERACY

Chapter One

DEFINING ADULT LITERACY

Laurie Elish-Piper

Some adults struggle with reading, writing, and mathematics in their daily lives. These struggles may limit their employment opportunities and community involvement and negatively affect their health. For example, if adults do not read and write well enough to obtain either a high school diploma or a GED, they may be relegated to low-wage jobs that do not offer long-term security, health insurance, or other benefits. There are four main reasons that some adults do not learn to read well (Chisman, 2002). First, some of these adults may have been the products of ineffective schools in inner-city and rural areas where quality education was not available. Second, some of these adults entered school behind their peers and never caught up, which led them to drop out of school. Third, some adults speak a native language other than English and have limited English literacy skills. Finally, some adults may have learning disabilities, chronic illnesses, and other conditions that impede their literacy development.

According to the National Assessment of Adult Literacy (NAAL), 44 percent of adults in the United States have limited abilities to use literacy to perform tasks in their daily lives (National Center for Education Statistics, 2006). Since so many adults in the United States have limited literacy skills, it is important to understand the many dimensions and components of adult literacy.

WHAT IS ADULT LITERACY?

Adult literacy is a broad concept that encompasses many components; therefore, its definition is complex and multifaceted. A traditional definition

of adult literacy focuses on a functional set of specific reading and writing skills that adults need to acquire to function in the world. Typically, these skills are emphasized through school-type activities such as reading a text and answering comprehension questions or completing workbook exercises on grammar. This traditional definition persists in the media and in some programs serving adult literacy students. For example, radio commercials advertising adult literacy programs often use phrases such as “Improve your reading skills” or “Build your basic skills,” which emphasize the functional aspects of adult literacy rather than contextual issues such as applying literacy in the workplace, in the home, or in the community.

The most common contemporary definition of adult literacy centers on an adult’s ability to read and write in relation to daily activities at home, at work, and in the community. Other definitions of adult literacy broaden the notion of literacy to include technology skills and the ability to solve problems, view, and visually represent. Still other definitions take a more progressive stance and view adult literacy as a political and transformative process that occurs in social, cultural, and power contexts.

CHANGING DEFINITIONS OF ADULT LITERACY

Definitions of adult literacy have changed significantly over the past century (Newman & Beverstock, 1990). During the early 1900s, literacy was simply defined as the ability to sign one’s name. In 1910 the U.S. Census Bureau categorized literacy as the ability to write in any language. In 1930 the U.S. Census Bureau made the ability to read in any language part of the definition of literacy. By 1940, the U.S. Census Bureau defined adult literacy in terms of the completion of at least five years of school and the ability to pass a written examination at the 4th-grade level. In 1958, the United Nations Educational, Scientific, and Cultural Organization defined adults as literate if they could read and write a simple statement about daily life. By the mid-1960s the standard level of performance for adult literacy had risen to the 8th-grade reading level. In 1978, the United Nations Educational, Scientific, and Cultural Organization defined literacy as the ability to use reading, writing, and mathematics in activities required for meaningful participation in an adult’s group and community.

The 1991 National Literacy Act defined literacy as an adult’s ability to read, write, and speak English; compute; and solve problems at the level needed to accomplish goals, function at work, and develop to one’s potential. Building on this definition, the 1992 National Adult Literacy Survey (NALS) described literacy from a task-based perspective as a skill consisting of three components: prose literacy, or the ability to find and use information from connected texts such as newspapers, stories, and poems; document literacy,

or the ability to understand and use information from charts, tables, graphs, and maps; and quantitative literacy, or the ability to use information in prose and document texts to complete mathematical operations (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993). Each of these types of literacy is described in more detail in Table 1.1.

The Workforce Investment Act of 1998 defined adult literacy as “an individual’s ability to read, write, speak in English, compute and solve problems at levels of proficiency necessary to function on the job, in the family of the individual and in society.”

An analysis of definitions of adult literacy indicates that until the mid-1980s, definitions focused on functional literacy and the attainment of skills and competencies linked to specific daily tasks (Demetrios, 2005). A concern with this view of functional literacy is how to identify a set of literacy skills and competencies for all adults regardless of their goals, situations, and lives. In response to this concern, some adult literacy educators and researchers began to define literacy as the “possession of skills perceived as necessary by particular persons and groups to fulfill their own self-determined objectives as family and community members, citizens, consumers, job-holders, and members of social, religious, or other associations of their choosing” (Hunter & Harman, 1985, p. 7). This shift from a rigid set of literacy skills and competencies to a more complex view that incorporated individual goals, needs, and strengths put the emphasis on the individual adult learner and his or her social and cultural context.

What, then, constitutes adult literacy within this broader framework? Barton (1994) defines literacy in terms of literacy practices, literacy events, and domains. Literacy practices are the “general cultural ways of utilizing literacy” that arise out of adults’ communities and daily lives (Barton, 1994, p. 5). Literacy events are the specific activities that incorporate literacy and

Table 1.1
Types of Literacy Assessed on the National Adult Literacy Survey (1992) and the National Assessment of Adult Literacy (2003)

Type of literacy	Description
Prose literacy	The ability and skills needed to search, comprehend, and use information from continuous texts such as newspapers, editorials, brochures, and instructional materials
Document literacy	The ability and skills needed to search, comprehend, and use information from noncontinuous texts such as job applications, maps, tables, and schedules
Quantitative literacy	The ability and skills needed to identify and perform computations using numbers from printed materials, such as balancing a checkbook, completing an order form, or figuring out interest on a loan

Source: National Center for Education Statistics (2005); Kirsch, Jungeblut, Jenkins, & Kolstad (1993).

are observable, such as reading a newspaper or writing a note. Domains are the contexts that adults function within, such as the family, the community, a house of worship, and the workplace. Looking at literacy through these three overlapping components makes it clear that adult literacy is a social and cultural practice that is defined and shaped by the contexts in which an adult lives, works, and interacts. This view of adult literacy, therefore, makes it difficult to identify a specific set of literacy skills and competencies that all adults must master due to the varied contexts in which adults live, work, and interact.

One attempt to merge these different definitions (i.e., functional literacy and literacy as social and cultural practice) is the 2003 NAAL definition. This definition states that adult literacy is “using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (National Center for Education Statistics, 2006, p. 2). The remainder of the 2003 NAAL definition describes adult literacy in terms of the specific skills needed to perform tasks (e.g., word recognition and making inferences). This is the most widely used definition in adult literacy programming at the present time.

EXPECTATIONS FOR ADULT LITERACY

The expectations for literacy in society and in the workplace have increased steadily over the past century. Presently, most jobs require a high school diploma or certificate of General Educational Development, and many jobs require even higher levels of literacy and schooling. Jobs that previously were available to adults with limited schooling and low levels of literacy (e.g., service jobs, construction work, and factory jobs) now often require a high school diploma or GED. The demands of the modern workplace have been a significant contributor to the need for increased literacy skills.

To match the demands of the workplace, greater emphasis has been placed on school completion over the past century. It is interesting to note that in the early 1900s, only 6 percent of students graduated from high school. By the 1940s, the number had risen to slightly more than 50 percent; presently almost 85 percent of students either graduate from high school or possess a GED. Clearly, the increasing demands for literacy have contributed to higher school completion rates, but a diploma does not fully ensure that an adult possesses the skills, strategies, and abilities to succeed in the workplace and in life. According to the NAAL, 52 percent of the adults tested who had graduated from high school still scored at the two lowest levels on prose literacy, 42 percent scored at the two lowest levels on document literacy, and 66 percent scored at the two lowest levels for quantitative literacy. This means that even high school graduates may struggle with reading and interpreting a newspaper article, reading and using infor-

mation from a chart or graph, and completing a mathematical task embedded in print. As the demands for literacy evolve and increase, schools, workplaces, community agencies, and colleges and universities have tried to revise their programs and services to meet today's needs. This challenge, however, is not new.

HISTORICAL INFLUENCES ON ADULT LITERACY

The roots of adult literacy reach back several hundred years (Newman & Beverstock, 1990). After the Civil War, recently freed slaves flocked to schools to learn to read and write. These schools were supported by the American Missionary Association, the Society of Friends, and the African Methodist Episcopal Church (Foner, 1988).

In 1911, Cora Stewart, a school superintendent in Kentucky, started so-called moonlight schools for adults. Classes met in the evening after work, and instruction was provided by volunteers. Because materials for instruction of adults were not readily available, Stewart wrote special instructional materials that focused on basic language, history, civics, agriculture, rural life, and hygiene. Stewart contributed to the war effort by helping American men become literate enough to join the military. Her materials and book were given to over 50,000 U.S. soldiers during World War I. A lasting contribution made by Stewart was the establishment of a literacy commission that served as a model for other states.

During World War I, the U.S. Army found that thousands of soldiers could not read printed directions needed for their jobs. The army raised awareness of adult literacy problems and established functional literacy training programs to teach job-oriented literacy skills to military personnel. While the army has been involved in adult literacy education for many years, its work has not been extended to the civilian population. The Army Continuing Education System offers educational services to enlisted members and to their adult family members. The High School Completion Program is an off-duty program that leads to a high school diploma or GED. The U.S. Army also offers a basic skills program that provides soldiers with instruction to improve reading, writing, speaking, math, and science skills, for reenlistment or reclassification and for lifelong learning. The army also provides Internet courses for military members who are unable to attend traditional classroom programs. The army currently allows individuals without a high school diploma or GED to enroll in the Army Education Plus Program, which provides an all-expense paid opportunity to earn the GED. Once the GED is completed, the individual is able to complete basic training. To be eligible for the program, individuals must have been out of high school for at least six months, pass a physical examination, and complete the Armed Services Vocational Aptitude Battery (U.S. Army Education Division, 2006).

Another major contributor to adult literacy education was Frank Laubach. Laubach was an educator, sociologist, and minister who is best known for the worldwide initiative Each One Teach One. Laubach's approach to adult literacy was based on his belief that literate adults have the ability and responsibility to help other adults improve their literacy skills. His reading instruction program emphasized phonics, using keywords for vowel and consonant sounds. He developed literacy programs in more than 60 countries and produced literacy charts and primers in over 150 different languages. His approach led to the development of the *Laubach Way to Reading* series. In 1969, Laubach Literacy Action was organized in the United States and Canada, and in the 1990s, more than 80,000 volunteers and 100,000 learners were involved in Laubach Literacy Action programs (ProLiteracy, 2006b).

Ruth Colvin founded Literacy Volunteers of America in 1962 in Syracuse, New York, after she realized that thousands of adults in the Syracuse area could not read or write. She realized that traditional classroom methods would not work well with the adults she wanted to help; therefore, she developed community networks of volunteers to work as tutors. Since its inception, Literacy Volunteers of America has served more than 400,000 adults through 460 programs based in 40 states in the United States (ProLiteracy, 2006b).

In 2002, Laubach Literacy Action and Literacy Volunteers of America merged to form ProLiteracy Worldwide and ProLiteracy America. ProLiteracy Worldwide is now the largest nongovernmental literacy organization in the world. In 2004–2005, ProLiteracy had 1,200 programs in the United States that served 202,834 adults through the efforts of 113,802 volunteer tutors (ProLiteracy, 2006a).

Myles Horton was a community organizer and activist who believed that by working collaboratively, people could solve problems in their communities and lives. Horton opened the Highlander Folk School in Tennessee in 1932 to focus on teaching adults what they needed in order to become active members of the political community. Classes focused on election laws, the benefits of unionization, and human rights. Horton's program expanded through the use of volunteer teachers offering classes in community locations. It is estimated that Horton's program taught 100,000 African American adults to read and write enough to be able to vote (Newman & Beverstock, 1990).

Paulo Freire viewed adult literacy as the way to transform political, economic, and legal systems, which he saw as oppressive. Freire worked with Brazilian peasants to help them move out of a "culture of silence" to take on active roles in their lives, communities, and institutions. He espoused a liberatory approach to literacy education in *Pedagogy of the Oppressed* (1970). This contrasted with the traditional model of education, which Freire described as the banking concept, wherein the teacher is the dispenser of knowledge and the learner is the passive recipient. Freire's work brought attention to the polit-

ical nature of literacy and to how low-income adults often lived in a “culture of silence” because they did not have the literacy skills or opportunities to express their views and take action to improve their lives. In his role as an educator and a social activist, Freire sought to help workers secure living wages, decent working conditions, and opportunities to participate in government and community decisions.

While there were certainly other key contributors to the historical development of adult literacy, those mentioned above are among the most influential and best known for their specific contributions to the field. In addition, federal legislation and policy have contributed to the development and shaping of adult literacy in the United States. These influences will be examined in depth in chapter 2.

UNDERSTANDING THE DEFINITION OF ADULT LITERACY TODAY

Reviewing the various definitions of adult literacy and the contributions of pioneers in adult literacy makes it clear that the current conception of adult literacy is more complex and multifaceted than ever before. Specifically, looking at the development of adult literacy definitions over the past century makes it clear that to be deemed literate, adults are required to know much more now than they were in the past. For example, being able to sign one’s name or write a simple sentence or completing five years of schooling was sufficient to identify oneself as literate in the past. Current definitions of adult literacy are broader and emphasize the application of reading and writing to work, family, and community demands; the importance of math literacy; the use of technology as a tool; and health literacy, which focuses on using literacy to understand and manage health conditions as well as implement preventative measures. Even within this broadened definition of adult literacy, functional uses of reading, writing, and other processes are still emphasized.

LEVELS AND TYPES OF ADULT LITERACY

In 2003, over two-and-a-half million adults were enrolled in adult basic education (1,056,927), adult secondary education (1,170,273), and English-as-a-second-language (453,063) programs in the United States (Institute of Education Sciences, 2005). That year, the NAAL was administered to over 19,000 adults in the United States. The NAAL included components in the following areas: demographic information for participants; prison literacy levels for adults incarcerated in state and federal prisons; state assessment of adult literacy, health literacy, fluency, and the adult literacy supplemental assessment, which measures letter and number recognition; and simple prose texts aimed at adults with the lowest levels of literacy (National Center for Education Statistics, 2005).

The 2003 NAALS categorized adult participants' literacy skills in four levels: below basic, basic, intermediate, and proficient. Adults with below-basic literacy are defined as having "no more than the most simple and concrete literacy skills." Adults at the basic level have the "skills necessary to perform simple and everyday literacy activities," while adults at the intermediate level have the "skills necessary to perform moderately challenging literacy activities." Adults who scored at the proficient level have the "skills necessary to perform more complex and challenging literacy activities" (National Center for Education Statistics, 2005, p. 3).

Adults were scored at the four levels (below basic, basic, intermediate, and proficient) in the areas of prose literacy, document literacy, quantitative literacy, and health literacy. The results are summarized in Table 1.2.

Overall, the results from the NAAL in 2003 were consistent with the findings of the National Adult Literacy Survey in 1992. The only notable change was an average increase in quantitative literacy scores of eight points from 1992 to 2003. Men and women scored similarly on the NAAL; the largest difference was in quantitative literacy, where males scored an average of seven points higher than females. Analysis of adults' performance by ethnicity indicated that white adults had the highest average scores in both quantitative and prose literacy, followed by Asians, African Americans, and Hispanics. In the area of document literacy, whites and Asians had the highest average scores, followed by African Americans and Hispanics. Adults who were 65 years of age and older had the lowest literacy levels.

Literacy can affect employment status, meaning that adults with low levels of literacy may find it difficult to secure and keep a job. Data from the NAAL indicate that 51 percent of the adults with below-basic prose literacy were not employed. Prose and document literacy levels were the highest among adults who were employed either on a part-time or a full-time basis. Quantitative literacy levels were the highest for adults employed full-time. These findings indicate that a strong correlation exists between literacy skills and employment status.

Table 1.2
Results of National Assessment of Adult Literacy (2003)

Type of literacy	Percentage of adults scoring at below-basic level	Percentage of adults scoring at basic level	Percentage of adults scoring at intermediate level	Percentage of adults scoring at proficient level
Prose	14%	29%	44%	13%
Document	12%	22%	53%	13%
Quantitative	22%	33%	33%	13%
Health	14%	22%	53%	12%

Source: National Center for Education Statistics (2005).

HEALTH LITERACY

Health literacy is defined as the ability to understand and use health-related printed information (National Center for Education Statistics, 2006). The NAAL measured health literacy by asking adults to search texts to obtain health information, to draw inferences from health-related documents, to identify and complete computations on numbers embedded in health-related documents, and to use information to make appropriate health decisions. The concern about health literacy addressed in Healthy People 2010, a U.S. Department of Health and Human Services program that is designed to improve the health literacy of adults. Health literacy is especially important for adults who have chronic health conditions or who care for other family members with such illnesses. When these conditions or illnesses are not addressed appropriately, more days of work and school are missed, which can negatively affect individuals. Fourteen percent of the adults who completed the NAAL scored at the below-basic level on adult literacy, indicating that they are unable to read and understand health-related information. Twenty-two percent of the adults scored at the basic level, meaning that they could identify, read, and use a limited amount of information about health matters. Fifty-two percent scored at the intermediate level, and 12 percent scored at the proficient level. In general, the average health literacy score for females was six points higher than for males. The age group that had the lowest overall health literacy levels was adults over the age of 65. A total of 29 percent of older adults scored at the below-basic level, and another 30 percent at the basic level. This finding is worrisome, as many older adults have health conditions that require close monitoring, medication, and other forms of treatment; however, this age group is the least likely to be able to read and use health-related information correctly.

UNDERSTANDING ADULT READING DIFFICULTIES

While the results of the NAAL indicated that many adults have limited literacy skills, additional research was needed to help adult educators and policy makers understand the types of difficulties adults have related to reading so that appropriate programs, instructional materials, and teaching techniques could be developed. To this end, the Adult Reading Component Study (ARCS) was conducted by the National Center for the Study of Adult Learning and Literacy. Approximately 1,000 adults enrolled in adult basic education (ABE) and English-for-speakers-of-other-languages (ESOL) programs in the Northeast, South, and Southwest regions of the United States participated in the study. Participants were administered a battery of tests to measure their word recognition, spelling, vocabulary, silent reading comprehension, and oral

reading rate. The results of the assessments were studied to identify common patterns of adult reading difficulties (Strucker & Davidson, 2003).

The ABE students in the study reported difficulty with school performance in the past. More specifically, 51 percent of the adults in this group had repeated at least one grade in school, 22 percent indicated they had difficulty reading in the early elementary school years, and 53 percent reported either receiving special education or participating in reading support classes during their school careers. On average, the ABE students had a 6th-grade-level word recognition rate, vocabulary, and oral reading skills.

The adults fit into three groups: GED/pre-GED students (group 1), intermediate students (group 2), and lower-level/beginning students (group 3). Within each of these groups several clusters were found. A summary of this information is provided in Table 1.3. Many of the adults in group 1 who are below the GED level have comprehension, reading rate, vocabulary, and background knowledge scores at the middle-school level. Because their skills are below what is needed for them to prepare for and pass the GED, they need additional reading instruction to strengthen their skills before they will be ready to embark on GED-level work. Adults at the GED level of group 1 are prepared to do work at the high school level and study for the GED.

Intermediate students represent the largest percentage of adult students. They have word identification and basic phonics skills; however, they are reading well below the middle-school level. These adults need to improve their oral reading rate and build their vocabularies and background knowledge before they will be equipped to begin work on GED preparation.

Lower-level/beginning students lack the phonics skills and word identification skills needed to read. These adults require systematic instruction in phonics and word identification. Their reading skills are at such a low level that it is unlikely they will be able to acquire the reading skills necessary to earn the GED. These adults may have learning disabilities or other disabilities that affect their ability to learn and read, chronic illnesses, and other challenges that impede their ability to acquire literacy.

The ARCS study led to the development of online resources that allow adult literacy educators to assess an adult student's reading and identify the profile that is the closest match. Once the profile has been identified, adult educators and volunteer tutors can access appropriate teaching suggestions and materials provided at the National Institute for Literacy Web site.

The ARCS study also included ESOL adult students. The majority of ESOL students in the study were Spanish speakers (78%). The findings indicate that more than 80 percent of the native Spanish speakers in the study had adequate or better literacy skills in Spanish. For these adults, the English-as-a-foreign-language approach offers greater promise for growth in English than the English-as-a-second-language (ESL) approach that is commonly used in adult

Table 1.3
Adult Reading Component Study

Groups and clusters of reading skill levels	Percentage of students in ABE sample
Group 1: GED/Pre-GED	34%
Cluster 1: Strong GED	9%
Cluster 2: Pre-GED with vocabulary/background information needs	11
Cluster 3: Pre-GED with vocabulary/spelling/reading rate needs	14%
Group 2: Intermediate students	56%
Cluster 4: High intermediates with difficulties in print skills/reading rate	9%
Cluster 5: Intermediates with stronger print than meaning skills	17%
Cluster 6: Intermediates with slow reading rate	5%
Cluster 7: Low intermediates	16%
Cluster 8: Low intermediates (should be in ESOL)	9%
Group 3: Lower-level/beginning students	11%
Cluster 9: Beginners	8%
Cluster 10: Reading-rate impaired	3%

Source: Strucker & Davidson (2003).

literacy programs. The ESL approach focuses on basic conversational and survival skills as opposed to the English-as-a-foreign-language approach, which teaches grammar and vocabulary to prepare the adult for the type of content instruction necessary for the GED (e.g., math, social studies, science).

The ARCS study also concluded that Spanish speakers' reading abilities in Spanish were directly related to the number of years of Spanish-language schooling they had completed. Most of these adults did not report having learning difficulties during their school careers. All the ESOL participants, regardless of reading level, were weak on English consonant sounds, indicating that phonics instruction might be appropriate for these students. Two clusters of Spanish-speaking adults who had limited schooling exhibited severe difficulties with phonics and word identification. At the present time, the National Center for the Study of Adult Learning and Literacy has not developed profiles for ESOL adult learners.

ADULT LITERACY LEARNERS

Adult literacy learners vary in terms of their racial, ethnic, and language backgrounds. A large number of low-literate adults are over the age of 65—products of an educational system from an earlier era that did not prepare them for today's literacy challenges. In addition, many adults with low literacy skills are unemployed and classified as low income. Fifty-two percent of the adults in the lowest literacy level on the National Adult Literacy Survey of 1992 were unemployed. Furthermore, the average annual income for a

household headed by an adult who scored at the lowest level was \$13,260, compared to an adult who scored at the highest level and earned \$40,050 (Kirsch et al., 1993).

A growing number of adults with low levels of literacy are also English language learners (ELLs). These adults may or may not be literate in their native language. Sixty-four percent of adult ELLs have not participated in ESOL classes (National Institute for Literacy, n.d.b). Many factors contribute to the low level of participation in ESOL programs. The complex issue of ELL status and English language literacy will be addressed in more detail in chapter 5.

Many adult literacy learners also have affective issues that they face in the process of becoming literate. They may have negative memories of schooling that they must overcome to become engaged in adult literacy education. In addition, adults are faced with stressful situations that demand their time and energy and limit their availability to pursue literacy education. Some common challenges include working multiple low-wage jobs to make ends meet, single parenting, financial problems, housing problems, domestic violence, isolation, transportation problems, and child care problems. The challenges faced by adult literacy learners often affect their enrollment, participation, persistence, and progress in adult literacy programs (Fingeret & Drennon, 1997).

ADULT LITERACY IN PRISONS AND JAILS

Almost two million adults are in federal or state prisons or local jails. This number has increased 49 percent from the previous decade. While literacy problems do not lead directly to incarceration, a link is evident. For example, one in three inmates who participated in the National Adult Literacy Survey in 1992 scored at the below-basic level. Furthermore, 14.2 percent of inmates have an 8th-grade education or less, and another 28.9 percent did not finish high school (National Institute for Literacy, n.d.a). In Florida almost 63 percent of adult inmates scored below the level required for admission to a GED preparation program (Florida Department of Corrections, 2005). Even with such low levels of literacy as the norm, most inmates do not participate in prison education programs due to their lack of availability. Only 25 percent of state and federal prisons have adult basic education programs available to inmates (National Institute for Literacy, n.d.a). Those adult inmates who did complete an education program while incarcerated had a much lower recidivism rate (19.1%) than inmates who did not complete such a program (49.1%) (Florida Department of Corrections, 2005). The impact of prison adult literacy programming appears promising.

LITERACY INSTRUCTION FOR ADULTS

Adults who have low levels of literacy may participate in several different types of educational programs. These include ABE programs, which serve adults who need literacy instruction and preparation for the GED, and adult secondary education programs that lead to a high school diploma and are designed for students who did not complete high school and are age 16 and older. In addition, adults may participate in ESOL programs, which target immigrants. Other programs include family literacy programs, which serve adults as well as their young children, and workplace literacy programs, which focus on literacy and language skills needed for the workplace. These programs are typically offered by volunteer organizations, community organizations, community colleges, houses of worship, public schools, state and local governmental agencies, and prisons and jails. Many of these types of programs will be addressed in greater detail in the following chapters.

Within these programs, various curricular materials and approaches may be used. The Partnership for Reading examined the available research on adult literacy instruction to identify research-based principles to guide adult literacy instruction (Krudiner, 2002). These principles focus on the areas of reading assessment, alphabets (phonemic awareness, phonics, and word analysis), fluency (the ability to read quickly, accurately, and with expression), vocabulary (understanding word meanings), comprehension (understanding what one reads), and computer technology (the use of computer-assisted instruction). The eighteen principles identified from the research literacy can be used by adult educators to develop and implement effective adult literacy instruction. These principles and other aspects of adult literacy instruction will be discussed further in chapter 3.

CONCLUSION

Adult literacy is an important issue facing the United States as well as the rest of the world. Having a literate citizenry is essential due to the increasing demands for literacy in daily life and in the workplace. While there are many competing definitions of adult literacy, the main goal of adult literacy efforts is for adults to read, write, and speak English; compute; and solve problems at the level needed to accomplish goals, function at work, and develop to one's full potential.

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THE WORLD TOUCHES THE CLASSROOM: USING “ANTHROPOLICY” TO UNDERSTAND POLITICAL, ECONOMIC, AND SOCIAL EFFECTS ON ADULT LITERACY EDUCATION

Alisa Belzer and Ralf St. Clair

This chapter explores the ways in which powerful external factors—political, economic, and social—influence adult literacy education. We define adult literacy education as instruction in basic literacy and numeracy, pre-GED and GED preparation, and English as a second language in adult education, family literacy, and workplace settings. The analysis of adult literacy is a deeply complex task because politics, social forces, and economics are intricately intertwined and together play a profound role in shaping much public policy on adult literacy education. Rather than take a top-down approach, which would begin with broad descriptions of significant political, economic, and social forces influencing the field, we take the reverse route. Our analysis focuses on descriptions of adult literacy services from the perspectives of practitioners and works its way back to the political, economic, and social forces that seem to shape the development of influential policies. We suggest that these conditions bear on policy and practice both through the legislative process and through the lived experiences of practitioners; both are within the reach of the same social forces. We also assume that the concrete and specific influences of policy on practice are not static but are highly contextualized and constantly evolving through the involvement of diverse groups of actors, such as practitioners and program managers.

Whereas many analyses focus on a horizontal interaction of policies and policy makers (with practice as simply a product of this interaction), we attempt to explore the vertical components of educational development by assuming that all stakeholders take action with regard to policies and will do

so in ways specific to their own positions. In this chapter, we focus in particular on practitioners. We acknowledge that given our layered and textured assumptions about the relationships among strong external forces, policies, and practices, multiple perspectives are needed. Our analysis here, however, is centered on the idea that the lived experiences of practitioners are an important starting point. Further research and analysis are required for a deeper understanding of other layers of the system.

We call our approach to policy analysis “anthropolicy.” This is a term we took from a typographical error in a conference program that intended to say “anthropology” (Plumb, 2006). We saw this new word, however, as suggesting an extremely important way to understand policy—from the perspective of the people who live it every day. By adopting this term, we are trying to suggest the importance of studying the ways in which humans interact with, make meaning from, and shape policy. This perspective denies the possibility of policy as a linear, causative mechanism and views it as essentially relational. While policy documents and legislation can be seen as reifications of intentions and aspirations making one set of ideas at one particular time the basis for creating policy, the ways in which people live and experience policy is clearly dynamic and nonlinear. By constructing narratives of practice in which practitioners tell about their experiences with, reactions to, and ways of working within policy regimes, we argue that we can learn a great deal not only about how policy affects people and how people affect policy, but also the complex and multifaceted ways in which policy can be interpreted and understood.

We begin by describing the delivery system for adult literacy education. This explanation is followed by narratives of practice constructed through interviews with three practitioners who have each worked in the field for over 20 years. These narratives represent their perspectives on the ways in which the field has changed significantly over the course of their careers. We use these stories to identify policy changes that matter to practitioners in how they do their jobs, and how they see them as changing opportunities for learning. From there, we analyze these changes in relation to key political, economic, and social changes that shape the shifting realities of the field.

THE ADULT LITERACY SYSTEM CONTEXT

Adult literacy education is funded publicly and privately through a variety of local, state, and federal sources. Federal funding for adult literacy education is estimated to address only 25 percent of total expenditures for adult literacy education (U.S. Department of Education Division of Adult Education and Literacy, 2006). Yet the federal government leverages considerable influence on how services are delivered. Federal money is allocated proportionally based on census data reflecting the total number of the target population (i.e., those

age 16 and above, not in school, and without a high school diploma) residing in each state. Each state is responsible for designating an agency to distribute federal funds to local programs through a competitive grant process. In its role as grant manager, the state agency also establishes standards and expectations for program performance.

There is considerable variation in funding and governance for adult literacy programs. Programs may be funded primarily through federal money, may receive funds (beyond the required 25% match) directly from the state, or may operate strictly with private money. Some programs leverage other state and federal program funds to support a range of related programs. Many draw on a variety of sources. Governance structures are as varied as the funding sources. Nonprofits must be governed by a board of directors. Programs based in school districts generally answer to local school boards. Some of the variation in funding and governance in adult literacy education may be shaped by the nature of the state's bureaucracy. The logistics of service provision are diverse as well. Adult basic education programs can be housed in locations such as public schools, libraries, prisons, churches, community centers, community colleges, and employment centers. Programs may operate five days a week, offering classes for five hours a day, or as little as just two or three hours a week. They may focus on any number of skills and content areas, ranging from only reading instruction to a comprehensive variety of courses. Some programs may focus primarily on specific work or workforce development skills; others may emphasize working toward greater social justice, or supporting children's learning through family literacy programming.

The current legislation authorizing federal spending is Title II, the Adult Education and Family Literacy Act, of the Workforce Investment Act (WIA), of 1998. This legislation was aimed primarily at reforming the workforce development system but also addressed federal policy on adult literacy education. Some of WIA's key goals are to provide system users with more individual choice, create a better match between local training and job opportunities, eliminate duplication of services by streamlining over 70 workforce programs (Imel, 2000), provide more local control, and increase accountability. In contrast to earlier reform efforts, WIA focused more on measurable outcomes, such as standardized test results, than on improving the quality of inputs related to program components (Grubb, Badway, Bell, Chi, King, Herr, et al., 1999). For the first time, adult education was positioned within the workforce development system and collaboration was mandated between the two systems.

The National Reporting System was developed to meet WIA's accountability requirements. The National Reporting System identifies and defines skill attainment measures and establishes methods and standards for data collection and reporting. The National Reporting System is first and foremost a tool to

improve access to the information available for demonstrating program effectiveness to Congress (i.e., the funder), but it can also be used to match successful outcomes with specific program and classroom practices, and as a way to track progress in improving services (National Reporting System, n.d.).

The Personal Responsibility and Work Opportunity Reconciliation Act (generally referred to as welfare reform) was initially legislated in 1996. It was not aimed at the adult literacy education system directly; however, its goal “to end welfare as we know it” (Clinton, 2006) affected many actual and potential adult learners. The basic tenets of welfare reform included a maximum five-year lifetime limit (some states elected to make the lifetime limit shorter) on availability of funds to recipients and more stringent requirements for participation regarding work-related and pre-employment activities. These changes indicated an ideological shift from an assumption that poor people are entitled to receive funds to an emphasis on helping people make transitions to work regardless of circumstances or need. The legislation’s emphasis on “work first” is based on the assumption that work, rather than education, is the best preparation for job advancement and economic independence.

NARRATIVES OF PRACTICE: THE ANTHROPOLOGY OF LITERACY

Typically, policy analyses focus on policy makers’ intentions, the obstacles and barriers to implementing the policy, or the impact of policy in bringing about intended and unintended change. Anthropology, however, can help us understand policy from the perspective of those affected by the policy and can be a way to tease out important influences on policy formation itself. Anthropology assists us in understanding which policies matter in practice, in what ways, and why. This lens can shed light on important forces that shape policy and that might be obscured by more traditional approaches to policy analysis and directs the focus to the active construction of policy and practice by all participants. Exploring the process of construction can then help to reveal how policy can be more or less effective in attaining ends such as enhanced equity.

Our choice of narratives of practice as a tool for informing our analysis of the significant forces that shape the field confirms the assumption that “people ‘make’ policy through practice” (Levinson & Sutton, 2001, p. 4). Narratives are a useful tool for understanding what this means in actuality. The two key pieces of information that come from this analysis concern filtering and meaning. By “filtering,” we mean the way the narratives focus attention on the changes that seem most important to the participants, and by “meaning” we mean the way the narratives frame and explain policy events. This kind of analysis helps illuminate how policy emerges within people’s practice.

There are many kinds of narratives, but they are generally understood to be stories of experience that follow rhetorical patterns similar to those used in fictional stories. Most researchers who engage in narrative inquiry acknowledge that narratives are not necessarily meant to be taken literally. Schram and Neisser (1997) suggest that narratives mediate reality and that “they are not so much an artifact of a preexisting factual reality as they are constitutive of it and even written into it” (p. 5). This makes narratives valuable regardless of their relationship to some absolute standard of factuality.

We see our anthropological narratives as hybrids between policy narratives, which are told to explain a particular policy problem (e.g., low achievement of minority students are the fault of failing schools and teachers) or to justify a policy response (Schram & Neisser, 1997), and teachers’ narratives, which locate personal experiences within broader contexts and shed light on what influences thinking (Goodson, 1992). While policy narratives are often constructed by policy elites such as elected or appointed government officials (Schram & Neisser, 1997), our narratives are told by those who live the policies. In their positions as practitioners, adult literacy educators have insider knowledge of policy, but they are less concerned with the ways in which policies are designed to address specific problems and are more concerned with how they can best do their jobs within the defined boundaries that policies create. Their narratives focus on policy in an experiential rather than explanatory manner, and the subject is the broader field as viewed through individuals’ experiences of practice in relationship to policy.

The narratives were constructed through interviews with three practitioners: an executive director and two teachers who have each worked in adult literacy education for over 20 years. We believed that because of their many years of experience, we could encourage them to develop narratives that would help make clear the ways in which policies have influenced their professional lives, their perspectives on the field, and their ways of doing their work. The three narrators work in the same large community-based organization in an urban center in a Middle Atlantic state (the program and practitioner names have been changed to protect confidentiality). The organization is viewed as high quality and innovative. Its executive director and staff often present at state and regional conferences and are recognized leaders in the field. The organization offers a wide range of adult literacy services and uses an eclectic range of traditional and innovative instructional materials, formats, strategies, and service delivery modes. The organization has a well-developed infrastructure and relatively stable funding. Neither the organization nor the practitioners were selected for their typicality. Because narratives are not meant to be generalizable, extrapolating to other settings was not the intent. Rather, the practitioners were selected because they were believed to be storytellers who

would be capable of positioning their experiences within the broader historical context of the field.

The narratives were constructed from transcribed interviews that were conducted in person or by telephone and lasted approximately one hour. All three interviewees had previously been colleagues of the first author of this chapter. Questions focused on ways in which the field has changed since their initial entry into it. The kinds of changes that the narrators discussed were identified by them without prompting. The narrators were then asked to talk about the specific ways in which these changes had influenced their practice. They were also asked to identify what they saw as the primary sources of change. Finally, they were asked to talk about the ways in which the changes had improved or detracted from their ability to help learners successfully meet their goals.

Michelle's Narrative

I have been the executive director of the City Literacy Program since I entered the field in 1986. Several important factors were shaping the field in the late 1980s. The Adult Performance Level Program, which claimed to measure minimum competencies needed for an adult to function successfully, was released. The findings of this study encouraged many to focus on addressing specific learning goals that related to the real-life tasks of adulthood. Concurrently, there was a lot of pressure to do phonics-based instruction. Many in the field were looking to researchers who talked about the phases of reading as if they were a straight-line progression. Now we talk about phonemic awareness, phonics, fluency, vocabulary, and comprehension, and we talk about how they're all intermixed. But then it was like you had to teach phonics before you taught how to actually read a book.

Because of my interest in policy development, I immediately got involved in advocacy at the state level so that I could advocate for programs like mine to take a more learner goal-driven and whole language approach (a contextualized, meaning-based, and integrated approach to reading and writing instruction). Similarly, I became a constant advocate for authentic assessment (when evidence of learning is demonstrated through the use of skills in the context of real-life tasks) at a time when the state was just beginning to feel the pressure of accountability and was trying to make decisions about what one test might be given. I argued that the use of specific curriculum or assessment instruments should not be mandated. Winning this battle left us free to implement the curriculum and assessment of our choice. I remember arguing that you don't have to have a standardized score to say that you are assessing and being held accountable for learner outcomes. I would say that it's a broader field than it was 20 years ago in the sense that there are now programs for family literacy and workplace literacy and other specialized

needs. Now there are more full-time teachers, there is much more instructional technology available, and we have a statewide professional development system. There is more money available, but the money that's available has not kept pace with inflation, and we are now looking at actual decreases. Additionally, private-sector fund-raising has become more difficult, and as a result we spend less on instructional materials, and staff salaries have not kept up with inflation. Adult literacy education continues to be underfunded.

There's a push toward accountability, which was not part of the field 20 years ago. If you are a state- or federally funded program, you've got a mandated set of tests to demonstrate learner outcomes from which you must choose. There are clear performance standards. Because of the National Reporting System and because of the requirements of the Workforce Investment Act, states have had to enforce accountability systems. And it has enforced several things, including the use of some kind of a data management system. There are standards around pretesting, post-testing, and anticipated gains, and particular attention is paid to more specific core learner outcomes: retaining employment, attaining employment, obtaining the GED or a high school diploma, and transitioning to postsecondary education. Although we now talk a lot about student outcomes, and there are what are called secondary outcomes (but performance standards are not based around secondary outcomes), the number of people, for example, who began reading to their children, voted for the first time, or obtained their citizenship is not longer used as a performance standard. Accomplishing goals like these is not being tracked by the data system. Because of the enforcement of particular formal assessments and the amount of time that that takes, more authentic assessment goes on the back burner.

So the nature of accountability has changed. We used to set our own accountability standards and worked hard to meet them. Now they're being set by a third party—the federal government in conjunction with the state agency directors. So that has made the job more difficult. On one hand, you want to be true to yourself in your beliefs about what adult outcomes should be and how to train your teachers and your staff to achieve them. On the other hand, you're being measured by certain outcomes, and so how you justify the merger, or the division, of those is an issue. How do you make sure there is customer satisfaction at the same time you're meeting a performance standard? We work on it, but do we question the standards? Yes.

The welfare system has had an evolving impact on adult literacy education since welfare reform in 1996. Depending on how adult basic education is determined to count toward fulfilling work obligations for welfare recipients, at times the requirements have really hurt literacy programs, at times it has been supportive of literacy programs, and now I think it's somewhere in the middle. The latest initiative has already changed its requirements twice.

It began as a full-time education program for welfare recipients but has now been reduced to 10 hours per week.

I would say that the biggest contributing factor to the changes I've described is WIA. No question about that. When I say WIA, I'm really referring to the reporting requirements put in place by the National Reporting System, and the requirement that we be an integral part of the workforce development system. Collaboration is emphasized as a goal by many funders, but WIA requires us to be involved with the workforce system in new ways. I spend a lot of time in meetings with these partners but question this use of my time. Although there is a lot of talk about an emphasis on research-based practice, it has had nowhere near the impact on our work that WIA has.

In an overall assessment of the state of the field now compared to 20 years ago, I feel that more adults are receiving services because of increased funding. I believe that increased collaboration helps in terms of provision of services and information available to individuals regardless of where they enter the service continuum. From that standpoint, I think the changes have been positive. I think that data systems are critical. Administrators and teachers looking at it, and what it tells them, and what it means to inform their practice is positive. But I think only examining standardized performance data leaves out important elements of effective programs. I'm basically pro-accountability, but I do know that you end up spending more time on some goals than you ever did before. What's really important for me is how accountability is defined, what the elements are that are considered in it, and what happens to the information—how it's used. I'm not sure what the overall impact on practice is.

Kate's Narrative

I have worked in the field for 21 years. I have been a volunteer coordinator; tutor; curriculum developer; literacy, pre-GED, and GED teacher; and administrator in four different programs, including two serving women and one for out-of-school youths. Now I'm back to where I began, teaching a class that is subcontracted to the City Literacy Program. It's a class in a job-training program, most of whose clients are referred by the court for child support issues. After they go through the job-training component and begin an intensive job search, they come to me until they get a job. They don't stay long because they really can't.

When I started to think about how to describe the field when I began working, I wondered if my perception was based on the fact that I was young and vigorous and new to the work, or if the field itself changed. Is it just me looking back 21 years later? I think it's the field that has changed. Back then it was very energetic and idealistic. People had a real passion for the work. The passion was about literacy as an issue, and people's empowerment through

education. It was more than a career, which it feels like now; it was almost a mission. It was creative, student-centered, grassroots. People were frustrated about money, but it felt like the sky was the limit anyway. If you could think it up, and it looked like the students would want it, and it would be good for them, you could do it. There was a lot of thinking, a lot of bright ideas.

I would definitely say the field now is less idealistic; it's less creative, and much more business-like. When I first came to one of the programs that I worked at, there was an education director. We talked about education issues and learning and teaching all the time. She was replaced by a program director, who was about making the program run smoothly and meeting the program requirements, much less about teaching and learning. This seems characteristic of the field. I think it's more cynical now. In the 1980s everyone was thinking outside the box. Now it's about staying inside the box. It seems like everyone is just thinking about what the funders want and how you can deliver that as efficiently as possible.

For my class now, student participation has a definite economic bottom line. The question always seems to be can you demonstrate outcomes to make it worth funding this program? At one point, I had a side job working at a local university coordinating an intergenerational literacy program, training college students to work with adults ages 55 and older. It was very hard to fund, and now that program is gone because there was no economic bottom line at all. I had two 90-something ladies who wanted to learn to read. For them it was just about quality of life. No one could say that there was going to be any economic payoff. That didn't matter in the 1980s, but in the 1990s it began to matter a lot.

We didn't have a lot of accountability when I started, so some people were screwing up, but now the accountability drives people's practice. Ten or twelve years ago at the end of the year, I could say students had achieved more subjective accomplishments like being more confident or increasing their self-esteem, or their parents had become more supportive. We considered that a successful outcome. But those things are irrelevant now. They don't come up at all. Now I have to pre- and post-test and show a gain. If a conversation started about relationships and it was a fruitful and productive conversation, we might let that run its course, and our social worker could run with that. Now she'd have to meet with them after class.

I think many of the changes in the field have been gradual, but when I came back after a year off when my daughter was born, that was the year when welfare reform had gone into place. I felt that in that time it had become a completely different program. I think that changed things more than anything else. I had always been working with women, and women were so profoundly affected by the welfare reform changes. Since I came back, I've never had students for a long period of time. Then, the welfare rules changed all the

time. The women were really no longer focusing on their education. What was communicated to them was “Get a job and focus on your education on your own time.” But the women weren’t getting jobs that were pulling them out of poverty. They had to take anything to meet the 20-hour work requirement.

All this changed what their priorities were, what their goals were, and the culture of the classroom. What had been more of a support-group kind of classroom became “I’m only here for a short period of time; let’s get something done.” It had such a big impact because of how long people could stay. People often had to leave for a job before they met their academic goals. They had to, or they would lose their benefits. Learners’ priorities changed too. People became unwilling to deal with bigger issues. People would always want to know, “What does this have to do with getting my GED?” After welfare reform it was harder to argue what this has to do with the GED. You can’t talk about neighborhood crime or HIV or other concerns because they feel more pressure to perform and achieve for other people. They have less time to be there, they’re more distracted with a lot of other demands on them, and we can put less of an emphasis on their individual goals. Early in my teaching, there was a focus on the learner as a whole person, and now I feel like we’re really looking much more at just the academic piece.

The biggest difference probably is that early in my time in the field the focus was firmly on the students, whatever they wanted, however they wanted it. Then as we shifted over to other systems, other outside influences, other programs, the question became what does welfare want, what does WIA want, what do the funders want? It wasn’t what the students wanted anymore. It’s a huge ideological change, really. Ironically, with all the accountability and the pressure to document everything, there are still programs that say they are offering services that they aren’t, and staff who are claiming instruction they aren’t doing. I don’t know sometimes if the accountability didn’t backfire a little bit. By trying so hard to make sure that people are doing the right thing, people aren’t being as creative as they used to be. There is creativity out there, but that and the idealism aren’t as characteristic of the field anymore.

Beth’s Narrative

I have worked in the field for about 28 years, always as a teacher, although I have also been involved in professional development and curriculum. When I started working, it was a very positive experience for both the teacher and the learners. Everyone was there because that’s where they wanted to be. No one was mandated to be there. That’s what they wanted to do. The learners participated in the hiring of the teachers. It was exciting! All these new things were happening where learners were being involved in roles that they had never been involved in before.

Not much money was being spent. People were really squeezing pennies to run programs. There was no such thing as ordering books from the Reader Resource Program, a state-funded program that provides free instructional materials. There were no professional development centers. There was very little professional opportunity other than going to conferences. Low pay. Very, very low pay. Learning environments were really rough. Sometimes you were teaching in little tiny closet rooms. I don't think there was a lot of attention back then that was being focused on quality standards. There probably weren't even any developed. I guess we reported attendance, but I can't even remember if we had a testing tool. There wasn't a lot of attention on quality or progress. It was a simple thing. You just entered a class and began working. The state adult literacy education agency wasn't really that visible like it is now.

The field is so much bigger now. There are many more staff development opportunities. Funding has increased. Administrators have gained skills in seeking funding and have a staff. That was never the way. Back in the day, the administrator was writing all the proposals with a skeleton staff. Now we can offer all kinds of programming for many more kinds of students in a lot more settings. We didn't have on-site classes at shelters and places like that back then. And we didn't have welfare reform.

Welfare reform has had a critical impact on the field because, like all our systems that are put in place, they are set up not in a way so that people succeed, but to perpetuate failure. I think the whole main purpose of welfare reform was to get people off the welfare system, and they certainly met that goal. But they started with the wrong goal. They started with an economic goal and then plugged in the education part. If they had started with that, the economic part may have come along. So then they put the money that they saved on welfare into all these training programs that people are now going to. Many people go to many programs that may not be in their [best] interests. Then they're put in job placement programs connected with these educational training programs, and they end up having a whole group of people for low-pay frontline jobs. For \$7.50 or \$6 an hour, people really can't afford to take those jobs. And they're mandated to participate in the training and to work after so many months of training. I personally can't imagine getting up every day, going to a place that I hate, and not having enough money to provide health insurance to my family, along with a lot of other things. It's not like the government doesn't have the funding, but it's the way the funding is being spent. People get put into little boxes. This has changed the whole learning environment. People are really hostile, and we have a whole different population of people. Our classrooms are microcosms of the larger society. So whatever is going on in the world touches the classroom.

The welfare reform certainly changes the whole idea of participatory learner-centered approaches when you only have six months to build somebody's skills

so they can pass an employment or training test. I think I've integrated into my curriculum in all my classes how to learn because I understand that I'm only a little piece in their lives as far as it connects to their learning. I'm not with them that long. If I have a learner for 50 hours, that's a pretty long time. If they meet the goals that they set coming into the classroom, then they've been successful and I've helped them to be successful. But that's only one part of it, because knowing how to learn is something that they'll take with them. I think it's important for them to think about their own learning process and the process that they're engaged in so they can get their learning needs met in the future and be in the position to evaluate [whether or not a learning situation fits with their own learning style].

Now I think there's much more data collection, much more paperwork and reporting. A lot of instructors' time today is spent on data. But the accountability doesn't really change what you do in class. It's like in the same way that the learners learn to work the system, programs and practitioners learn to work this system too. So for example, one of the core outcomes is obtain the GED. If a person comes in July and says she wants to get the GED—because everyone says they want to get a GED whether they're at the 4th- or 10th-grade level—if I check that and she comes in at the 4th-grade level, she's never going to achieve that by the end of the year. That would be a negative outcome for me and the program. In order to remedy that, if I don't think, after working with the person for awhile, that she can meet that goal at the end of the fiscal year, I'm not going to check that as a goal. I mean, look at the goals! The people who are in the position in the state capital and Washington—what do they know about this?

I think the changes have been for the better, because there's more funding available and more needs being addressed, in more specific ways. Classes are focused on different populations' needs, youths, and ESL. But at the federal level, when people are in the position to make decisions, the decisions are based on their expectations, not the expectations of those of us in the field. I think there's certain things that have never changed that really need to change. Programs are always set up where the people who know what changes need to be made are never given power to make any kind of decision. I think that's always been a contradiction. For example, teachers can give recommendations that would support higher-quality learning, yet many times throughout history, those recommendations fall in a big black hole because either organizations don't have the money to support the recommendations or the people who are in the position to know better than anybody else what kind of changes would enhance the program don't have the power to institute those kinds of changes. That hasn't changed.

NARRATIVE THEMES

It seems that there are certain areas that the informants agree strongly are key to understanding the changes in practices over the last 20 years. They

break down into six themes that seem to fall into three clusters. The first is the impact of the view that literacy education is a component of workforce development, which attracts a considerable amount of focus. Next are accountability, standards, and authentic assessment, areas that are strongly related. The notions of specialized programs and changing funding patterns can also be seen as running together. The meanings practitioners attach to each of these themes emerge through closer examination of their narratives.

Both of the instructors talked about idealism and the idea of empowerment as a goal of literacy education and suggested that something was lost from the field as the structures changed over the years. In a traditional analysis, factors such as passion would not be associated with policy analysis, but the anthropological approach encourages such ideas to be brought forward. It brings up issues such as how things have been changed to reduce commitment to the field and points toward a key component of meaning for these practitioners. While it is not possible to link this issue with a specific policy change—and Kate raises the possibility that her perceptions may simply be an effect of aging—it certainly tells us something important about the practitioners' engagement with the field.

The key question is how external conditions, whether political, economic, or social, influence adult literacy education. These practitioners indicated that several policies have made a difference in the ways in which they interact with students, even though they resist and subvert them to some extent. Although the narratives identify specific policy initiatives, we examine these policies thematically. This approach emphasizes a changing, holistic environment with interwoven influences, rather than marking each policy as having a clearly delineated and unique set of influences.

Literacy Education as a Workforce Strategy

In the mid-1990s, adult literacy education was regarded explicitly as a component of workforce development for the first time, largely in response to concerns about the economic competitiveness of the U.S. economy and the belief that increased skills result in increased productivity. The Workforce Investment Act, which had the effect of linking literacy to workforce development more strongly than ever before, was identified as a key change. The impact of this change is hard to overemphasize—as Michelle explained, “I would say that the biggest contributing factor to the changes I’ve described is WIA. No question about that.”

The WIA legislation promoted a standardized form of outcomes and purposes where there had previously been a far broader approach to the value of literacy education. Practitioners had mixed feelings about the effects of these changes on instructional practices. On one hand, Kate stated, “there were workers who were not doing right by the students, and they were sticking

around for a long time because there wasn't accountability." On the other hand, there is concern about the loss of creativity and flexibility that was apparent before WIA. Kate stated, "I could say students had achieved more subjective accomplishments like being more confident or increasing their self-esteem, or their parents had become more supportive. We considered that a successful outcome."

Just two years before the introduction of WIA, there was a significant effort to reform the welfare system. Attendance at a literacy program was often mandated as a way for participants to show willingness to become ready for work, and failure to attend could result in reduced payments to individuals. Conversely, work was very strongly prioritized in the reforms, and individuals could be pulled out of education whenever a job became available, and the duration of their participation was limited by external regulations. Literacy educators can find this an extremely frustrating situation and may see the system as "set up not in a way so that people succeed, but to perpetuate failure," as Beth stated. Some resentment about the policy's influence on their work was expressed by Kate when she stated, "I had always been working with women, and women were so profoundly affected by the welfare reform changes." The reform's effect was seen as an externalization of control over their work, as well as having the potential for significant interference.

Overall, explicitly positioning adult literacy as a workforce development strategy can be seen as a significant move away from self-determined local programs toward a larger externally regulated system. It moved literacy from voluntary engagement to mandated service, structured according to the needs and philosophies of stakeholders who are not literacy educators or learners. In the narratives, participants linked reduced freedom in their work and a more hostile work environment with WIA and contemporary changes in welfare provision. The significance of this change, to these practitioners, is epochal, marking the end of an era.

Assessment, Accountability, and Standards

Changes in accountability systems have a profound effect on instructional practices (St. Clair & Belzer, in press). The practitioners interviewed certainly reflected this influence in their comments, and this was a substantial area of concern for them. Their understanding of accountability systems was profound and insightful. For example, Michelle stated, "What's really important for me is how accountability is defined, what the elements are that are considered in it, and what happens to the information—how it's used."

When Michelle started her career, she advocated authentic assessment, arguing that no one test or one curriculum would be best for all students. Her efforts kept the field open for local programs and practitioners to develop

and implement their own models. This has since changed. Michelle reported, “There are standards around pretesting, post-testing and anticipated gains, and particular attention is paid to more specific learner outcomes: retaining employment, attaining employment, obtaining the GED or a high school diploma, and transitioning to postsecondary education.” Programs have become accountable for providing a narrow range of services in ways that were not always compatible with learner goals or effective teaching and learning practices.

While Michelle refers to standards as coming from the federal government, most of the specific implementation structures are actually decided and driven at the state level. The state agency has raised its profile within the field and has started to require specific forms of assessment in response to the demands of the National Reporting System. Alongside these assessment requirements, perhaps inevitably, come demands to use standardized assessment tools that contribute to determining instruction in ways that are less likely to be customized to individual needs and interests. While testing has always been a significant issue in schooling, there is no comparable history in adult literacy education—the tradition has been based on collaborative learner-centered teaching and learning interactions. This means that not only have systems been built from almost nothing over the last 10 years, but that practitioners in the field may not have a great deal of experience in challenging the way such systems are constructed.

The meaning attached to these developments is a reduction in freedom for practitioners and, perhaps more tellingly, a sense that responsiveness to the needs and desires of students is significantly reduced. Assessment systems can very easily reorient instruction. Michelle underlined this by stating, “I do know that you end up spending more time on some goals than you ever did before.” This statement, however, should not be read as suggesting that practitioners simply comply with centralized demands. As Michelle puts it, “We work on it, but do we question the standards? Yes.” Beth makes it clear that she simply subverts the system. These comments demonstrate the ways that practitioners may reconfigure and resist policy imperatives in the service of the values they see as important to maintain within literacy education.

Funding and Specialization

Current funding for the field seems good compared to what has been available in the past. Lower levels of funding led to some frustration. Kate shared, “There wasn’t enough money, so you could have all the bright ideas in the world, but there wasn’t any money. There was never enough money for the projects you wanted to do, so people were frustrated about that, so they needed to leave, and it was hard to hire people.” There was general agreement across

the narratives that there has been some degree of improvement. One of the benefits of increased funding over the last few years has been an increasing emphasis on specialized programs for specific types of learners. Beth stated, “Now we can offer all kinds of programming for many more kinds of students in a lot more settings.” This development can be viewed very positively.

As Michelle pointed out, however, “adult literacy education continues to be under-funded. This has led to the devotion of considerable amounts of people’s time, and other resources, to the pursuit of funding. Michelle stated, “As we have pursued funding opportunities, it has changed what I do and how I spend my time.” Conscious thought is devoted to positioning the City Literacy Program appropriately—including within the right partnerships—to pursue funding when it becomes available. Money can become a determining factor in shaping provision at both the organizational and classroom levels. Kate stated, “At the program where I work now, student participation has a definite economic bottom line. The question always seems to be can you demonstrate outcomes to make it worth funding this program?”

In summary, changes in resources are seen as having a beneficial effect because, as Beth reports, “there’s more funding available and more needs are being addressed, in more specific ways.” The significance of these changes in resource patterns resides in the programs’ abilities to aim services at underserved learners even though the overall support for adult literacy education is still regarded as fundamentally insufficient. It is important to note as well that from the perspectives of practitioners, increased funding seems to come with many strings attached that are not always palatable to them or learners.

LINKING DOWN AND LINKING UP

When adult literacy education is examined using some of the approaches suggested by the notion of anthropolicy, a vibrant portrayal of the way practices react to, react against, and reformulate policy results. This discussion suggests that only some policy initiatives actually reach teaching and learning practices in any direct way. It is also notable that the significance of the initiatives is reinterpreted at the practitioner level in terms of their actual effects on their professional lives, their practice, and the learners with whom they work rather than ideologically or on the basis of intention. For example, the Workforce Investment Act is seen as producing a less pleasant working environment with little room for maneuvering on the part of practitioners, which can make the experience of learning less relevant and inspiring for learners.

These narratives of practice tell the story of a field that has both benefited from and paid a price for increased funding and attention. While there is more money for professional development, infrastructure, and materials, and programs can provide more diverse services for a greater number of learners

in an expanding range of settings, some important opportunities for teaching and learning have been reduced. The political, economic, and social outcome of this loss is unknown, but these practitioners express ambivalence at best, and cynicism and doubt at worst, about these changes. At the same time, decision making regarding purposes and valued outcomes for learning has shifted from learners, teachers, and program managers to third parties at the state and federal levels. This shift translates into a shift in practitioners from feeling accountable to learners to feeling accountable to funders. These three narratives suggest that the field has matured in many ways by clarifying performance goals and accountability systems, but the changes have also shifted practitioner attention away from teaching and learning and toward externally constructed, not always meaningful measures. At the same time, these practitioners identify a shift in learners' attitudes away from motivation for literacy learning toward a sometimes resentful compliance with external expectations.

If we view the developments from the top down, it is possible to link up to the practitioner perspectives by identifying the policy interventions that have affected their working context so radically. The policies that seem to drive these shifts are state and federal increases in funding (accompanied by increased expectations for demonstrated returns on investment), welfare reform (with mandated participation in specified programs for predetermined lengths of time), and the Workforce Investment Act (with mandatory collaboration with the workforce system and standardized accountability and performance standards). Each of these policy initiatives shares economic, social, and political characteristics implicated in the changes in practice identified in the narratives of Michelle, Kate, and Beth. These include a market view of investments in education as necessitating demonstrable economic returns, and standardization determined by a top-down approach that assumes a unitary definition of literacy.

As adult literacy education has been brought further into the mainstream, there has been increased emphasis on centralized approaches to performance standards. When adult literacy was seen as having relatively low stakes, there was little interest, or perceived need, to manage the system as a coherent whole. Localization was the norm and seemed to present few problems. The increasing investment in adult literacy has started to make the field a more high-stakes endeavor, resulting in the promotion of more consistent approaches to measuring the quality of services, even though it is far from clear that quality will mean the same thing in every context or with every learner. Nonetheless, adult literacy education can no longer avoid the current push toward unified models of practice and accountability.

The reasons for the increased interest in adult literacy are complex, and it is hard to identify direct causes in a reliable way. There are a number of critical elements that seem to have come together around the same time, however.

One is the assumption that low literacy is linked to dependence on social services. The independent American worker and citizen is a literate one, and the notions of illiteracy and dependency are strongly linked in national cultural myths (Sandlin & St. Clair, 2002). So, even though many problems have to do with intractable poverty and racism, adult literacy education is expected to produce solutions.

Another condition that sits in some tension with the last is the promotion of narrow educational goals as the desirable outcome. The narrower the goal, the easier it is to measure, and one effect of the push for accountability has been the inadvertent acceptance of the idea that outcomes must be measurable in standardized and narrow ways to be real (Merrifield, 1998). This perception works alongside an interest in the efficiency of education to prioritize a set of simple outcomes that can be easily achieved and demonstrated—in the current context it is in nobody's interest to invest resources in less demonstrable soft outcomes such as those that have been historically important to the field.

Literacy education, then, is expected to address massive social problems while maintaining a tight focus on externally defined educational outcomes. To some extent, it may be that the field has gotten itself into this position by expressing willingness to engage with contradictory expectations, but there may have been little choice open to literacy educators. As the educational field as a whole has had to accommodate the movement in social policy priorities away from welfare toward market-centered responsibility, it is perhaps inevitable that adult literacy education should have to move in the same direction.

CONCLUSIONS

In this discussion, we have attempted to approach the links between adult literacy education as a field of practice and a policy area by using an analytic approach rooted in the narratives of those who have lived the changes. By doing so, we were able to show how those lived experiences both filtered policy initiatives and provided meaning for them. The picture that we end up with is that of a field experiencing significant shift over the last 20 years in direct response to political, economic, and social pressures. It is certainly possible to present this shift as an example of responsive evolution within an educational area, but it is equally possible to suggest that the endeavor has lost its way to some extent.

The current mission of adult literacy education seems to be simply impossible—it will never ameliorate poverty on a large scale or even ensure the existence of a universally well-educated workforce. Yet these are the claims that the field has been encouraged to make despite the discomfort of those involved in practice. Adult literacy education seems to be forced away from what practitioners believe they do well—respectful and effective work with

learners based on their identified needs and interests—toward areas where they may feel they can never do well enough. The meaning of this for the practitioners informing the present discussion seems clear. The world not only touches the classroom; it floods in and changes everything.

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Part Two

ADULT LITERACY INSTRUCTION AND ASSESSMENT

Chapter Three

TEACHING AND LEARNING IN ADULT BASIC EDUCATION

M. Cecil Smith

Although it is commonly assumed that the adults who enroll in adult basic education (ABE) programs are illiterate, this is rarely the case. Most ABE participants have completed several years of schooling; despite their school attendance, they were unsuccessful at learning to read. Often this lack of reading achievement is due to factors that are largely outside of the control of the individual. They may have had poor role models who did not demonstrate good reading practices, such as reading to them at home when they were young. They may have had inadequate reading instruction in school. Or they may have one or more undiagnosed learning disabilities—among a myriad of other problems (Corley & Taymans, 2002).

Despite these challenges, most individuals who have had some schooling can read at least a few simple or commonly used words and can often use the context to figure out other words in books, documents, and newspapers. Most scholars and many literacy practitioners recognize that literacy is not an all-or-nothing skill but constitutes a continuum of abilities (Barton, 1994). Therefore, it is preferable—and more accurate—to refer to adult participants in ABE programs as low literate in regard to their reading and writing, rather than illiterate.

This chapter describes teaching and learning in adult literacy education. The chapter begins by providing a context for understanding important characteristics of adult learners in literacy programs. Because adult basic education is a fundamentally different system from that of the pre-K–12 education system, the preparation and qualifications of adult literacy teachers are somewhat different from those found in elementary and secondary schools. Thus,

some background is provided about the preparation of ABE teachers and the roles and responsibilities of the volunteer tutors who are the backbone of the ABE system. The next section of the chapter describes reading instruction in ABE classrooms in terms of practices and activities that are aimed at developing both the component skills of reading and the cognitive strategies that enable more effective reading. In addition to teaching reading, many ABE programs also help adult learners to write and to use basic math or numeracy skills. Therefore, writing and math instruction are also described, as is computer-assisted instruction that is used to supplement adults' reading, writing, and numeracy abilities. Finally, learning in ABE programs is discussed, with particular emphasis on learners' perceptions of the benefits derived from their participation in basic skills programs.

THE CONTEXT FOR TEACHING AND LEARNING IN ABE

Many children and adults who struggle to read—slowly and without enjoyment—simply avoid reading. This lack of exposure to the printed word serves to further compound their reading problems, as they do not practice using the reading abilities that they have. This condition is called aliteracy. Reading is a significant contributor to the growth of vocabulary and, therefore, one's knowledge. Nagy and Anderson (1984) estimated that the least motivated middle school students read perhaps 100,000 words per year. Yet highly motivated middle school readers may read more than 10 million words per year! Thus, children who do not read very much do not see a variety of words in print and are, therefore, less likely to learn them. Because vocabulary knowledge directly contributes to reading comprehension (Stahl, 1983), the academic achievement gap between good and poor readers grows ever wider.

In many cases, adults who are not native English speakers also participate in ABE programs. Generally, these individuals are immigrants to the United States. Some of these adults have been well educated in their home countries and are fully literate in their native language, but not in English. Others may have had little or no schooling in their country of origin and can be said to be either low literate or illiterate in both their native language and English. Adults in both groups participate in English-as-a-second language (ESL) literacy programs. ESL programs are described in chapter 5.

Many children and adolescents who struggle with reading eventually drop out of school, and some then attempt to earn a General Educational Development diploma. The GED is a high school equivalency examination that is taken by thousands of older adolescents and adults each year. The GED test assesses reading and writing skills, as well as knowledge of school subjects such as math and history. Those adults whose reading skills are not sufficient to study for the GED attend classes in ABE programs.

ABE programs focus on teaching adults to read and write. ABE students may also learn basic math skills. State-funded ABE programs are typically offered through community colleges. Other ABE programs are provided by community-based or religious organizations at neighborhood centers, YMCAs, and local churches. Enrollment in ABE programs is typically free and open ended, meaning that adults can drop in and drop out of these programs at will. This is an important characteristic of ABE programs, because many low-literate adults lack the financial means to pay for classes, and they may have transportation or child-care problems that are barriers to their consistent participation. Because ABE participants are usually not required to attend classes, teachers are challenged to develop motivating instructional activities that can help adults learn to read. It is estimated that more than 100 hours of instructional time is required to increase an adult's reading skills by one full grade level (Sticht & Armstrong, 1994). Unfortunately, many ABE participants receive much less than this amount of instruction. Often, adults quit programs because they are bored with the instruction or frustrated by their lack of progress. Because of the attrition problem, some ABE programs require enrolled students to regularly attend classes.

Adults' motivations for participating in ABE programs are varied. Many individuals, of course, want to improve their reading and writing skills. They are often prompted to do so to get and hold on to a job, or to assist their children with homework. Many low-literate parents want to be positive role models for their children. By showing their children that they are learning to read, they hope to inspire them to work hard and to persist in school. Other adult learners profess a desire to read the Bible or the newspaper, or to read letters from family members or correspondence from businesses such as utility companies. For many older adults in ABE programs, learning to read has been a lifelong desire that they are finally able to pursue.

It is not unusual to find a wide age range of adult participants in ABE classrooms. Coupled with the diversity of ages is a range in reading ability. Such diversity of skills, knowledge, and life experiences owing to differences in students' ages creates special demands for ABE teachers in these multi-level classrooms. Smaller class sizes, greater structure and enforcement of rules guiding classroom behavior, and individualized learning plans are some of the strategies that ABE teachers have employed to meet the needs of youth and adult learners (Hayes, 2000).

ABE instruction is typically provided in two ways. First, many formal programs, such as those offered through community colleges, employ teachers to provide literacy instruction in classrooms of a dozen or more students. Many ABE teachers are hired on a part-time basis, although most programs have at least a few full-time teachers. Second, some programs rely exclusively on volunteer tutors to provide one-on-one instruction to adult learners.

Typically, volunteer-based literacy programs are run by community groups or religious organizations. Literacy tutors often receive their training through federally funded programs such as AmeriCorps and the Peace Corps. Others may receive training from literacy advocacy groups such as ProLiteracy Worldwide, the oldest and largest nongovernmental literacy organization in the world. Many ABE programs employ a mix of professional teachers and volunteer tutors. Federal legislation embodied in the 1998 Workforce Investment Act has increased program accountability, however, and now requires measurable outcomes for adult learners. These changes have prompted calls for increasing the professional profile of ABE teachers and tutors (Sabatini, Ginsburg, & Russell, 2002).

ABE TEACHER PREPARATION

The majority of ABE teachers have elementary or secondary school teaching experience or credentials. Their teaching experiences provide valuable knowledge that they can draw upon to help them to effectively manage the ABE classroom and create interesting activities and assignments that are engaging for adult learners. Yet a significant portion of the ABE teacher population has little or no teaching experience prior to teaching adult learners (Smith & Hofer, 2003). These individuals are often drawn to ABE teaching out of a desire to help others, or because they enjoy working with adults. Many but not all states require ABE teachers to be certified teachers in elementary or secondary education. Only one state, Alabama, requires a master's degree in adult education for ABE teachers. Because the majority of states do not require ABE teachers to have professional preparation in adult education, there is no guarantee that these teachers are well equipped to effectively teach adult learners.

Generally, only a modest amount of preparation or training is provided to ABE teachers before they begin teaching adult learners. Smith and Hofer (2003) surveyed ABE teachers and found that more than half (53%) had no formal coursework in adult education. To compensate for this lack of teacher preparation, some ABE programs offer orientation programs for new teachers. These programs provide descriptions of adult learners' characteristics, information about how to teach reading, and a few basic concepts of classroom management. Thereafter, the opportunities for ABE teachers to improve their skills and knowledge are mostly confined to professional development programs that are offered by state adult education offices (Smith & Hofer, 2003). Such programs often include off-site workshops, although ABE teachers may lack the means to participate in them if transportation and other costs are not covered by their ABE program. Therefore, there is little uniformity in the skills and knowledge of ABE teachers, and few professional standards that they are required to achieve and maintain.

Tutors

Classroom instruction in ABE programs is frequently supplemented by one-on-one tutoring that is provided by a volunteer literacy tutor. The tutor may work closely with the ABE teacher to design a program of independent learning for the adult. Frequently, tutors provide the only reading instruction that the adult learner receives, as some ABE programs have no formal classes for literacy instruction. One-on-one instruction can be intensive and provides an opportunity for the tutor and tutee to establish a close relationship. Adult learners are often ashamed of their poor reading skills, so having a trusting relationship with a tutor who is encouraging and nonjudgmental is deemed to be very important to adults' success in reading. Yet many literacy tutors feel unprepared to teach reading and report feelings of frustration at the slow progress of their tutees (Belzer, 2006c). Because the tutors are generally very able readers themselves, they may hold unrealistic expectations about adult tutees' abilities to learn to read. While many literacy tutors can achieve much success with their adult students, it is evident that the preparation of tutors is even more inconsistent than that of ABE teachers. Belzer (2006c) found that tutors used only a few instructional strategies and that these were largely ineffective in helping their tutees learn to read.

Literacy Instruction in ABE

Despite the fact that the purpose of ABE is to teach adults to read, often very little explicit reading instruction takes place in ABE classrooms. Teachers may lead large-group lessons in which students complete letter and word identification drills, or the teacher may read aloud while students listen. Teachers often cannot provide individualized instruction for learners because of large class sizes and the wide range of learner abilities that are typical within ABE classrooms.

Robinson-Geller and Lipnevich (2006) surveyed 695 ABE teachers in 12 states to determine their instructional practices. Three types of instruction were identified. These were teacher-led groups, where teachers initiate and terminate class discussions, utilize commercially published instructional materials, and emphasize basic skills; individual group instruction, where basic skills are emphasized and all learners work on the same materials but at their own pace while the teacher works with individual students; and meaning making, where learners' interactions are encouraged, learning is connected to their lives, they learn about topics of personal interest, and they make decisions about classroom content and activities. They found that 14.9 percent of teachers reported using some combination of all three approaches in their classrooms. Another 14.5 percent reported using meaning-making approaches. A slightly smaller percentage (13.7%) reported using a combination of meaning making

and individualized group instruction with a basic skills emphasis. Nearly 10 percent (9.5%) reported using other approaches not captured by the above three categories. Thus, teachers appear to pick and choose what seems to work best for them and their students.

ASSESSMENT

Teachers rarely engage in systematic assessment of learners' needs or evaluate if their instruction has met individual learners' or groups' needs (Beder & Medina, 2001). Scores from standardized test, such as the Test of Adult Basic Education, which many ABE programs use, do not tell the teacher what the learner's skills deficits are or how to teach to remediate these deficits. Until recently, ABE teachers had few guides as to what kinds of skills to teach and lacked information about the best methods for teaching adults to read.

The best assessment practices are ongoing processes that enable both teachers and learners to gather and analyze data to inform instructional decisions. ABE teachers are encouraged to use a variety of assessment tools to identify and diagnose learners' skill deficits and to then design instruction to address these deficits. Assessment serves three purposes (McShane, 2005). The first purpose is to identify learners' goals, strengths, and needs. The information derived from this assessment is used for instructional planning. The second purpose is to monitor the learner's progress. The third purpose is to determine the outcomes for the learner. Simply put, has the student learned to read at a given level of proficiency?

Ideally, assessments of learners' progress are an important dimension of teaching, but assessment is an area in which most ABE teachers have little preparation or experience. Learner assessments in ABE programs—if they occur at all—tend to happen only two times: upon initial entry into the program (to determine the learner's grade-level reading ability) and at the end of the program (i.e., when the learner takes the GED test). Ongoing learner assessment to track progress or for the purposes of diagnosing learning deficits, or to modify instruction, is uncommon.

Programs that receive federal funding are required to gather standardized test data on students to assess their progress, as mandated by Title II of the 1998 Workforce Investment Act. The WIA established the National Reporting System for Adult Education, a national accountability system for adult education programs. ABE programs satisfy National Reporting System requirements by reporting both pre- and post-test data. However, there is some indication that enrollment began to drop when ABE programs implemented more widespread testing more to comply with the National Reporting System (Sticht, 2004).

TEACHING READING

The National Reading Panel (2001) has identified five components of reading ability: phonemic awareness, decoding, fluency, vocabulary, and comprehension. Phonemic awareness is the ability to detect individual speech sounds within words, which is necessary to accurately decode words. Decoding refers to word identification, and it involves making letter-to-sound correspondences to recognize printed words. Fluency means rapid, accurate reading. Nonfluent readers read slowly and stumble over words. They often have difficulty comprehending what they read because they focus their attention on accurately decoding individual words rather than getting the gist or meaning of the text. Phonemic awareness, decoding, and fluency are considered print-based skills. Vocabulary refers to the person's knowledge of word meanings. Vocabulary growth occurs best through print exposure—that is, reading—rather than through direct instruction or oral language (e.g., watching television). Comprehension is the goal of reading—to understand the ideas conveyed in the written text. Comprehension requires knowledge of words and of the world (Hirsch, 2003). Vocabulary and comprehension are considered meaning-based skills.

During the 1990s, the U.S. government took a significant interest in improving adult literacy education. For example, the National Research Council, which is part of the National Academies, advocated adult reading instruction emphasizing mastery of both print-based and meaning-based skills so that all five reading components are addressed. Also, the Partnership for Reading—a collaborative effort among three federal agencies (the National Institute for Literacy, the National Institute of Child Health and Human Development, and the U.S. Department of Education)—was established in 2000. The Partnership for Reading brought together findings from reading research to better inform the educational community and to help all people—children, youths, and adults—learn to read well.

Subsequently, during the George W. Bush administration, the partnership was authorized by the No Child Left Behind Act, which was enacted by Congress in 2001. That year, the Partnership for Reading produced materials for dissemination to ABE teachers that informed them about instructional approaches and strategies that may be useful for teaching the five reading components. More recently, however, the Bush administration has shown little interest in adult literacy education, preferring to focus on reading improvement in the early school years. Also, despite the efforts of the Partnership for Reading to produce guidelines for teaching that are helpful to ABE teachers, there is no comprehensive body of research that has distinguished between effective and ineffective reading instruction methods for adults.

Having little research to guide them, both ABE teachers and tutors tend to be unsystematic in their approaches to reading instruction. Under the best of

circumstances, adult literacy teachers and tutors draw upon what they know about reading instruction as it is practiced in the primary grades. ABE teachers' knowledge of reading instruction may be based upon their experience as elementary teachers, or drawn from professional development workshops or their recollections of their own experiences in school.

Phonemic Awareness Instruction

Because adult nonreaders have little awareness of phonemes (the individual sounds of spoken English) and beginning readers have difficulty manipulating phonemes (Curtis & Kruidenier, 2005), it is believed that they require specific instruction in phonemic awareness. Such instruction has been shown to increase reading achievement for some adult learners (Gold & Johnson, 1982). Generally, explicit instruction—that is, the direct and sequenced teaching of letter-sound relationships—is recommended. In this way, students learn the different sounds that are associated with letters (/ c / a / t /) and letter combinations (/ sh / ph / ous /). A disadvantage of direct instruction is that lessons tend to be drill-and-skill activities that are dull and devoid of meaning for learners.

Some scholars argue that direct instruction is not a useful approach to reading development. Krashen (1993), for example, claims that language is too complex to be taught one phoneme or word at a time, that people can and do learn to read without receiving formal instruction, and, further, that the evidence supporting direct instruction is modest. The effects of direct instruction tend to be very small and to disappear over time, according to Krashen.

Decoding Instruction

The National Reading Panel (2001) recommends that decoding or word analysis be taught together with phonemic awareness in the primary grades. This recommendation has also been applied to adults, although there is little research on adult learners to determine if this approach is effective. One of the activities that teachers can use to promote decoding ability is to have learners convert both individual letters and letter combinations into their phonemes, blending them together to form words (/ c / + / a / + / t / + / ch / = catch). These activities can be done both orally and in writing. Alternatively, new readers can look at new, unfamiliar words and break down the letters and associated sounds and then put them back together. Creative ABE teachers find ways to make these learning activities interesting and fun, often through the use of games and classroom contests.

Fluency Instruction

Repeated practice at reading—both silently and orally—is recommended to promote fluent reading for adult beginning readers (Curtis & Kruidenier,

2005). The more exposure new readers have to the printed word, the more familiar and comfortable they will become with reading. This approach is consistent with Krashen's (1993) view that people (both children and adults) learn to read by reading. An advantage of repeated reading practice is that the teacher can provide immediate corrective feedback about the reader's accuracy and reading rate (i.e., how quickly he or she is reading) and can quickly determine where the reader is experiencing difficulty (e.g., lengthy words, unfamiliar words). A potential disadvantage is that it is time consuming for the teacher to observe the reader. Having the student use a tape recorder to audio-record his or her oral reading for later playback is a timesaving method that teachers sometimes use to assess readers' fluency and provide individual feedback.

Vocabulary Instruction

Curtis (2006) describes four typical approaches to vocabulary instruction: direct instruction, differentiating word meanings, promoting word consciousness, and engaging in wide reading. Direct instruction is both intensive and systematic. Teachers provide learners with numerous exposures to new words and opportunities to use these words when speaking and writing. Using new words in speaking and writing enables learners to extend the meanings of words, that is, the uses of words in new contexts. Teachers often rely upon established word lists that contain common, everyday vocabulary, along with more abstract words, and low-frequency words.

ABE teachers help adult learners to differentiate word meanings when they highlight distinctions among words (e.g., *capital* versus *capitol*). Word comparisons, classifications, and analogies are all useful activities. For more advanced students, semantic mapping can be used—students make visual representations of the relationships that exist among vocabulary words, using lines and arrows to show connections among the word and related concepts.

The promotion of word consciousness entails nurturing students' awareness of and interest in words and word meanings. One such activity is having students generate creative but accurate uses of specific vocabulary words in sentences. Another approach is to have students investigate word meanings by using dictionaries and other printed materials.

Although these direct instruction approaches are widely used, Stanovich (2000) notes that direct instruction is not an effective means for extensive vocabulary learning. Nagy, Herman, and Anderson (1985) argue that learners acquire word meanings ten times faster by reading alone than through intensive vocabulary instruction. Still, reading by itself may not be sufficient to ensure that new readers acquire a rich and varied vocabulary. ABE teachers must supplement adult learners' free reading activities by creating opportunities for students to practice using the new words they have encountered in their reading (e.g., writing and talking about what they have read).

Reading Comprehension Instruction

The language experience approach is a commonly used method in which learners orally recite a story that is transcribed by the teacher or tutor. The story may be about something that the individual has experienced firsthand, or it could be a fictional tale. The transcribed narrative is then used as instructional material for reading, writing, speaking, and listening activities (Taylor, 1993). Thus, the learner's own words are used, which provides powerful motivation for word recognition, vocabulary development, and comprehension. Such an approach also conveys to learners that their ideas are important and valued (Purcell-Gates, 1987).

Direct instruction of reading comprehension, like the teaching of phonemic awareness and decoding, involves teacher-led instructional procedures. Typically, students are given specific task instructions, and the teacher directs students' practice and skill building and provides immediate corrective feedback. The direct instruction of reading comprehension has been demonstrated to be effective with some young learners (Stevens, 1991). Less evidence is available regarding the effectiveness of direct instruction approaches with adults. Alamprese (2001) has reported preliminary observations, but not yet the results, of a study of five ABE programs in which reading is explicitly taught in structured, organized classes, and the instructional content is sequenced.

In these programs, an organized series of exercises and activities provides the instructional content. The ABE teachers use reading passages that have highly relevant content for adults for different comprehension exercises. The passages are also judged by their teachers to be reading-level appropriate. Other activities are aimed at developing phonemic awareness, reading fluency, and vocabulary skills and knowledge. The teachers foster high levels of learner engagement by involving all students in instruction, such as by having them take turns working when completing whole-class exercises and by encouraging their participation in discussions. Finally, the teachers also give concrete feedback and verbal praise when students correctly respond to prompts and questions, and they elicit praise from other learners.

Little evidence exists that ABE teachers actively encourage adult learners to read books and other print materials, such as newspapers and magazine, outside class. This lack of encouragement to participate in authentic reading (and to practice one's reading skills) tends to reinforce the notion that students should only read school materials (e.g., workbooks) and that real-life reading is somehow different from the kinds of reading activities that take place in the classroom (Belzer, 2006a). Adult learners cannot improve their reading comprehension and increase their vocabularies if they do not practice reading a variety of text materials. Further, they are unlikely to acquire a positive attitude about reading and will avoid reading for pleasure.

Strategy Instruction

It is also important for new adult readers to develop reading comprehension strategies. A strategy is a conscious activity that is initiated to improve one's cognitive performance, as when reading. An example of a simple comprehension monitoring strategy is to ask oneself, "How well do I understand this passage?" If the reader determines that he or she has not fully comprehended the text, then one of several possible actions may follow. The reader might ignore this lack of understanding and continue to read the text, assuming that the meaning will become clear. Alternatively, the reader might go back and reread the passage to try to get the gist of it. Or the reader might ask for assistance from the teacher. Most new readers do not possess such strategies and fail to spontaneously adopt them; they must therefore be taught strategies that will aid their comprehension. Teachers can demonstrate and model these strategies and have learners practice using them and then provide corrective feedback as needed.

Prepackaged Programs

Another approach to teaching reading in ABE programs is to employ one of four varieties of commercially available programs or instructional systems. These four programs are the Lindamood-Bell Learning Process, which is designed for learners with reading disabilities who also have poor auditory skills and teaches them alternate ways to perceive the various sounds in English; the Orton-Gillingham method, which is a multisensory structured language approach that adheres to direct, explicit teaching of English phonology; the Slingerland Approach, which is also a multisensory, structured language approach to teaching language skills; and the Wilson Reading System, which teaches students word structure and language through 12 sequenced steps. The Wilson program targets students with specific language learning disabilities such as dyslexia. Proponents of all four programs claim that these work well for learners who have been unsuccessful in other reading programs.

An advantage of these programs is that they are highly structured and systematic and provide good instructional materials. Typically, teachers learn the instructional scope and sequence of the programs' curricula through participation in professional development workshops and other training sessions. A significant weakness of these programs is that none have been proven in independent research to be effective for reading instruction in the general population of nonliterate adults. No randomized trial studies wherein students are randomly assigned to the commercial programs and to other forms of instruction have been conducted. Further, there is no way to determine if teachers who use these programs adhere faithfully to the established methods

and procedures. Therefore, literacy researchers do not know if these commercial programs are truly better for teaching reading than teachers' idiosyncratic methods.

Other Instructional Activities

Having students complete reading tasks in commercially produced workbooks is a staple of most ABE classrooms. These workbooks provide an organization and structure for teaching that might otherwise be missing in many classrooms. Students can complete letter and word identification tasks, learn new vocabulary, and read brief passages and respond in writing to questions about what they have read. While students are completing assignments in their workbooks, the teacher can move around the classroom and provide individual assistance to those who need it. A limitation of workbooks is that the materials and tasks are typically neither interesting nor motivating for the student. Also, because students are working independently in their books, they have few opportunities to share what they are learning with others.

WRITING

In addition to reading instruction, some ABE classes also focus on developing adult learners' writing skills. Learning to write can help to reinforce reading ability. Writing provides the first opportunity many low-literate adults have ever had to read the words that they, not others, have produced (Purcell-Gates, 1987). Thus, writing is a tremendously powerful activity for ABE students. Perhaps even more than learning to read, being able to write imbues the adult learner with a sense of personal identity as a literate person.

Unfortunately, as Belzer and St. Clair (2005) point out, we do not know very much about how writing is taught to adult learners because there has been little research on ABE writing instruction. Generally, ABE writing instruction appears to be even less systematic than the teaching of reading. The focus of instruction is often on the mechanics of writing—spelling, punctuation, and grammar—which are, of course, important but lower-order skills. Attending primarily to these basics of writing does little to encourage adult learners to actually write. There is some evidence that when ABE writing instruction occurs, it focuses on helping learners attain the minimum skills necessary to pass the GED writing test (Halbrook, 1999). Again, such a limited mastery approach does little to promote independent writing activities among adult learners.

Despite the pervasiveness of the mechanics-based approach to writing, a few ABE writing teachers do encourage adult learners to write extended and creative texts. Some ABE teachers allow learners to write about topics of their

own choice. These teachers encourage personal, expressive writing in which students commit their thoughts, wishes, feelings, and personal goals to paper. Students' writings may take the form of correspondence, autobiographies, or daily journal writing. Keeping a personal journal is often encouraged as a way for students to regularly practice their writing skills.

An approach called process writing has gained favor over the past two decades in K–12 and higher education and has made some inroads into ABE writing instruction. A process-oriented writing approach takes the view that writing is a problem-solving activity and, therefore, the writer should engage in planning prior to writing. Students are encouraged to define their purpose for writing, identify their audience, and employ a variety of writing strategies. Prewriting (e.g., thinking about the audience, creating an outline) is also emphasized. Students receive carefully crafted corrective feedback from the teacher and then have multiple opportunities to revise their work. In doing so, they discover that any kind of learning—whether a skill such as writing or a content area such as history—involves recursive rather than linear thinking processes.

Some progressive ABE instructors develop writing workshops in their classrooms, often incorporating process writing and other creative writing activities. Learners not only practice their basic writing skills but also read the stories, poems, and other narratives that they have written before audiences of fellow students, teachers, family members, and friends. They also read and critique the writing of their fellow students. In some workshops, students' writing is assembled in a book that is printed and disseminated to others, providing further confirmation to students of the value of their own words and ideas.

NUMERACY

Numeracy is defined by the U.S. Department of Education (n.d.) as “the ability to interpret, apply, and communicate mathematical information.” Numeracy is synonymous with math literacy. Generally, adults who are learning to read and write also need to improve their basic math skills. Numeracy instruction typically focuses on improvement in four areas: understanding numbers, data analysis (statistics and probability), geometry and measurement, and algebraic patterns and functions.

Unfortunately, aside from those ABE teachers who have professional backgrounds as math teachers, ABE teachers often have no formal training in math education (Schmitt, 2002). As Belzer and St. Clair (2005) note, math instruction is often ignored altogether in ABE classrooms, as it is not considered as essential to adults' success as reading. This is indeed unfortunate, as most adults today are constantly faced with everyday tasks that require some basic math skills.

Commercially prepared materials tend to predominate in ABE math instruction. Students engage in skill-and-drill activities, solving problems out of workbooks, and getting corrective feedback from the instructor. While there is nothing wrong with getting lots of practice at math problem solving, the kinds of math problems found in workbooks are highly decontextualized and encourage routinization in problem solving and an understanding of mathematics that is rooted in external authority and rules rather than personal experience (Tout & Schmitt, 2002). Learning research has shown, however, that adults learn more quickly and effectively when they work on problems that are embedded in real-life situations and activities and when they can create their own problem-solving procedures.

The Adult Numeracy Network advocates the adoption of the following approaches for improving adult learners' numeracy skills and knowledge: First, math should be taught in the context of real-life and workplace situations to which most adults can easily relate. Second, learner-centered approaches should be used so that learners see the personal relevance of what they are learning. Third, an interdisciplinary approach should integrate math with other content areas. Fourth, new learning should be linked to previous learning and promote learners' interests in math. Finally, math concepts should be taught before math rules. Effective numeracy instructors use models, examples, and learners' real-world experiences to convey concepts before they teach them formulas and equations.

COMPUTER-ASSISTED INSTRUCTION

Because there are few effective guides for using technology to enhance ABE instruction, most ABE teachers employ computers and other technologies (i.e., audiovisual media) in a trial-and-error fashion. A survey of programs conducted a decade ago (Sabatini & Ginsburg, 1998) found that only about one-third of ABE programs in the Midwest described themselves as significant users of computers for any purposes, including instruction. It is likely, however, given the rapid and extensive infusion of computing technology into all kinds of social and educational institutions, combined with greater affordability of the hardware and software, that computer-assisted instruction (CAI) is more common in ABE classrooms today.

CAI may be either supplemental or stand alone. Supplemental use occurs when the teacher incorporates CAI into teacher-led instruction and the computer is then used to reinforce students' learning. CAI is frequently used in situations where adult learners can work independently on drill-and-skill activities (i.e., learning vocabulary) or self-tests (e.g., GED practice examinations).

In stand-alone usage, the computer is the principal vehicle for instructional delivery. Lessons and activities might be embedded in instructional software

that is used by the students. More advanced software offers interactive features, which gives some control to the learner but also features some of the structure and content that a teacher would otherwise provide. Effective software programs provide consistent corrective feedback for learners. Learners might access other online literacy-related lessons, such as those offered by the Public Broadcasting System's *PBS LiteracyLink*. An advantage of stand-alone uses of technology is that learners can work at their own pace, pausing or stopping the program at any time, rather than trying to keep up with the pace of the teacher's instruction.

Using technology in adult literacy instruction opens up a world of possibilities that go beyond basic literacy. Students can, for example, be taught to use computer programs such as word processors, databases and spreadsheets, desktop publishing, Web page authoring, and presentation software (i.e., PowerPoint). These programs are very useful in that they provide opportunities for adult learners to practice writing; play with written language; use numbers and math; combine text with graphics, animation, and video; and develop skills that are valued in the workplace.

ABE teachers can also take advantage of the numerous instructional videotapes and CDs and streaming videos on the Internet that demonstrate lessons and activities that have been developed to support adult literacy instruction. Creative and imaginative teachers find exciting, innovative ways to use these media in their ABE classrooms either alone or in combination with CAI. Kruidenier (2001) reports that CAI has been found to be at least as effective as non-CAI for increasing learners' reading achievement. CAI appears to be most effective for somewhat more advanced ABE students (i.e., those who read at the pre-secondary school level). Finally, CAI makes it possible to more readily integrate the multiple components of reading instruction—word recognition, vocabulary, and comprehension.

Aside from teaching adults reading, writing, basic math, and computer applications, a variety of other activities and programs that support adult literacy learning may be found in ABE classrooms and programs. Adult learners often come to ABE programs with a number of problems in their lives, only some of which are directly related to their low literacy. These problems may include domestic abuse, drug and alcohol use, and chronic unemployment. Thus, the provision of personal counseling can be an important component of a comprehensive ABE program. While teachers typically do not provide formal counseling, they may often give informal guidance by being good listeners or suggesting possible solutions to problems.

STUDENTS' LITERACY LEARNING

There are numerous reports in the literature with adult learners' testimonials as to the personal and educational benefits they have derived from participating

in ABE and other literacy development programs. These testimonials are powerfully persuasive in suggesting that low-literate adults benefit in several important ways from their participation in such programs. Yet evidence from more objective studies paints a very different picture of the effects of ABE programs on adult literacy. These studies raise important questions about the extent of adults' literacy learning as a result of ABE instruction.

Two large studies provide compelling evidence that ABE programs may not be helping adults to improve their literacy abilities. Friedlander and Martinson (1996) compared the literacy proficiencies of adults in California who were randomly assigned to ABE classes to the proficiency of adults who were not. Both ABE students and non-ABE students were school dropouts and recipients of Aid to Families and Dependent Children benefits. Following ABE instruction (a period of several months), the standardized reading measures of participants were found not to differ from those of non-ABE adults, although more ABE participants had earned a GED than had the non-ABE adults.

Sheehan-Holt and Smith (2000) used data from the 1992 National Adult Literacy Survey to determine if participation in adult basic skills programs is associated with higher literacy proficiency scores and more extensive reading practices (e.g., reading books and newspapers). Adults who reported having ever participated in a basic skills program to improve their reading, writing, and/or math skills were compared to adults who were similar in terms of age, native language, educational attainment, and other important background variables. Adults who had participated in basic skills programs did not differ from adults who had not taken part in such programs in regard to their reading abilities. There were a few differences in regard to reading practices, as those who had participated in a basic skills program in the workplace had more extensive document reading practices than other groups of adults. Combined, the findings from these two studies raise serious questions about the literacy benefits that adults might gain through their participation in basic skills programs.

Thus, on one hand, individual participants offer impassioned testimonials that they have greatly benefited from their time in ABE programs. On the other hand, large-scale studies comprised of representative samples of adults show that the benefits are small to nonexistent. What, then, might explain the discrepancy between these two kinds of results?

One explanation is that the kinds of personal benefits that individuals derive from participating in an adult education program cannot be easily or adequately captured by objective tests of literacy proficiency. As noted previously in this chapter, adults enroll in ABE programs for many reasons. While most participants do want to learn to read or to improve their existing reading skills, many may exit programs satisfied that they can read a few simple texts or that they have expanded their intellectual or social boundaries. Thus, ABE participants

may acquire just enough reading ability to do the things that they want to do, but not so much to show statistically meaningful changes from pre- to post-test.

Success and failure in regard to literacy learning are therefore relative concepts. Learners' perceptions of their experiences and outcome is every bit as valid as the evidence obtained from a standardized test of reading (Belzer, 2006b). What might objectively appear to be an adult's failure to improve his or her reading skills might, for that adult, represent a success because the individual attended class every week, made new friends, and learned to feel less ashamed of his or her poor reading ability. Certainly, other conditions are also related to ABE students' literacy learning as well as their failure to improve their performance on standardized literacy tests. These conditions include participants' persistence in attending and completing an ABE program in spite of myriad obstacles to their success. The quality and the kinds of instruction that adults receive play a large role in their success, as suggested previously in this chapter. Adults' persistence or success in ABE is related to the extent to which the literacy tasks they encounter in the classroom are similar to and connected with the literacy tasks that they face in their everyday lives.

CONCLUSIONS

ABE teachers and tutors engage in a wide variety of instructional practices and activities to assist low-literate adults who are learning to read and write and to use basic math skills. Because there is no single path to becoming an ABE teacher, and few educational requirements, adult literacy teachers often feel challenged and frustrated in helping learners improve their literacy skills. Although adult learners are often faced by numerous barriers to participating and learning in ABE classes, many are successful in acquiring the literacy skills they need to function effectively in their homes, workplaces, and communities. Often, however, these successes cannot be objectively determined from standardized literacy tests.

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Chapter Four

ADULT LITERACY EDUCATION PROGRAMS

Hal Beder

Adult literacy programs are the organizations that organize, manage, and conduct the work of adult literacy education at the local level. The Adult Learning Center (ALC) is an example of an adult literacy program. The ALC is located in the mid-Atlantic state of New Jersey and serves about 3,600 students each year. In 2004, the program employed 57 teachers and 28 support staff, making it a comparatively large program. The ALC has three full-time counselors, four full-time teachers, and three full-time administrators. It has classes in basic education, English as a second language, and GED preparation. In GED preparation classes, adult students prepare to pass the GED tests, and if they are successful, they are awarded high school certification. The ALC also has an adult high school program through which students can earn a school district diploma by meeting state standards and school district requirements. The ALC is open from 8:30 A.M. to 8:30 P.M. Monday through Thursday and 8:30 A.M. to 4:30 P.M. on Fridays. It is located in an urban neighborhood in a building that also houses the local school district's administrative offices.

Prospective students typically learn about the ALC through word of mouth or by referral from other community agencies, although the ALC does advertise through a brochure. New students seeking to enroll in the ALC first stop at the office, where they are greeted by the program director if she is in, or by a teacher if she is not. The director is very active in the community and is often away attending meetings.

Following a friendly greeting, new students are introduced to one of the counselors, who conducts the intake interview. One purpose of the interview

is to determine the student's goals. This is an important step, because ALC staff members are very aware that their students are voluntary learners who come in order to meet their personal goals. If students can meet them, they will persist; if they cannot, they are likely to drop out. Establishing student goals is also a step in the National Reporting System, the accountability system that is mandated by the federal legislation that funds most of the ALC's classes. Next, students take the Test of Adult Basic Education, a literacy skills test. Although the Test of Adult Basic Education is commonly used by adult literacy programs, other tests are also used.

The Test of Adult Basic Education has two purposes. First, it is used as a diagnostic to determine students' skill levels in reading and math. Second, it is used as a pretest in the National Reporting System—mandated accountability standard for tested learning gain. Students who score at an 8th-grade level or higher on the Test of Adult Basic Education are typically assigned to a GED preparation class. Instruction in these classes is individualized. Students are assigned instructional materials appropriate to their grade level, and they work independently to complete the workbook exercises. The materials are geared to passing the GED tests. Students' work is corrected when they are finished, and if it is correct, the teacher supplies the student with more difficult materials and assistance, if needed. When a student is able to pass a GED practice test, the teacher recommends that he or she register to take the GED tests.

The ALC is a real program. Although it is larger and better funded than most programs, and although it has the reputation of being one of the best programs in the state, the process described above is typical of many adult literacy programs.

PROGRAM CHARACTERISTICS

Understanding adult literacy programs is important for at least two reasons. First, because these are the programs that organize, manage, and conduct the work of adult literacy education at the local level, understanding how they operate is critical to an understanding of how adult literacy education functions. Second, adult literacy programs are very different from the K–12 and higher education institutions with which most educators and policy makers are familiar. When educators make decisions that are based on the assumption that adult literacy programs are like K–12 or higher education institutions, their decisions are often inappropriate.

When most literacy education professionals speak of programs, they are referring to state and federally funded classroom-based operations that educate students in groups. This type of program will be the focus of this chapter. It must be acknowledged, however, that there is a large volunteer-based adult literacy sector that educates students through one-on-one tutoring, typically

in homes and libraries. The largest volunteer agency, ProLiteracy America, has 1,200 affiliates and operates in all 50 states; it served 202,834 students in 2004–2005 (ProLiteracy America, n.d.). There are also many developmental skills programs maintained by community colleges. Students in developmental skills programs pay regular tuition and are considered to be enrolled at the community college. Although developmental skills courses generally do not count toward graduation requirements, students are eligible for financial aid and have access to all the services the college offers. As Chisman (2002) notes,

Approximately one million adults attend developmental education classes nationwide each year. The content and method of instruction varies, and there has been no authoritative research comparing developmental courses with those supported by Title II funds. However, the existing evidence indicates that the goal of most developmental instruction is to upgrade the literacy, math and English language skills of students who would be placed in the middle or upper levels of Title II ABE, GED, or ESL programs. In many cases, developmental classes are virtually indistinguishable from adult education classes supported by Title II. (p. 10)

There are several factors that influence how adult literacy programs operate and cause them to differ from K–12 and higher education institutions. These include funding, organizational sponsorship, enrollment and attendance patterns, staffing, and structural marginality.

Funding

The great majority of adult literacy programs are grant funded. The largest federal source of funding is Title II of the Workforce Investment Act of 1998, the Adult Education and Family Literacy Act (AEFLA). In 2005, AEFLA funding was \$560 million dollars (U.S. Department of Education, 2005). Under AEFLA, federal funds are dispersed to the states, which then allocate the funds to local programs through a competitive grants process. AEFLA programs are sometimes referred to as Title II programs.

The grant funding of adult literacy programs has major implications for how they operate. AEFLA, for example, stipulates that service is to be provided to those who are age 16 and older and are not enrolled or required to be enrolled in secondary school. It further stipulates that those served must “lack sufficient mastery of basic educational skills to enable the individuals to function effectively in society; . . . not have a secondary school diploma or its recognized equivalent, and have not achieved an equivalent level of education; or are unable to speak, read, or write the English Language” (Workforce Investment Act of 1998). These eligibility requirements translate into the three services most adult literacy programs provide: adult basic education, which is analogous to elementary education; adult secondary education, which generally focuses on teaching the skills needed to pass the GED tests; and English as a second language.

According to AEFLA, all states must match federal funding at the amount of at least 25 percent of their federal allocation, but some states allocate considerably more than the mandated minimum. State funding for California, Connecticut, Florida, Maine, Minnesota, and Oregon pays for 80 percent or more of their programs' costs. In contrast, Kansas, Mississippi, Nebraska, South Dakota, Tennessee, and Texas provide the minimum required to meet the AEFLA match (U.S. Department of Education, 2005).

While some adult literacy programs receive only AEFLA funding, others acquire grant funding from other sources as well. A 2001 New Jersey study found that there were 23 separate and independent sources of public funding that supported adult literacy programs in the state, and that these funds were administered by four state agencies (State Council on Adult Literacy Education Services, 2001). The report also found that while New Jersey's AEFLA funding stood at \$13,396,286, the funding from all the grant sources that funded adult literacy education was approximately \$100 million, of which \$32 million came from Department of Education grants, \$29 million came from the Department of Labor, and \$35 million came from Department of Human Services grants. In other states, the situation is similar. In Massachusetts, programs may receive funding from AEFLA, Even Start, Special Education, Welfare, Head Start, Community Development Block Grants, the McKinney-Vento Homeless Assistance Act, and the Massachusetts Education Reform Act (Comings & Soricone, 2005).

For programs that have multiple grant funding streams, the result can be chaotic. The New Jersey report noted:

Resource allocation and distribution is clearly an issue when we look at the impact of funding from 23 different programs in four state departments. Bureaucratic fragmentation produces disjointed resource allocation and this reeks havoc at the provider level. As one provider put it, "Currently we are operating 15 different grant programs to maintain the variety of programs we have here. This means 15 different funding streams, 15 different goals and objectives and targeted programs, plus 15 different reporting systems.... Each has different calendars, reporting forms and requirements. All of these are operating to provide basic skills instruction. The needs are the same, but because money is targeted, we must recruit different populations. But what we are teaching is very similar. Depending on the funding source and how people (clients) are labeled, if they are from one economic level you can serve them. If they are from another they cannot be serviced. If they are a certain age they go to one class. If they are over an age, they go somewhere else." (State Council on Adult Literacy Education Services, 2001, p.14)

The grants that a program seeks and is successful in acquiring determine who the program serves and, to some extent, how it serves them. Grant eligibility requirements target services to a multiplicity of populations, including the general low-literate public, welfare clients, the incarcerated, the homeless, low-literate families, and the employed at their worksites.

Under AEFLA, states have a considerable amount of latitude in how they spend their federal allocations. For that reason, the adult literacy education system varies from state to state. Some states have invested substantially in professional development—for example, Ohio, Pennsylvania, and Illinois have developed a system of resource centers that provide professional development—while other states do very little in professional development.

Grants also determine how much funding programs will receive, and because receiving a grant is not a certainty, programs face funding insecurity. In 2005, for example, the president's budget recommended that AEFLA funding be cut from \$569 million to \$207 million. Had not the funds been restored due to a massive advocacy campaign mounted by the adult literacy community, programs would have been decimated. Moreover, there is little doubt that adult literacy education programs are underfunded, at least in comparison to elementary and secondary education (Beder, 1996). In 2002, adult literacy education programs spent an average of \$803 per participant, compared to \$9,941 for elementary and secondary education (National Center for Educational Statistics, 2005).

Grant funding also requires that programs seek and administer grants. This adds significantly to the burden of administering programs. Grant applications have to be written, and reporting and accountability requirements must be met. Under Section 233 of AEFLA, programs are restricted to an expenditure of 5 percent for administrative costs. As Chisman (2002) notes, lack of resources for program administration severely constrains programs:

Moreover, the management resource problem is at the program level because most programs in most states have at best one full-time staff member, the Program Director. With such limited managerial resources, it is virtually impossible for Title II programs to meet their managerial challenges as they should—it is remarkable that they meet them at all. (p. 22)

Belzer (2003) studied the impact of changes caused by welfare reform and the advent of the Workforce Investment Act in two grant programs on how programs operate. In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act, which radically reformed how welfare was administered in the United States, was passed. As Belzer notes, prior to welfare reform, many states had adopted an education-before-work policy in the belief that those on welfare needed enhanced skills before they could be successful in the workforce. Although the specifics varied by states, grants from welfare-funded programs provided adult literacy education, and these grants were a major source of funding for many programs. Because welfare clients were not working, many welfare classes were conducted during the day and were able to meet 20 hours per week. Welfare reform, however, put work first, and many of the welfare clients who had attended literacy classes were slotted into jobs. As a result, some adult literacy programs were decimated. Their only recourse

was to expand their evening classes to meet the needs of those who were now employed, but that hardly compensated for the decline of enrollment and program income.

In 1998, the Workforce Investment Act was passed, and the Adult Education Act, which had changed little since its inception in 1966, became section 2 of the Workforce Investment Act, also known as the Adult and Family Literacy Act. The AEFLA had a new requirement for accountability. Under the new accountability provisions, programs were now required to collect and report data on students' outcomes. One stipulated outcome was leaning gain, which meant that programs now had to pretest and post-test their clients if they wished to receive an AEFLA grant. Some states anticipated the new accountability requirements and established systems to deal with the requirements. Other states were caught nearly unaware. Collecting and reporting the data, especially the testing, placed a severe administrative burden on programs that lacked the staff to manage the accountability system and knew little about the fundamentals of testing. Responses to the accountability requirements noted by Belzer (2003) included turning away the least skilled students, who were less likely to show gains on the tests; focusing instruction more on workplace topics; and hiring new staff to collect accountability data. In respect to the shift in emphasis to the workforce, the director of one large program remarked:

[The Workforce Investment Act is] looking for outcomes that are not necessarily relevant to all adult literacy programs. What are the outcomes on the reporting system that the feds want? How many people got jobs. Well, a program such as ours is not always looking to get a person a job, and the person is not necessarily coming into our program to look for a job. The student might need literacy because their family found out they don't have a high school diploma, for their self-esteem. They want to be able to help their children with school. They never had a high school diploma and it's a dream they want. A person could come in saying, "I can't read and I'm fondly admitting I can't read. Help me." The students in our school have different reasons why they're here. The feds would like us to get everyone a job with benefits and so that they can get out and help the economy of the country. It's not one size fits all. (Beder & Medina, 2005a)

Belzer (2003) categorized each program, depending on how the programs reacted to the vicissitudes of changes in grant requirements, as a refiner, a reinventor, or a resister. Refiner programs took the changes in grant requirements in stride and made minor changes to comply with the requirements. Most refiner programs had the capacity to make the mandated changes without major dislocation. In contrast, reinventor programs operated in ways that made compliance with mandated requirements difficult, and responding to the changes in the Workforce Investment Act funding necessitated major change.

Resister programs decided either to abandon AEFLA funding or not to comply with the new regulations in the hope that they would not be sanctioned.

Organizational Sponsorship

Adult literacy education programs are sponsored by several types of organizations. Programs sponsored by public schools predominate, with 54 percent in 2003, followed by community-based organizations at 24 percent, community colleges at 17 percent, and prisons at 7 percent (U.S. Department of Education, 2005). Thus, most adult literacy programs are not free-standing educational institutions like public schools or universities. They are attached to parent organizations, and they serve functions that are ancillary to the primary objectives of the organizations that sponsor them. This means that adult literacy programs are influenced by the regulations and policies of their sponsoring organizations. For example, in New Jersey, all teachers who work in public schools must be certified in a K–12 area. Consequently, all adult literacy teachers who work in public school–sponsored programs must be certified, even if their K–12 certification is in an area that has nothing to do with what they teach in adult literacy. The program director at a large mid-Atlantic program explained how being sponsored by a public school district influenced her program:

How much space you have is determined by your local superintendent and so forth, so if you have limited space, you know, that determines certain kinds of decisions that you make in terms of how you allocate space. As you see by our room charts, we just about fill every slot for every hour of the 56 hours we are open per week. The pressures that are on the school district affect us. For example, you know, No Child Left Behind. One concrete thing I can say is that we have really shifted our focus to trying to actively recruit parents, because we feel that as far as school district goes, the one way we can really help them with the achievement of their kids is by, you know, educating the parents. So, certainly we've always recruited parents in the past, but this year in particular we doing this more actively, really trying to reach parents. (Beder & Medina, 2005b)

Enrollment and Attendance Patterns

Adult students who participate in literacy education are constrained by a multitude of problems that adults who live on marginal incomes face. Lack of transportation, arranging for child care, and shifting job schedules are just some of them. The result is a high dropout rate. When students drop out, spaces are left in the classroom. Due to attrition, an adult literacy class can simply evaporate. Given this situation, when new adult students arrive, they are typically immediately slotted into the spaces vacated by dropouts. The result is open enrollment. Open enrollment is abetted by the reality that funding is often predicated on the number of students served, and open enrollment

maximizes the number served. The open-enrollment environment, then, is one in which students are constantly dropping out or stopping out, and new students are constantly enrolling in classes. This makes the traditional classroom instruction typical of the K–12 system problematic, as newly enrolled students are not privy to the subject matter teachers presented before they arrived. In essence, in open-enrollment programs that employ traditional classroom instruction, new students are behind before they even start.

Because of the same constraints that adult students will face and that sometimes lead them to drop out, tardiness and absenteeism are common. Individualized group instruction is a common response to open enrollment, absenteeism, and tardiness (Robinson-Geller, 2005). Describing individualized group instruction in a mid-Atlantic program, Beder, Tomkins, Medina, Riccioni, and Deng (2006) explain:

In [individualized group instruction], students are tested at intake to assess their skill levels in reading and math. Then they are assigned to a classroom, where after a brief orientation, they are given materials appropriate to their diagnosed skill level. The materials are kept in large envelopes with the students' names written on them. They are deposited in file crates, picked up by the students when they come to class, and put back when the when the students leave. Students work independently on their materials. When they have completed an exercise, the teacher corrects the work and provides help if needed. If the work is essentially correct, the teacher assigns more difficult materials. Thus in [individualized group instruction], materials are the focus of teaching and learning, and students progress by completing progressively more advanced materials. (p. 2)

Since individualized group instruction students work at their own skill levels, they can begin and end work at any time and can pick up where they left off if they miss a class. Thus, individualized group instruction compensates for open enrollment, tardiness, and absenteeism (Robinson-Geller, 2005). Students' enrollment and attendance patterns are important factors that shape the teaching and learning technologies of adult literacy programs. These patterns also have significant implications for research on adult literacy education, since high attrition confounds many research designs.

Although participation in adult literacy is sometimes mandated for welfare clients, and although the courts sometimes mandate participation for offenders, by and large participation in adult literacy is voluntary. This means that programs are under pressure to satisfy the needs of their students, because if they do not, students will simply cease to attend.

Staffing

Eighty percent of the staff who work in adult literacy programs are part time (Chisman, 2002). Programs are typically headed by a director who reports to an official employed by the sponsoring agency. In public school-sponsored

programs, this would usually be the school principal or superintendent. Part-time teachers typically arrive, teach their classes, and leave. For this reason, intercommunication among teachers is constrained, and this thwarts the ability of teachers to learn from each other.

Use of part-time staff is related to program size. In small programs that operate only in the evening, all staff, including the director, may be part time. In larger programs, the director is typically full time; some of the teachers may be full time, and the program operates both during the day and the evening. About half of the programs in the United States might be classified as small, operating on budgets of \$200,000 or less (U.S. Department of Education, 2005).

Certification requirements for adult literacy teachers vary considerably by state. Kutner, Webb, and Matheson (1996) reported that 24 states require no certification to teach adult literacy, 15 states require K–12 certification, and 12 states require certification in adult literacy.

Structural Marginality

Due to conditions such as funding insecurity, underfunding, serving a function that is ancillary to the function of the sponsoring agency, and use of a part-time workforce, adult literacy programs tend to be structurally marginal. In other words, adult literacy programs experience a weak power position in relation to other organizations that seek to acquire educational resources.

Structural marginality begins at the state level. In most states, the official who is responsible for adult literacy, typically called the state director, is at the third or fourth level in the state department of education bureaucracy and has limited access to the centers of power. Because K–12 education is the business of most state departments of education, adult literacy frequently gets little attention (Chisman, 2002). When states are successful in acquiring additional resources for adult literacy programs, it is usually because of an idiosyncratic and fortuitous situation—a supportive governor, for example, or a supportive coalition of legislators. If, however, these external supporters leave the scene, or if the state finds itself in a financial crisis, everything gained can be lost. In one New England state, for example, the governor decided that adult literacy education would be one of his new initiatives. While policy staff made sound progress on reforms favorable to adult literacy, a serious budget crisis developed. Consequently, 13 agencies were completely defunded and the adult literacy initiative was quickly abandoned.

ISSUES FACING PROGRAMS

Quantity versus Quality

Because funds are limited, states and the programs to which they allocate funds are faced with two strategic options. They can emphasize service by serving as many students as possible or they can emphasize quality by serving

fewer students and using the funds that are saved to invest in things that promote program quality, such as full-time teachers, professional development, and support staff (Comings & Soricone, 2005). Programs that emphasize service have lower costs per student because the funds are spread out among more students. Programs that emphasize quality have higher costs per student. In 2002, Georgia had the lowest cost per student (\$208), while Vermont had the highest (\$2,683), followed by Michigan (\$2,301) (U.S. Department of Education, 2005). The disparity is striking.

Massachusetts has led the way in promoting the quality policy—that is, serving fewer students with more resources per student. In 1988, the cost per student in Massachusetts was \$150 and the state served 40,000 students. By 2002, however, the state served 12,000 students and the cost per student was \$1,904 (Comings & Soricone, 2005). When the number of students served declined in Massachusetts, programs that previously had full-enrollments now had waiting lists. This created a demand for increased service that was parlayed into a grass-roots campaign aimed at the state legislature. The campaign was successful, and state funding for adult literacy programs increased dramatically.

PROVIDING PROFESSIONAL DEVELOPMENT

As noted previously, nearly half the states require no certification to teach in adult literacy education; another fifteen states require K–12 certification, but not certification in adult literacy. This means that the largely part-time teaching force for adult literacy is often ill equipped to do the job, and for this reason, professional development is a critical issue for programs. This is particularly true for new and inexperienced teachers. Teachers who have certification and/or experience in K–12 education at least have foundational knowledge about teaching, but they lack knowledge about how to teach in adult education programs.

Smith and Hofer (2003) found that adult literacy education teachers faced three challenges that created needs for professional development: developing curriculum, organizing instruction, and assessing skills and progress. They found that while the majority of teachers had to develop their own curriculum, many lacked an understanding of either what a curriculum is or how to develop one. In organizing instruction, the major challenge was responding appropriately to the enrollment patterns that we previously described. Sixty-nine percent of the teachers in Smith and Hofer's study taught open-enrollment classes and had to learn how to cope with a student population that was constantly changing. Since experience in K–12 education provided little guidance for dealing with this situation, simple trial was common strategy teachers used for coping with the challenge of being underprepared to teach adults. Teachers also had difficulty using the results of diagnostic tests to design instruction

and to meet accountability requirements. Despite the emphasis on assessment, the teachers in Smith and Hofer's study felt that they lacked the skills, time, and tools to administer and interpret formal assessments.

The need for professional development is not easily met. Part-time teachers who are employed full time elsewhere generally owe their primary professional allegiance to their full-time profession and are less likely to invest in professional development in adult literacy. Moreover, scheduling professional development for a part-time workforce that is paid by the hour is extremely difficult. Teachers who are working both full time and part time are understandably reluctant to devote the little free time they have to professional development activities.

MANAGING HIGH STUDENT ATTRITION

Dealing with student attrition is a significant challenge for adult literacy programs. According to Development Associates (1993), 20 percent of the adults who enroll in adult basic education drop out before 4 weeks of instruction and 50 percent drop out before 16 weeks of instruction. Although these figures are dated, there is no evidence that the dropout problem has improved.

As we have noted, dropout leads to continuous enrollment, which in turn frequently leads to individualized instruction. Although there is no evidence to suggest that individualized instruction is an ineffective approach, it is clear that dropout does shape the instructional system of adult literacy education programs in major ways. Moreover, when students drop out of adult literacy programs, their social and financial investment in their education is largely lost.

There are two primary factors that influence students' persistence: motivation and the prevalence of constraints to persistence. Adult literacy students are motivated by many conditions, including the desire to be better parents, obtain better jobs, earn the GED, and shed the stigma of being illiterate. At the same time, adult literacy education students face many constraints to persistence, including changes in work schedules, arranging child care, lack of transportation, and fear of failure. These barriers are exacerbated by the fact that most adult literacy education students have low incomes and therefore have fewer resources available to overcome barriers.

In considering motivation and constraints to persistence, it is possible to divide the population of adults who need adult literacy education into three groups: the demand population, the constrained, and the no-demand population. The demand population is comprised of those who are highly motivated to enroll and are relatively free of constraints. They are individuals who attend adult literacy education and persist as long as motivation is maintained and new constraints do not arise. The second population, the constrained, con-

sists of those who are motivated to attend but also experience significant constraints. They are less likely to enroll in programs and much more likely to drop out. The final group, the no-demand population, consists of those who are not motivated to attend and/or are highly constrained. Lack of motivation is sometimes caused by a low perception of need for literacy. Quigley (1997) notes that negative attitudes toward schooling develop through negative experiences in K–12 education, which is also a demotivator.

For program staff, the second group—the constrained—should be the primary concern in reducing attrition. The problem for this group is maintaining or enhancing motivation while reducing the constraints. Beder and his colleagues (2006) found that students who persisted in a large adult learning center were highly motivated and engaged in their studies. Motivation is enhanced when students understand that they are progressing toward the attainment of their goals. There are two categories of constraints: material and psychological (Comings, Parrella, & Soricone, 1999). Material constraints include such things as child care and transportation. The appropriate response is support services, such as child care and counseling, but unfortunately, few programs can afford comprehensive support services.

As Comings, Parrella, and Soricone (1999) found in their study of persistence, lack of self-efficacy was a major psychological constraint. Self-efficacy can be enhanced through the provision of mastery experiences that allow students to be successful and to have real evidence of that success, the showcasing of successful student role models, verbal support, and addressing negative physiological and emotional states such as tension, stress, and fear of failure.

ACQUIRING OPERATING RESOURCES

Unlike in public schools, basic operating resources for adult literacy programs are not guaranteed. Funding is contingent on success in grant acquisition. Students are voluntary students and have to be recruited. Classroom space has to be negotiated with the parent organization. Thus, if programs are to grow and prosper, administrative staff will have to adopt a decidedly entrepreneurial orientation with the network of organizations that provide resources. Mezirow, Darkenwald, and Knox (1975) published one of the first comprehensive studies of adult literacy education. In discussing programs' resource acquisition activities, they stated that for adult basic education,

This means linking up with a variety of specific organizations, community groups, and target populations. Through them the operator recruits the players [i.e., students], space and support without which he is out of business. His style in hustling the community will depend on its size and composition, past experience of adult education in the schools, and his own professional orientation. (Mezirow et al., 1975, p. 119)

Although the study is over 30 years old, conditions have not changed much regarding resource acquisition. For example, a recent study showed that the director of a large adult learning center understood how important her relationships were with the urban public school system that sponsored her adult literacy program; her program was dependant on the school system for both space and a significant portion of the program's funds (Beder & Medina, 2005a). To build and maintain productive relationships with the school district, she attended K–12 back-to-school nights and administrators' meetings and asked K–12 teachers to refer their students' parents to the adult literacy program. She also placed articles about her program in the PTA newsletter.

CONCLUSIONS

Adult literacy education programs are in many ways very different from the K–12 and higher education institutions with which most educators are familiar. To survive, adult literacy programs must acquire grant funding. The nature of the grants they receive shapes who they serve and to some extent how they serve them. Unlike free-standing organizations that control their own facilities, they are attached to parent organizations that influence how they operate. Their staff is primarily part time, and they are structurally marginal compared to more mainstream educational institutions. Professional development is a major concern, but difficult to provide. The student attrition rate is very high; this influences enrollment patterns and the type of instruction provided.

To many, the characteristics of adult literacy education programs highlighted here may seem to be weaknesses, and to a certain extent they are. Clearly, sufficient and stable funding, more full-time staff, reduction in marginality, more and better professional development, and reduction of attrition would enhance program success.

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Chapter Five

ADULT ESL IN THE UNITED STATES

John Strucker

English as a second language (ESL), also known as English for speakers of other languages, is the fastest-growing sector of adult education in the United States, primarily because of dramatic increases in immigration over the last three decades. The percentage of foreign-born individuals in the total population was at its highest during the decades from 1870 to 1910, when foreign-born individuals averaged nearly 15 percent of the population. Over the next 60 years, that percentage gradually declined to a low point of 4.7 percent in 1970 (U.S. Census Bureau, 1999), but from 1970 on, the percentage of foreign born began to rise again, and in 2002 it was an estimated 11.8 percent (U.S. Census Bureau, 2003).

How many foreign-born adults in the United States are potential candidates for adult ESL instruction? To arrive at an estimate of this target population, the U.S. Department of Education commissioned an analysis of English language proficiency from the 2000 U.S. Census Population and Housing Survey (Lasater & Elliott, 2005). In that survey, all adults who were not native speakers of English were asked whether they spoke English “very well,” “well,” “not very well,” or “not at all.” Those answering anything less than “very well” were considered potential candidates for English language instruction. Using this criteria, it was estimated that 11.5 percent of the adults age 16 and over—approximately 21.9 million people in 2000—could be considered the maximum target population for adult English language instruction.

A small number of foreign-born individuals are business professionals, who usually pay for English instruction at colleges, universities, or private language

schools. This chapter will focus on what is by far the largest category of ESL learners: those who enroll in the free and publicly funded adult basic education (ABE) system. That system is mandated to serve adults age 16 and older who either lack a high school diploma or lack high school-level academic skills. According to the U.S. Department of Education's Office of Adult and Vocational Education (2006a), 44 percent of all students in the ABE system are enrolled in ESL classes.

WHY IS ESL IMPORTANT?

It is important for immigrants to know English so that they can improve their employment prospects and income. Studies have consistently shown a strong relationship between the English speaking and reading ability and income (Park, 1999). According to 1999 U.S. Census Bureau figures, the average income of immigrants who reported speaking English "not at all" was \$16,345, \$20,595 for those who answered "not well," \$29,595 for those who answered "well," and \$40,741 for those who answered "very well" (Sum, Kirsch, & Yamamoto, 2004).

Limited English proficiency also adversely affects the health of immigrants (Derose, 2000) and their children (Flores, Abreu, & Tomany-Korman, 2005). People with limited English tend to visit doctors less frequently, and they are less likely to be aware of preventive health-care procedures like vaccinations and screenings. In the workplace, adults with limited English proficiency and their coworkers face additional safety risks if immigrant workers do not understand safety rules and procedures explained to them in English (Hong, 2001). Finally, studies suggest that the children of immigrants are more likely to be successful in school if their parents can communicate in English (Pastore, Melzi, & Krol-Sinclair, 1999; Weinstein-Shr & Quintero, 1995). Parents who can speak English are better able to advocate their children's needs with school officials and better able to support their children with their homework and out-of-school learning.

WHERE DO IMMIGRANTS AND ADULT ESL STUDENTS RESIDE?

In the nineteenth and early twentieth centuries, immigrants tended to be concentrated in the big cities of the Northeast, the upper Midwest, and the West Coast. States like New York, Illinois, and California continue to be home to the largest numbers of immigrants. From 1990 to 2000, however, states that had not been traditional immigrant destinations experienced rapid increases in their percentages of foreign-born individuals, including North Carolina (274%), Georgia (233%), Arkansas (196%), and Nebraska (165%) (Center for Adult English Language Acquisition, 2006).

This dispersed settlement pattern for immigrants reflects the dispersed employment opportunities in many areas of the U.S. economy. If an employer establishes a plant that attracts immigrant workers in a rural or suburban area, that locality can soon have dozens or even hundreds of foreign-born families residing within it. This can present challenges to the entire local infrastructure, including K–12 schools, health care, public safety, and ABE programs charged with providing ESL instruction.

WHAT ARE THE NATIVE LANGUAGES SPOKEN BY ESL STUDENTS?

In the 2000 census, of the 47 million residents who reported speaking a language other than English at home, about 60 percent, or an estimated 28 million people, spoke Spanish. After English and Spanish, the U.S. language picture quickly becomes very diverse. Chinese, the third most common native language, was spoken by about 2 million people, or about 4 percent of non-English speakers, followed by French (including Cajun Creole), German, Tagalog, Vietnamese, Italian, Korean, Russian, Polish, Arabic, Portuguese, Japanese, French Creole (mostly Haitian), Greek, Hindi, Persian, Urdu, Gujarathi, and Armenian. Together, these 17 languages accounted for an additional 25 percent of the “other than English-speaking” population. The remaining 10 percent spoke dozens of other languages. These trends have continued: by 2005, Spanish was the native language of 62 percent, and Chinese 4.4 percent, and Korean had moved past Italian into 5th place (U.S. Census Bureau, 2005).

ALL ESL IS LOCAL

Spanish speakers are likely to be present in ESL classes almost anywhere in the United States. They do not necessarily make up the majority or even a plurality of ESL learners, however. Taking a cue from the late House Speaker Tip O’Neill’s aphorism “All politics are local,” it can also be said that all ESL is local. Consider, for example, the Hmong people from Southeast Asia, who settled in the United States after the Vietnam War. The Hmong make up only 0.3 percent of the total national non-English-speaking population (U.S. Census Bureau, 2005), but they are heavily concentrated in a few areas: 50,000 Hmong live in or near Minneapolis–St. Paul, 25,000 in Fresno, and 10,000 in Milwaukee, as well as in smaller cities such as Modesto, California (3,500); Appleton, Wisconsin (2,000); and Hickory, North Carolina (5,000) (Hmong Information Center, 2006).

Haitian Creole speakers, who make up only 1.1 percent of the “other than English-speaking” population, provide another example of local concentration (U.S. Census Bureau, 2005) but are a significant presence in ESL classes in Miami; Washington, D.C.; New York; Boston; and other East Coast cities. Immigrants, especially those who are refugees, are now likely to show up in

seemingly unlikely parts of the United States, sometimes because of a particular employment opportunity, or sometimes because a local church or community organization has agreed to sponsor them and help them to resettle.

WHAT DO WE KNOW ABOUT THE NATIVE LANGUAGE LITERACY AND EDUCATION OF ESL ADULTS?

An adult's level of native language education and literacy plays an important role in his or her ability to acquire English oral and literacy skills because people with higher levels of native language literacy usually acquire literacy in English faster than those with lower levels of native language literacy. In addition to allowing learners to use tools such as dictionaries and grammar texts, being able to read can also support oral language acquisition. When one is learning a foreign language, it is not easy to segment or separate the words in sentences spoken by native speakers because they frequently run the words together, as in "Wannuh goferuh cuppuh coffee?" If learners can read speech written down, they have time to analyze it and note where words start and end. This advantage for more educated adults holds even when their native language employs a written script that is very different from English, such as Cambodian, Korean, or even Chinese (Carlo & Skilton-Sylvester, 1994; Solorzano, 1994).

According to 2000 U.S. Census data, 33.0 percent of the entire foreign-born population were not high school graduates, 25.0 percent were high school graduates, 16.2 percent had some college education (but did not earn a bachelor's degree), and 25.8 percent had a bachelor's degree or more. Little information is available about immigrants' actual levels of native language literacy, however. It is very difficult, for example, to know what high school completion means in terms of literacy skills, since many immigrants come from developing countries where the quality of schooling is uneven at best. Of the adults who enroll in publicly funded ESL classes, only 25 percent reported completing high school and 50 percent reported not having completed high school (National Center for Education Statistics, 2005). The 50 percent reporting that they did not finish high school includes everyone from those with some high school education to those who never had the opportunity to attend school at all. Some ESL students speak native languages that do not have writing systems. Speakers of nonwritten languages make up a small percentage of the ESL population, but, like the Hmong and Bantu-speaking Somali refugees, they can be quite significant locally.

THE U.S. ABE SYSTEM

In the late nineteenth and early twentieth centuries, new immigrants learned English in so-called evening schools provided by public schools, as

well as in churches and settlement houses, such as Jane Addams's Hull House in Chicago. Some immigrants paid for instruction at private business colleges and secretarial schools. These earlier forms of ESL education still exist today: free or low-cost English classes are offered by public school systems, churches, settlement houses, and community-based organizations, while private language schools, joined by community colleges, offer fee-based instruction. In addition, the federal government's Even Start family literacy program provides ESL education to parents of young children, and many employers offer ESL instruction in the workplace (Sticht, 2002).

HOW IS THE ABE SYSTEM FUNDED?

The modern framework for funding adult education was laid down in the Economic Opportunity Act of 1964, the centerpiece of President Lyndon Johnson's Great Society programs. From the beginning, states were given many options as to how to use this money. They could use it for specified populations, such as Native Americans, migrant workers, immigrants, or unemployed young adults, or for teacher training and administration, as well as direct instructional service. Programs could be operated by public schools, community organizations and agencies, or private nonprofit and for-profit groups. Collaborations combining funding from various federal initiatives (e.g., Model Cities and the Job Corps) and tapping into the federally funded Volunteers in Service to America (VISTA) were encouraged at the both the local and national levels (Sticht, 2002).

Over the ensuing 30 years, targeted funds were added to ABE to serve clients of Temporary Assistance to Needy Families, formerly known as Aid to Families with Dependent Children, or welfare; immigrant refugees; and employment training programs such as the Job Partnership Training Act. In 1998, all federal funding for adult education and ESL was incorporated into the Workforce Investment Act, which continues to be the overall statute providing funds to the states for adult basic education and ESL (Office of Adult and Vocational Education, 2006a).

In 2002, \$494.8 million in federal funds, with an additional \$70 million earmarked for ESL, was distributed to the states. That year, the average expenditure, including federal, state, and local, and other sources, was \$803 per adult learner (Office of Adult and Vocational Education, 2005). In comparison, in 2002 the average per-pupil expenditure for elementary students was \$8,049 and \$9,098 for secondary students (Organization for Economic Cooperation and Development, 2006). This tenfold difference between K-12 and adult education funding is not quite as disproportionate as it appears, because adult learners usually attend class six or fewer hours per week, while children normally attend school for 35 hours per week.

Of the \$803 per adult learner in 2002, the federal contribution averaged only \$206, with the remaining \$597 coming primarily from state funds, and some very small additional amounts contributed by local and private sources. The national funding average masks great disparities among the states: at the upper end, Vermont spent \$2633 per learner, while at the lower end, Mississippi spent only \$248 (Office of Adult and Vocational Education, 2005).

Public schools are obligated by state constitutions to provide education for school-age children, but this is not the case with regard to ABE and ESL. In lean budget years, state legislatures are free to slash adult education funds, forcing local programs to cancel class offerings and thus deny education to many students. ESL students in many areas face waiting lists from six months' to a year's duration, even in states that do not normally tolerate long waiting lists for ABE students (Tucker, 2006), a situation that a 1993 report termed "a national disgrace" (Chisman, Wrigley, & Ewen, 1993). Other states disguise their failure to provide enough classes by encouraging over-enrollment: they allow up to 30 to 40 adults to enroll in each beginning ESL class, knowing that large and unwieldy classes will discourage students and cause more than half to drop out within a few weeks.

WHERE DOES ADULT ESL INSTRUCTION TAKE PLACE?

The typical adult ESL classroom in the United States could be anything from a church basement staffed by a volunteer teacher to a modern high school or community college classroom staffed by a certified teacher with a master's degree in ESL. Nationally, 54 percent of the federally funded programs are operated by local school districts, 24 percent by community-based organizations, 17 percent by community colleges, and 5 percent by corrections institutions (Office of Adult and Vocational Education, 2005). Some states, like Oregon, deliver almost all their ABE and ESL instruction through community colleges, and others, like Texas, Connecticut, and California, rely heavily on local school districts, while Massachusetts delivers the majority of its instruction through community-based organizations.

According to the Office of Adult and Vocational Education (2005), 80 percent of the federally funded adult education programs across the United States are small, with annual total budgets under \$200,000, but since small programs serve fewer people, most students attend programs that are somewhat larger. In any event, when it comes to instructional effectiveness, the key factor is the size of the sites where classes are actually held. Large urban programs can be made up of dozens of small sites that may not differ in terms of capacity and scope from more isolated rural programs.

Separate national figures for teachers of adult ESL are not available, in part because some individuals teach both ABE and ESL, but the figures for all

adult education indicate that the workforce is composed overwhelmingly of part-time teachers and unpaid volunteers. Of the 92,309 teachers who worked in federally funded programs in 2005, 14 percent were employed full time, 58 percent were employed part time, and 28 percent were unpaid volunteers (Office of Adult and Vocational Education, 2007). Part-time employees are used because they are cheaper because they do not receive benefits, and adult education runs on a split-shift schedule that makes the most use of part-timers as possible. Unlike the seven-hour K–12 day, adult education classes are usually offered in a morning shift for adults who work nights or are unemployed, and an evening shift for those who work days.

The fact that only 14 percent of the teachers are full time does not necessarily mean that 14 percent of the teaching is done by full-time teachers, since they average more total contact hours with students than part-timers. Many part-timers actually work the equivalent full-time contact hours by teaching at two or three different programs to piece together a full-time income. Part-timers have rates of turnover above 13 percent per year, more than double those for K–12 teachers (Smith, Hofer, & Gillespie, 2001). Administrators and full-time teachers report spending inordinate amounts of time replacing part-timers who quit, and much time in orienting and training a constant stream of new hires (Smith et al., 2001). Most volunteers work only a few hours per week, usually in tutorials with one or two students at a time. As a result, their actual student contact time is probably quite a bit less than their 28 percent representation in the ABE workforce would suggest.

Given that states establish their own guidelines for the formal qualifications and training of adult ESL teachers, it is difficult to generalize about teacher qualifications in the country as a whole. ESL teachers include people with master's degrees and formal adult ESL certification and people with bachelor's degrees in various disciplines, as well as people who have taught English abroad. Because of the high percentage of part-time teachers, states have been reluctant to insist on high levels of formal education such as master's degrees for their adult ESL teachers. Over the last 20 years, many states have increased in-service training for ESL teachers, usually in the form of workshops and study circles. The federal government has also funded research and dissemination centers that develop distance learning training materials for ESL teachers, such as the National Clearinghouse for English Language Acquisition and the Center for Applied Linguistics.

ADULT ESL INSTRUCTION

Since 1998, the U.S. Department of Education's Office of Adult and Vocational Education has operated the National Reporting System to track students' progress and participation in ABE and ESL in terms of attendance,

academic growth, and a range of additional outcomes, including employment, U.S. citizenship, and attainment of personal goals. The National Reporting System levels for ESL learners provide a thumbnail description of the stages of language learning of ESL students. Each level is identified by score ranges on any of three standardized norm-referenced tests of oral and written English authorized by Office of Adult and Vocational Education. In addition to test score ranges, each level is also identified by qualitative descriptions of learners' skills.

Beginning ESL literacy students make up 21 percent of the ESL enrollment in the United States. These individuals cannot speak or understand English and have no or minimal reading or writing skills in any language. They function minimally in English, communicating only through gestures or a few isolated words, and can handle only very routine entry-level jobs that do not require oral or written communication in English (Office of Adult and Vocational Education, 2006b).

Some beginning ESL literacy students, like the Hmong, speak native languages that do not exist in written form. A larger proportion of beginning literacy students come from the rural areas of developing countries or are members of minority populations or females who were denied access to formal schooling in their native countries. Still others come from countries where war and famine disrupted what schooling existed. Such students may also suffer from cognitive difficulties that are the result of trauma and prolonged malnutrition. Others come from societies where limited education was available, but they were learning disabled and their teachers were not trained to help them.

Beginning literacy adults face the difficulty of learning to read in a language that they barely speak or do not speak at all. Mastering the alphabetic principle, the relationship between spoken language and its written form, can be especially difficult for them. When children or adults are taught to read in their mother tongue, they know both the spoken representations and the meanings of the written words that they are attempting to decode. It is much more difficult to make this leap between spoken language and print for the first time in a foreign language.

ESL beginning literacy students usually require classes of 10 or fewer students, not only because of their literacy needs, but because many of them have had so little experience with formal education that they don't know how to "do" school. They may not know how to hold a pencil or book, or the basic rules of classroom etiquette, such as paying attention to the teacher. Teachers who work with beginning literacy students require specialized training in methods of teaching reading that are similar to those used with English-speaking dyslexics. They also need training in how to present English oral skills very concretely, using realia, that is, objects such as foods, items of clothing, and tools, as well as pictures and drawings (Wrigley, 2003).

Beginning literacy learners pose a challenge to small programs because they may not have teachers trained to meet their needs. Even under ideal circumstances, beginning literacy students are not easy learners to serve, as 32 percent drop out before completing a class (Office of Adult and Vocational Education, 2007). Those who persist make slower progress than other learners because they are starting farther behind.

Low-beginning learners are individuals who can understand basic greetings and simple phrases and respond to simple questions, but they speak slowly and with little control over grammar. With regard to reading and writing, they can read numbers, letters, and common words and may be able to sound out simple words but have limited understanding of connected prose. Writing is restricted to basic personal information (e.g., name, address, and telephone number). With regard to functional and workplace skills, they can provide limited personal information on simple forms and can handle routine entry-level jobs that require very simple written or oral English communication and for which the job tasks can be demonstrated (Office of Adult and Vocational Education, 2006b).

High-beginning learners are individuals who can understand common words, simple phrases, and sentences containing familiar vocabulary and are able to respond to simple questions with simple sentences showing a limited control of grammar. With regard to reading and writing, they can read most sight words—or words that are instantly recognized on sight by most readers without having to be sounded out and that cannot be decoded (*the* and *is*, for instance)—but have limited understanding of connected prose. Writing shows very little control of grammar, capitalization, and punctuation and contains many spelling errors. With regard to functional and workplace skills, they can function in familiar social situations and recognize common forms of print found around the home, workplace, and community. They can handle routine entry-level jobs requiring basic English and may have limited knowledge or experience using computers (Office of Adult and Vocational Education, 2006b).

Low beginners and high beginners together make up 29 percent of ESL enrollment nationwide. Low beginners are made up of people who are studying English for the first time, while high beginners may be thought of as people who have had some previous instruction or people who have lived in the United States long enough to acquire minimal speaking and listening abilities informally. These students range from people who have very basic literacy in their native language to those with considerable native language literacy and education. If their native languages are written in alphabetic form, like the 62 percent or more who are Spanish speakers, these adults may be able to transfer some of their knowledge of the alphabetic principle to English. Teachers working with low and high beginners are not as dependent on using realia as

those working with beginning literacy students. With these literate students they are able to use workbooks, charts, signs, and word lists as springboards for oral language practice and discussion.

Low intermediates and high intermediates are similar in their listening and speaking skills in that they can participate in most basic English conversations, while the high intermediates are distinguished by their control of more complex grammar. With regard to reading and writing, low intermediates can understand paragraphs and texts on familiar material, while high intermediate can begin to understand longer and less familiar texts if they have a clear structure. The latter group may also have sufficient English vocabulary to use context to guess at the meanings of unknown words. In regard to functional and workplace skills, low intermediates can interpret simple written materials such as signs, schedules, and maps and handle some entry-level jobs that involve some written as well as oral English skills. In addition, high intermediates can communicate on the telephone, write basic messages and notes, and complete medical forms and job applications (Office of Adult and Vocational Education, 2006b).

The low and high intermediates, who make up 34 percent of the ESL enrollees, are on their way to having functional competence in many areas of English. Functional competence allows an individual to perform many important day-to-day tasks in the workplace and the community in English. Because these learners are developing English reading skills, their classroom work involves reading of stories, poems, and simplified stories from the newspaper. For the high intermediate learners, reading is beginning to become one of their main sources for learning new English vocabulary.

There is a sharp falloff in enrollment between low and high intermediates from 21 percent to 13 percent of total enrollment. Some of this falloff is due to low intermediates transferring to intermediate levels of adult basic education within the same program, particularly if their goal is to earn a GED. The fall-off may also indicate that many immigrant adults are satisfied with acquiring functional levels of English competence. For young single adults who plan to pursue postsecondary education in the United States, it may make more sense to invest the considerable time needed to achieve more advanced levels of English. For those who do not aspire to higher levels of education, however, it may make more sense to spend that time at home with one's family or working overtime or taking a second job.

Moving beyond functional oral competence to being able to read and learn in English involves acquiring far more English vocabulary knowledge than intermediate students possess. Their tested vocabulary can be quite limited, often the equivalent of a 2nd-grade vocabulary (Davidson & Strucker, 2002). When it comes to acquiring vocabulary, an ESL learner's level of native language education plays a key role. Adults with high levels of native

language education and vocabulary are faced only with learning the English words for concepts they already know, but those with low levels of native language education are faced with having to learn both the words *and* the concepts for the first time in English. Spanish speakers with higher levels of native language education possess an additional advantage in learning vocabulary because of the high number of Latin-based cognates in higher-level English texts.

The terms “advanced” and “high advanced” are used in ESL to refer to individuals who can communicate orally in a variety of contexts related to life and work, including some more formal informational communication. They can read moderately complex texts, make inferences and predictions, and contrast information presented in multiple texts. They are able to write organized multiparagraph texts using some complex grammar, a variety of sentence structures, and a range of vocabulary. They can understand radio and television, and in the workplace they can handle nontechnical oral and non-written instructions and routine interactions with the public, use common computer software, and learn new applications (Office of Adult and Vocational Education, 2006b).

The 16 percent of ESL students who fall into the advanced ESL levels are distinguished by their ability to use English to learn more English. They are capable of understanding and using English that is more formal, academic, and abstract. As they near the end of the advanced levels, many educational options are become available to them. Those who wish to acquire a U.S. high school credential can transfer to adult secondary education, the designation within the ABE system for GED preparation classes. Those who already have a high school credential may want to study to take the Test of English as a Foreign Language, which is required for admission to many U.S. colleges, universities, and technical schools. Still others may choose to enroll directly in community colleges and continue to hone their advanced English skills while pursuing a career education.

HOW LONG DOES IT TAKE FOR ADULTS TO LEARN ENGLISH?

It can take ESL children who attend school 35 hours a week two to three years to develop functional English ability and seven years or more to catch up to their English-speaking classmates in academic achievement in English (Collier, 1989). Mainstream English Language Training (1985) estimated that it can take from 500 to 1,000 hours of instruction for an adult who knows no English but is literate in his or her native language to develop sufficient functional ability in English to cover the basic workplace and social interactions. Thus, if an adult could attend ESL class four hours per week and never miss a class, it could take a minimum of 125 weeks, or nearly two-and-half

straight years of instruction to reach a functional level. Based on likely rather than maximum attendance, three to five years from beginning to intermediate is probably a more accurate estimate (Chisman et al., 1993).

EXPOSURE TO ENGLISH OUTSIDE THE CLASSROOM

For adult ESL students in the United States, exposure to English outside the classroom can play an important role, but the amount and character of that exposure varies a great deal. For example, some ESL adults interact almost exclusively with English speakers during their workdays, while others work exclusively with speakers of their native language. Those with school-age children may encounter English through their children's homework and English conversation at home, while elderly adults or those who remain at home to care for young children may have little exposure to spoken English. Adults have considerable discretion over the amount of English they encounter in social, religious, and recreational settings, as well as through television, radio, movies, and the Internet. In the past, only Spanish speakers enjoyed access to native-language media in the United States, but satellite television and the Internet have brought native-language news and cultural programming to many other immigrant groups, freeing them of the need to acquire English for those purposes.

CHALLENGES AND OPPORTUNITIES FACING ESL

Improving Assessment of Learners' Skills

Research on children and adult ESL students highlights the critical need for diagnostic assessments of learners' strengths and needs (August & Shanahan, 2006; Wrigley, 2003). It is not unusual to find great differences across adults' levels of skills in English. Some have strong reading skills but little oral language ability in English, while others are fluent conversational speakers with almost no English reading ability.

The tests mandated by the National Reporting System have helped to improve teachers' knowledge of students' strengths and needs in English, but information about students' native language literacy is still generally lacking. Other than those for Spanish speakers, there are no widely available tests of ESL students' native language literacy abilities. Brief computer-administered and scored tests of native language reading comprehension would tell teachers whether an adult has low, medium, or high literacy in his or her native language. In a promising development, UNESCO and ETS are conducting a pilot study called the Language Assessment and Monitoring Program to develop basic reading assessments in a number of languages spoken in developing countries (UNESCO, 2005).

Assessment isn't just a matter of tests; it's also a matter of having the time to give them and the staff trained to interpret them. Even though many ESL programs in the United States have Spanish-speaking teachers and staff, and even though reliable Spanish reading tests are available, too few programs have the money and time to invest in buying and using those tests.

Improving Attendance and Persistence of ESL Students

Despite the fact that ESL adults are highly motivated to learn English, their attendance tends to be erratic (Sticht, MacDonald, & Erickson, 1998), and 20–25 percent end up dropping out before completing the levels they enroll in (Office of Adult and Vocational Education, 2006). They do not usually miss classes or drop out of school for frivolous reasons: like other adults in our society, they have car problems, or their employer asks them to work late, or their child-care arrangements fall through, or their family members get sick (Comings, Parrella, & Soricone, 2000).

Given that some attendance and persistence problems are unavoidable, a partial solution might be to offer on-site ESL classes that are accompanied by parallel online versions. If a student has to miss classes or even drop out for a time, he or she could follow the class and at least participate in some of the activities at home. Online learning would probably not be effective with low-skilled beginning literacy students, but it could benefit those with basic functional skills and some familiarity with computers

Increasing the Intensity of Instruction

Wrigley (2003) found that ESL students who attended a higher percentage of their classes for the period they were enrolled made better progress than students who attended a greater number classes but attended more sporadically. In other words, intensity of study appears to be more important than total hours. It would be useful to know whether ESL students would achieve better results if shorter, more intensive courses were offered to them. What if, instead of the typical semester of 48 hours of instruction spread over three months, some students could receive 48 hours of instruction in one month? Some students might find it easier to commit to attendance over a shorter period.

Using Technology to Improve Instruction

Since the 1980s, ESL teachers have made extensive use of low-cost computer software programs for drill and practice in vocabulary, grammar, and spelling. Such programs allow students to work at their own pace on skills, while at the same time acquiring some basic computer literacy skills. Videos

have also been effective with ESL learners because they offer exposure to natural language presented in a structured sequence, and they can be replayed for multiple exposures (Burt, 1999). In the past few years, computer language learning programs employing text-to-speech and speech recognition have become commercially available from several sources, aimed primarily at English-as-a-foreign-language learners. Their potential for ESL students has yet to be explored. But in a recent study, intermediate ESL students reported high levels of engagement and satisfaction with a speech recognition reading tutor. In the future these technologies might be used to create self-study language labs for ESL students or as part of the online support for on-site classes.

Making Use of Native Language in Adult ESL Classrooms

Total English immersion in the classroom was once considered to be best practice, but recent research with both K–12 and adult ESL students suggests that the “judicious use of native language” can be highly effective (Huerta-Macias, 2003). This could be relatively easy to implement in programs where adult ESL students who are native speakers of Spanish make up all or nearly all of the students, but it would obviously not be possible for the many classes in the United States in which multiple native languages are represented among the students.

Addressing the Need for Structural Reforms in Adult ESL

This point serves as a fitting conclusion, because key structural weaknesses in the adult basic education ESL delivery system undermine the best efforts of administrators, teachers, and the students themselves. As discussed earlier, funding for adult ESL is inadequate and inconsistent. Inadequate funding is the direct cause of long waiting lists and class sizes that are too large to be effective and contributes to an overreliance on part-time teachers. Inconsistent funding at the state level leads to fluctuations from year to year in services and further exacerbates workforce turnover.

It takes skill, training, and experience to be an effective ESL teacher. Minimally trained volunteers can provide opportunities for ESL students to perfect their conversational ability, but it takes specialized training to teach English grammar, vocabulary, and literacy skills to the diverse learner population in adult ESL. Despite federal support for state teacher training initiatives, the 13 percent annual turnover rate among part-timers severely undercuts in-service teacher education efforts.

One reform that is not dependent on increased funding is the consolidation of smaller sites and programs into larger entities capable of providing a better range and quality of ESL instruction and better access to technology. Small sites

have too few teachers and too little space to offer the range of classes needed by the diverse multilevel adult ESL population. At larger sites teachers are better able to specialize in the various learner types and develop expertise in assessment and technology. Small sites are unavoidable in rural or exurban areas, but there is no educationally justifiable reason for small sites in urban areas.

CONCLUSION

Despite these challenges and limitations, adult ESL programs remain among our most important centers of civic culture. Every morning and night, in thousands of classrooms across the country, work-weary adults from 100 different countries come together to learn English in safe, supportive environments, places where nobody makes fun of their accents and where teachers and volunteers are understanding and patient. Like generations of immigrants before them, they come to learn English, but in the process they also experience much of what is good and enduring about America.

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Chapter Six

ADULT LEARNERS IN A CHANGING AMERICA

Irwin Kirsch, Marylou Lennon, and Claudia Tamassia

In many ways, the challenges faced by adult education programs and the learners they serve are more complex than ever before. In America today, the rewards for higher levels of educational attainment and skills are large and growing. Those in our society with below-average skills are finding it increasingly difficult to earn above-average wages in a global economy. They cannot hope to fully participate in an evolving society where individuals are being required to take on additional responsibility for more aspects of their lives: from planning their careers to nurturing and guiding their children, navigating the health-care system, and assuming more responsibility for their financial future. Policy makers and others are coming to recognize that in modern societies, human capital, or what one knows and can do, may be the most important form of capital (Becker, 2002).

In this changing America, the skills that participants in adult education programs do or do not develop have increasingly important implications in terms of their workforce participation, long-term self-sufficiency, acculturation, and citizenship. A growing body of data shows that literacy and numeracy skills are associated with the likelihood that individuals will participate in life-long learning, keep abreast of social and political events, and vote in state and national elections, in addition to obtaining and succeeding in a job (OECD & Statistics Canada, 2005; Sum, Kirsch, & Taggart, 2002). These data also suggest that literacy is likely to be one of the major pathways linking education and health and may be a contributing factor to the disparities that have been observed in the quality of health care in developed countries. Thus, the

noneconomic returns to literacy in the form of enhanced personal well-being and greater social cohesion are viewed by some as being as important as economic and labor market returns (Friedman, 2005; OECD, 2001). Given the social and economic stakes involved, it might reasonably be argued that adult education programs have a more critical role to play in today's society than ever before. Recognition of this fact has led some to believe that it is important to gather national data about both these programs and their participants to stimulate and inform a conversation about the needs of adult learners and the ways in which those needs might best be met to ensure that both individuals and society as a whole can reach their full potential.

OVERVIEW OF THE ADULT EDUCATION PROGRAM STUDY

The Adult Education Program Study (AEPS) was sponsored by the Office of Vocational and Adult Education. The study was designed and conducted by the Educational Testing Service and Westat, in conjunction with staff from the Office of Vocational and Adult Education and the National Center for Education Statistics. Westat is an employee-owned research corporation that conducts national surveys for various agencies of the U.S. government. The overall goal of the AEPS was to provide nationally representative information about adult education programs and their participants through the use of two surveys (Tamassia, Lennon, Yamamoto, & Kirsch, 2007).

The Program Survey consisted of a detailed questionnaire designed to collect information about the characteristics of adult education programs, including size (in terms of number of programs, sites, and participants and budget), staffing profiles, the types of learners served, the kinds of assessments employed, and the extent to which various technologies were used by learners and staff. The questionnaire covered the program year (July 1, 2001–June 30, 2002) and was completed by administrators from a nationally representative sample of adult education programs.

The focus of this chapter is on the second of the two surveys—the Learner Survey. This survey was designed to provide a profile of the literacy and numeracy skills of a nationally representative sample of adult learners enrolled in federally supported adult education programs. The Learner Survey administered between March and June of 2003 and assessed the skills of participants in three domains: prose literacy, document literacy, and numeracy. The definition of literacy for this survey followed that used in the Adult Literacy and Life Skills Survey (ALL), the International Adult Literacy Survey (IALS), and the National Adult Literacy Survey (NALS): “Literacy is using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993, p. 2).

The definition of each domain also followed that used by other large-scale literacy assessments. Prose literacy was defined as the knowledge and skills needed to understand and use information from texts such as editorials, news stories, brochures, instruction manuals, poems, and fiction. Document literacy was defined as the knowledge and skills required to locate and use information presented in various formats, including job applications, payroll forms, transportation schedules, maps, tables, and charts. Numeracy was defined as the knowledge and skills required to effectively manage and respond to the mathematical demands of diverse situations. While the ALL and AEPS surveys employed the numeracy scale as it is defined here, the earlier NALS and IALS assessments used a quantitative literacy scale that dealt primarily with arithmetic skills embedded in texts. The numeracy scale focuses more on mathematical reasoning and, as such, represents a broader construct that is important in today's society.

The AEPS Learner Survey instrument was derived from the ALL, an international large-scale assessment of adults conducted in 2003. The ALL was a household survey that examined the characteristics and levels of literacy and numeracy of the general adult population in the United States and six other countries. Assessment tasks were based on real-life materials taken from a variety of sources, including newspapers, brochures, and magazines. The tasks were presented in an open-response format; that is, rather than respond to multiple-choice questions, participants were asked to respond to questions by writing brief responses, completing portions of an order form, circling numbers in a table, and so forth. Like the ALL, the AEPS survey was administered by a trained administrator. Because the AEPS survey used instruments and methodology derived from the ALL, the results of the AEPS and ALL surveys are directly comparable and able the adult learner population to be compared with the general adult population in the United States.

The Learner Survey also included a detailed background questionnaire that was used to collect information about various learner characteristics. Like the ALL, the AEPS background questionnaire addressed areas including language background, educational background and experiences, labor force participation, and other activities, as well as general demographic information such as gender and age. The background questionnaire not only added to the interpretability of the AEPS data but, as was true with the assessment instruments, allowed for direct comparisons with the general adult population.

One important research question addressed in the AEPS focused on the impact that language of assessment has on the performance of English language learners. In previous large-scale assessments that were conducted with English-language tasks, it was important to qualify the results as not capturing the literacy skills and knowledge that some respondents might possess in other languages. To investigate this issue, the AEPS oversampled the Hispanic

population enrolled in adult education programs and randomly assigned these learners to either a English or Spanish version of the AEPS prose and document instruments. This aspect of the study design allowed for an analysis of the extent to which the language of the assessment influenced performance on literacy tasks.

In summary, the data derived from the AEPS Learner Survey provided information about the skills and characteristics of participants in federally funded adult education programs. This information is important and unique for several reasons.

- It was the first time comparable literacy measures have been used to assess the skills of adult education participants in the United States in a nationally representative sample.
- It was the first time such a measurement allows comparisons with a household sample, through comparison of the Learner Survey results with those from the ALL.
- It was the first time this type of large-scale assessment has been conducted in both Spanish and English.

THE ADULT EDUCATION POPULATION

Throughout the history of adult education, a range of groups—both public and private, state and federal—have been involved in educating a diverse group of adult learners. While diversity within the field persists, the past 40 years have been characterized by a sustained federal and state partnership. In 1964, as part of the federal War on Poverty, Congress passed the Economic Opportunity Act, which introduced the Adult Basic Education Program. This legislation established a program of federal grants to states and focused on setting up basic education classes for adults who had not completed secondary education. In 1966, the program expanded beyond basic education with the passage of the Adult Education Act. The 30 years that followed saw an increase in the commitment of federal dollars to adult education, and a concomitant increase in the number of adults enrolled in federally supported programs.

Adult education programs in the United States are currently governed by the Adult Education and Family Literacy Act, Title II of the Workforce Investment Act of 1998, which defines the target population for adult education. According to that legislation, individuals are eligible to participate in federally funded adult education programs if they are at least 16 years of age; are not enrolled or required to be enrolled in secondary school under state law; and either lack sufficient mastery of basic educational skills to function effectively in society, do not have a secondary school diploma or its recognized equivalent, or are unable to speak, read, or write the English language.

Table 6.1 shows the distribution of participants in adult education programs by selected demographic characteristics. At 53 percent, women continue to represent more than half of the participants in adult education, although the difference between males and females is smaller than it was in 1970, when women accounted for some 57 percent of participants (Sticht, 1998). Adult learners also tend to be younger than the general population, on average, with some 35 percent reporting that they were 16–24 years of age at the time of the survey. In fact, 80 percent of the participants in adult education programs reported that they were 44 years of age or younger. Only 17 percent of participants in adult education programs were 45 years of age and older.

Not only are participants in adult education programs young, but they are increasingly non-native. Some 43 percent reported being born outside the United States, with Hispanic adults representing some 35 percent of program

Table 6.1
Demographic Characteristics of the AEPS Learner Population

	Learner population	Percent of learner population
Total	2,429,531 ¹	100
Gender		
Male	1,137,353	47
Female	1,291,601	53
Age		
16–18	106,738	4.4
19–24	732,236	30.1
25–44	1,114,259	45.9
45–59	378,458	15.6
60+	42,130	4
Born in United States		
Yes	1,389,754	57
No	1,036,756	43
Ethnicity		
Hispanic	852,474	35
Non-Hispanic	1,577,057	65
Program		
ABE	1,033,454	42
ASE	505,290	21
ESL	890,336	37

¹ This figure is the weighted sample of individuals who participated in the Learner Survey. The Program Survey data found that 2,728,512 learners participated in federally funded adult education programs during the period from July 1, 2001, to June 30, 2002. While all learners were included in the Program Survey data, learners enrolled in the lowest-level ESL classes were not included in the sample for the Learner Survey because it was judged they would not have the English language skills necessary to complete the assessment tasks.

participants. This percentage is up from the 21 percent that has been estimated for 1979 (Sticht, 1998).

To help address this changing population and meet the broad range of educational needs of adult learners, federally funded adult education programs provide instructional services categorized according to the skill level or language background of learners. These include the following three types of instructional programs.

- Adult basic education (ABE) programs are designed for adults “who lack competence in reading, writing, speaking, problem solving or computation at a level necessary to function in society, on a job or in the family” (National Reporting System for Adult Education, 2001, p. 25). ABE learners participate in adult programs to acquire basic literacy and numeracy skills.
- Adult secondary education (ASE) programs are intended to help adults “who have some literacy skills and can function in everyday life, but are not proficient or do not have a certificate of graduation or its equivalent from a secondary school” (National Reporting System for Adult Education, 2001, p. 25). Typically, these learners are attending ASE classes to obtain a GED or adult high school credential.
- English-as-a-second-language (ESL) programs are designed “to help adults who are limited English proficient achieve competence in the English language” (National Reporting System for Adult Education, 2001, p. 25).

Table 6.1 shows that 37 percent of the learners participated in ESL programs while another 42 percent were in ABE programs. ASE programs addressed the needs of 21 percent of participants in adult education programs. It is important to keep in mind that these percentages are slightly different from what was found in the Program Survey because learners at the lowest ESL level were not included in the Learner Survey, as it was thought that they would not have the requisite language skills to respond to either part of the assessment. Nevertheless, enrollment in the two largest groups shows that some 80 percent of adult learners were enrolled in programs designed to help participants with the lowest skills—both basic literacy and numeracy skills and English language skills. In addition, level 1 ABE, as defined by the National Reporting System, increased by 70 percent between 2000–2001 and 2004–2005 (National Reporting System for Adult Education (n.d.)). With so many learners needing to develop foundational skills, these data clearly show one set of challenges that adult education programs and their participants strive to meet.

The remainder of this chapter will look more closely at the AEPS’s learner data, first presenting the distribution of skills in the overall adult education population. Literacy and numeracy skills will be further investigated by program type and then by selected background characteristics of adult learners. Given the central role that English-language learning plays in adult education,

we will give ESL learners particular emphasis and will look at the ways in which nativity, language, and educational background interact with literacy and numeracy proficiencies. Because the AEPS survey design included the assessment of a representative sample of the Hispanic population in either English or Spanish, the impact of testing language on the performance of Hispanic learners will also be discussed. Finally, we will place findings from the AEPS survey in the context of the economic and labor force changes arising in this country and discuss the challenges these raise for our adult education system now and in the future.

PROFILING THE SKILLS OF ADULT EDUCATION PARTICIPANTS

Results of the AEPS Learner Survey are reported on the prose literacy, document literacy, and numeracy scales, each ranging from 0 to 500 points. Scores on each scale represent degrees of proficiency in that particular dimension. While most respondents tend to obtain similar, although not identical, scores on the three scales, this does not mean that the underlying skills involved are the same. Each scale provides some unique information, especially when comparisons are made across groups defined by variables such as gender, age, and nativity.

Performance on each scale is divided into five levels, of which level 1 represents the lowest skills and level 5 the highest. These levels were determined not as a result of any statistical property of the scales, but rather as a result of shifts in the information-processing skills and strategies required for one to succeed on various tasks along the scales. Thus, individuals who perform at level 1 on the prose and document scales tend to be restricted to using familiar materials to perform simple tasks such as locating information. At level 2, individuals typically are able to make low-level inferences and compare and contrast information. Individuals at level 3 are generally able to integrate multiple pieces of information found in documents and texts. Performance in levels 4 and 5 reflect the ability to apply increasingly specialized knowledge and use increasingly complex texts and displays of information.

On the numeracy scale, individuals performing at level 1 tend to be able to complete simple tasks in concrete, familiar contexts, such as sorting dates in a list or counting objects in a photograph. Individuals at level 2 are still restricted to fairly simple tasks but can typically solve problems involving more than a single step. At level 3 in numeracy, individuals are typically able to understand mathematical information in a range of different forms, including symbols, graphs, and drawings, and can solve problems that require knowledge of mathematical patterns and relationships. Numeracy levels 4 and 5 reflect an understanding of an increasingly broad range of mathematical information and the ability to understand complex representations.

Of particular significance for the interpretation of data from the Learner Survey is the fact that a number of national and state organizations, including the National Governor's Association, identified level 3 as a standard of minimum proficiency for success in today's labor market (Comings, Sum, & Uvin, 2000). The identification of level 3 was based on judgments made after an examination of the relationships between performance on the NALS and IALS scales and its connection to social, educational, and labor market outcomes (Sum, Kirsch, & Yamamoto, 2004). One factor that influenced this judgment was the relationship between the average literacy scores on the NALS and educational attainment. Adults who were performing at levels 1 and 2 demonstrated proficiencies that were below those of the average high school graduate and, for the most part, below the proficiencies of those who graduated but reported they did not pursue any postsecondary education. This comparison was thought to be important because in all states those who are 16 years of age and older and have not earned their high school diploma or GED are eligible to participate in adult education programs.

What also concerned those researchers about these data was not just that large percentages of adults were found to have limited skills but that the association between these skills and opportunities is strong and growing. Collectively, what data from the NALS and IALS indicate is that literacy is a currency. Just as adults with little money have difficulty meeting their basic needs, those with limited literacy skills are likely to find it more challenging to achieve their goals, whether these involve seeking or advancing in a job, making consumer decisions, pursuing educational opportunities, or participating actively in civic affairs. Moreover, as information and technology continue to increase in importance, and as our economic competitors continue to invest in human capital, even those adults in this country with average skills may experience increased difficulty obtaining better-paying jobs and understanding the many complex issues facing our society.

OVERALL RESULTS FOR THE ADULT LEARNER POPULATION

Not surprisingly, data from the Learner Survey show that, overall, the overwhelming majority of adult education participants performed at the two lowest levels of the literacy scales. Over 80 percent performed at level 2 or below in prose and document literacy, and over 90 percent performed similarly on the numeracy scale (see table 6.2). The performance of adult learners was consistently lower in numeracy than their performance in prose and document literacy.

Data from the Learner Survey showing the distribution of performance across program types also confirmed what might be expected given the learning needs of populations in those programs. In all three domains, learners in

Table 6.2
Proficiency Distribution on the Prose, Document, and Numeracy Scales by Program

	Overall Score		Level 1 (0-225)		Level 2 (226-275)		Level 3 (276-325)		Level 4 (326-375)		Level 5 (376-500)	
	Mean	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Prose literacy	219	(1.9)	48.8	(1.3)	35.5	(1.0)	14.3	(1.4)	1.3	(0.3)	0.1	(0.1)
ABE	240	(3.5)	35.5	(2.7)	46.8	(2.0)	16.2	(2.8)	1.2	(0.6)	0.2	(0.2)
ASE	255	(3.3)	23.6	(3.0)	45.2	(1.9)	28.3	(3.0)	2.9	(0.6)	0.1	(0.1)
ESL	175	(3.1)	78.6	(1.6)	16.8	(1.3)	4.2	(0.5)	0.4	(0.1)	0.0	(0.0)
Document literacy	228	(1.9)	44.3	(1.5)	37.4	(1.0)	16.7	(1.3)	1.5	(0.4)	0.0	(0.0)
ABE	244	(3.7)	30.7	(3.1)	47.9	(2.3)	19.5	(2.6)	1.9	(1.0)	0.0	(0.0)
ASE	258	(3.0)	19.2	(2.3)	46.0	(2.4)	32.0	(2.9)	2.8	(0.7)	0.0	(0.0)
ESL	192	(2.5)	74.5	(1.7)	20.5	(1.2)	4.7	(0.6)	0.3	(0.1)	0.0	(0.0)
Numeracy	203	(2.1)	66.4	(1.8)	25.3	(0.9)	7.7	(1.1)	0.7	(0.1)	0.0	(0.0)
ABE	210	(4.4)	65.5	(3.9)	26.4	(2.0)	7.5	(2.5)	0.6	(0.3)	0.1	(0.1)
ASE	229	(3.3)	46.9	(3.2)	38.2	(1.8)	13.7	(2.0)	1.2	(0.4)	0.0	(0.0)
ESL	182	(2.7)	78.5	(1.6)	16.7	(1.2)	4.3	(0.5)	0.5	(0.1)	0.0	(0.0)

ASE programs performed significantly higher, on average, than learners in ABE and ESL programs. These findings are not surprising, as ASE learners are expected to have completed basic educational requirements and are enrolled in programs to receive help to obtain secondary education certification. Similar results were found for ABE programs compared with ESL programs. As shown in table 6.2, the largest percentage of ABE learners performed at level 2 on the prose and document literacy scales, whereas the largest percentage of learners in ESL programs performed at level 1. For each group of learners, the largest percentage performed at level 1 on the numeracy scale.

One finding of interest was the fact that, overall, 16–18 percent of adult learners performed at level 3 and higher on the prose and document literacy scales, while some 8 percent did so on the numeracy scale. Among participants in ASE programs, more than 30 percent demonstrated performance at level 3 and above on the prose and document scales, while only 15 percent did so on the numeracy scale. A number of studies discuss the skills of individuals performing at these levels on the literacy scales. For example, a study looking at the percentage of test-takers who passed the GED showed that 88 percent of those with document literacy scores at level 3 passed the GED, while 98 percent at levels 4 and above passed the GED (Baldwin, Kirsch, Rock, & Yamamoto, 1995). Thus, these data raise interesting questions outside the scope of the AEPS Learner Survey about these higher-performing participants with respect to their particular purposes for attending adult education programs and their learning goals. Given their relatively lower performance on the numeracy scale and the fact that numeracy skills are critical across a range of adult contexts, including performance on the GED, one hypothesis is that these adult learners were attending adult education programs to improve their skills in the numeracy domain.

As noted previously, the AEPS survey was designed so that results from this study could be compared with those for the general household population in the ALL. As table 6.3 shows, the performance of the general adult population was 42 points higher on the document literacy scale than participants in adult education programs, 49 points higher on the prose literacy scale, and 59 points higher on the numeracy scale. In terms of performance by proficiency levels, the largest percentage of the general population performed at either level 2 or 3, while the largest percentage of the AEPS population performed at level 1.

It is equally important to examine the performance gaps that exist between the most and least skilled adults (e.g., 10th and 90th percentiles). These gaps provide a measure of inequality of outcomes for these populations. This analysis reveals findings that are not consistent across domains. The performance gap between the two populations were approximately equal on the document literacy scale, while the gap for the AEPS population was 24 points wider on the prose literacy scale and 10 points narrower on the numeracy scale—still

Table 6.3
Skills in Prose Literacy, Document Literacy, and Numeracy among the AEPS and ALL Populations

Scales	Mean		Percentiles				Distribution by proficiency levels				
	Score (SE)	SD	10 th Score (SE)	25 th Score (SE)	50 th Score (SE)	75 th Score (SE)	90 th Score (SE)	Level 1 % (SE)	Level 2 % (SE)	Level 3 % (SE)	Levels 4/5 % (SE)
Prose literacy scale											
AEPS	219 (1.9)	60.3	134 (4.3)	186 (3.4)	229 (1.8)	262 (2.5)	290 (5.5)	48.8 (1.3)	35.5 (1.0)	14.3 (1.4)	1.3 (0.3)
ALL	269 (1.3)	51.9	200 (2.1)	235 (1.1)	272 (2.4)	306 (2.7)	332 (1.4)	20.0 (0.8)	32.6 (1.1)	34.6 (1.2)	12.8 (1.0)
Document literacy scale											
AEPS	228 (1.9)	52.5	153 (3.2)	196 (2.6)	232 (1.8)	268 (3.6)	292 (2.9)	44.3 (1.5)	37.4 (1.0)	16.7 (1.3)	1.5 (0.4)
ALL	270 (1.5)	53.9	199 (1.5)	236 (1.8)	273 (1.6)	308 (2.2)	337 (1.6)	20.2 (1.0)	32.3 (1.4)	32.6 (1.1)	15.0 (1.0)
Numeracy literacy scale											
AEPS	203 (2.1)	53.6	134 (2.3)	170 (2.7)	205 (1.9)	238 (3.7)	272 (3.7)	66.4 (1.8)	25.3 (0.9)	7.7 (1.1)	0.7 (0.1)
ALL	261 (1.4)	57.5	186 (2.6)	223 (2.4)	264 (1.1)	302 (2.1)	334 (2.6)	26.8 (0.9)	31.8 (1.1)	28.8 (1.0)	12.7 (1.1)

equivalent to 2.6 standard deviations. The fact that prose showed the widest performance gap is most likely related to characteristics of the domain. Prose literacy requires a greater knowledge of language structure, including grammar, syntax, text schemata, and prosodic elements. Thus, these results could have been affected by the larger percentages of non-native adult learners in the AEPS population who had a mother tongue other than English.

Overall, about one in two adults in the general population and four in five adults in the AEPS population performed below level 3. Of course, it would be expected that adults participating in programs to improve their skills would demonstrate lower skill levels than the general adult population, and these results from the Learner Survey and comparable measures across the adult learner population confirm that assumption. The large proportion of adult learners in level 1 suggests that adult education programs are, in fact, serving adults who are most in need of educational services. It also points to the fact that their educational needs are significant and varied. Previous studies have shown that adults in level 1 are a particularly heterogeneous group who not only have limited literacy skills but also tend to have poor language skills and/or lack component skills such as decoding, vocabulary, and fluency that one must possess in order to become a proficient reader. A recent study by Strucker, Yamamoto, and Kirsch (2006) found that many participants in adult education programs who performed at levels 1 and 2 on the literacy scales also demonstrated difficulties with one or more of these component skills. These characteristics highlight the challenges to be faced by learners and programs if the skill levels of these level 1 learners are to be raised to a point that will allow them to fully participate in today's society.

RESULTS BY GENDER

Results from the Learner Survey showed no differences between male and female learners on the AEPS on either the literacy or numeracy scales (see table 6.4). In addition, the percentage of learners performing at each proficiency level was similar for males and females across the three domains. While these findings contrast to those of surveys of school-age populations, which generally find performance differences between girls and boys (Freeman, 2004; OECD, 2004), they are similar to the findings of other surveys such as the International Adult Literacy Survey (OECD & Statistics Canada, 2000) and the National Adult Literacy Survey (Kirsch, Youngblood, Kolstad, & Jenkins, 1993), which found no important differences between the performance of males and females.

The AEPS results on the numeracy scale, however, stand in contrast to those found for the household population in the ALL. While, as noted, there were no significant differences between males and females on the numeracy scale in the AEPS, a significant 16-point difference in favor of males was found in the ALL

Table 6.4
Gender and Skills on the Prose Literacy, Document Literacy, and Numeracy Scales for the AEPS and ALL Populations

	Distribution by proficiency levels					
	Mean score		Level 1	Level 2	Level 3	Levels 4/5
	Mean <i>SE</i>	<i>SD</i>	% (<i>SE</i>)	% (<i>SE</i>)	% (<i>SE</i>)	% (<i>SE</i>)
Prose literacy scale						
AEPS						
Male	219 (2.6)	59.5	49.0 (2.2)	36.0 (1.8)	14.2 (1.5)	0.9 (0.3)
Female	220 (2.1)	60.9	48.7 (1.4)	35.1 (1.2)	14.5 (1.5)	1.8 (0.4)
ALL						
Male	266 (1.8)	53.1	21.0 (1.0)	33.0 (2.0)	34.0 (1.0)	12.0 (1.0)
Female	271 (1.6)	50.5	19.0 (1.0)	32.0 (2.0)	36.0 (2.0)	14.0 (1.0)
Document literacy scale						
AEPS						
Male	229 (2.2)	51.3	42.9 (2.2)	38.9 (1.7)	17.2 (1.5)	0.9 (0.2)
Female	228 (2.3)	53.4	45.6 (1.6)	36.2 (1.2)	16.2 (1.4)	2.1 (0.6)
ALL						
Male	272 (2.1)	55.7	20.0 (1.0)	31.0 (2.0)	32.0 (1.0)	17.0 (2.0)
Female	268 (1.6)	52.2	20.0 (1.0)	34.0 (2.0)	33.0 (2.0)	13.0 (1.0)
Numeracy scale						
AEPS						
Male	205 (2.3)	53.0	64.6 (2.0)	27.0 (1.5)	8.0 (1.2)	0.4 (0.1)
Female	202 (2.4)	54.0	67.9 (2.0)	23.8 (1.1)	7.3 (1.2)	1.0 (0.3)
ALL						
Male	270 (1.8)	58.5	23.0 (1.0)	29.0 (2.0)	31.0 (1.0)	17.0 (1.0)
Female	254 (1.9)	55.3	30.0 (2.0)	34.0 (2.0)	27.0 (2.0)	9.0 (1.3)

(OECD & Statistics Canada, 2005). This may reflect the fact that, relative to the prose and document literacy scales, and in comparison to the general adult population, the performance of adult education participants is weakest on the numeracy scale. This more uniform weakness may well wash out any performance differences between males and females on the numeracy scale in the AEPS.

There were also no significant differences found between males and females participating in the three types of adult education programs. That is, the performance of males and females in ASE, ABE, and ESL programs was similar, which corresponds to the general finding that, across the adult education population, gender does not affect performance on the prose literacy, document literacy, or numeracy scales.

RESULTS BY AGE

Adult education programs target learners ages 16 and older and therefore are attended by individuals across a wide age span. In the background

questionnaire for the Learner Survey, respondents were asked to indicate their year of birth, which allows literacy and numeracy skills to be examined across age groups. Forty-six percent of adult learners were between the ages of 25 and 44. An additional 35 percent of adult learners were between the ages of 16 and 24. For all three types of programs, a negative relationship existed between performance and age, with younger age groups performing better, on average, on each of the three scales.

As shown in table 6.5, average scores in prose and document literacy for the two youngest groups—ages 16 through 18 and 19 through 24—were at proficiency level 2 (226–275), compared with scores at level 1 (0–225) for the older cohorts. The largest differences were found in prose literacy, for which the youngest age group—ages 16 through 18—scored 34 points higher than participants between 25 and 44 years of age, and some 40 points higher than participants ages 45 to 59. Performance in numeracy was not only more uniform across age groups, but it was also the only domain in which all age groups had average scores at level 1.

Table 6.5
Percentages and Average Proficiencies of Adult Education Participants: Overall, by Type of Program, and by Age

	Age				
	16–18	19–24	25–44	45–59	60 +
Percentage					
Overall	4.4 (0.9)	30.1 (2.0)	45.9 (1.9)	15.6 (1.4)	1.7 (0.3)
ABE	4.3 (1.4)	36.9 (3.8)	42.2 (3.4)	14.2 (2.4)	1.3 (0.3)
ASE	11.9 (2.9)	45.7 (3.0)	27.8 (3.3)	10.9 (2.5)	0.8 (0.4)
ESL	0.2 (0.1)	13.4 (1.0)	60.4 (2.7)	19.8 (1.5)	2.7 (0.6)
Prose literacy scale					
Overall mean	248 (5.2)	236 (3.2)	214 (2.5)	208 (5.2)	164 (7.3)
SD	42.9	50.7	59.4	66.7	63.6
ABE mean	247 (5.2)	241 (4.7)	242 (3.5)	236 (7.3)	184 (10.3)
ASE mean	252 (7.3)	257 (4.0)	251 (4.9)	263 (6.8)	237 (16.8)
ESL mean	137 (28.7)	177 (4.2)	181 (3.2)	168 (5.5)	141 (8.3)
Document literacy scale					
Overall mean	250 (5.7)	245 (2.2)	222 (2.3)	218 (4.5)	182 (6.6)
SD	41.1	45.6	51.6	55.3	50.4
ABE mean	251 (4.8)	250 (4.5)	244 (3.9)	238 (6.8)	190 (9.6)
ASE mean	253 (8.0)	262 (3.3)	256 (4.7)	260 (8.6)	242 (15.9)
ESL mean	159 (36.3)	195 (3.3)	195 (2.6)	189 (4.5)	167 (6.4)
Numeracy scale					
Overall mean	218 (8.2)	212 (2.8)	201 (2.3)	199 (4.7)	165 (6.4)
SD	53.0	49.9	51.9	57.9	54.4
ABE mean	219 (8.1)	211 (4.9)	209 (4.8)	210 (7.8)	162 (10.1)
ASE mean	220 (11.3)	231 (4.1)	224 (5.7)	239 (8.8)	231 (18.4)
ESL mean	134 (44.4)	179 (3.9)	187 (3.1)	178 (5.6)	156 (6.2)

To what extent is this relationship between age and proficiency similar among adults in the three types of instructional programs? Data in table 6.5 show that when we look at it by type of program, the relationship between performance and age is different from the negative relationship found for the total adult education population. A relatively flat relationship was demonstrated among learners between ages 16 and 59 in ABE and ASE programs, while those participants 60 years of age and older performed at a significantly lower level on each scale. Data for the ESL participants revealed a more curvilinear relationship, with the youngest and oldest cohorts performing at a somewhat lower level than adults between 19 and 24 and 25 and 44 years of age.

Care should be taken when we interpret these results because they in part reflect differences in the percentages of adults in each age group participating in each type of program. For example, while the youngest cohort (those 16–18 years of age) represented some 4 percent of the overall adult education population, they represented 4 percent of those in ABE classes, 12 percent of those in ASE classes, and less than 1 percent of those in ESL classes. In contrast, while those between 25 and 44 years old represented some 46 percent of adult learners, they represented 42 percent of those in ABE classes, 28 percent of those in ASE classes, and 60 percent of those in ESL classes.

RESULTS BY SOURCES OF INCOME

The background questionnaire of the Learner Survey asked respondents about their labor force status as well as about their sources of income during the previous program year. Sources of income included wages or salaries; income earned through self-employment; interest, dividends, or investments; pensions; and government transfers. These variables were examined through latent class analysis, which is a statistical tool for clustering subjects based on categorical variables. The analysis yields a classification for each survey participant that represents a tendency to respond to a set of questions in a particular way (Lazarsfeld & Henry, 1968; Patterson, Dayton, & Graubard, 2002). The analysis of these variables resulted in the identification of three classes that associate performance with sources of income and can be looked at by labor force status. We can also compare the results for the AEPS learner population with those of the general household population.

- Class 1 represents 15 percent of participants in adult education programs and 9 percent of adults in the general population. In general, this group of learners had a low likelihood of reporting any income, but when they did, it was likely to come from a combination of wages or salaries, Social Security benefits, and SSI payments.
- Class 2 represents 85 percent of participants in adult education programs and some 65 percent of adults in the general population. For adults in this group there was

a high likelihood that their only source of income was wages or salaries (including commissions, tips, and bonuses).

- Class 3 is almost nonexistent in the adult education population but represents about 25 percent of adults in the general population. This group was likely to have income from wages or salaries or to be self-employed. What distinguishes them from the other two groups is that they reported receiving additional income from interest, dividends, capital gains, or other investments.

Table 6.6 shows the results of the latent class analysis using sources of income for participants in adult education programs and for adults in the general population. Before examining these results, it is important to remember that participants in adult education programs are there to improve their language skills as well as their literacy and numeracy skills. Many are also there to increase their labor market opportunities and hence their wages and incomes. Overall, some 50 percent of the adult learners reported they were employed, while some 33 percent indicated they were unemployed but looking for work, compared to the 69 percent of the general ALL population who reported they were employed and the 9 percent who indicated they were unemployed but looking for work. As the AEPS learner population is both younger and less skilled than the general population, it is not surprising that the probability of adult learners receiving income from interest, dividends, capital gains, or other investments (class 3) was close to zero, compared to some 25 percent of adults in the general population.

The AEPS and ALL groups differed not only in terms of how they are distributed across the three latent classes but also in terms of their performance on the three scales. The ALL data for the general population shows that adults in class 3 demonstrated significantly higher scores on each of the three scales than adults in class 2, with the average differences ranging from 35 points on the prose scale to 37 points on the document scale and 47 points on the numeracy scale. In turn, adults in class 2 outscored adults in class 1, on average, by 25 points on prose literacy, 35 points on document literacy, and 33 points on numeracy. In total, in the ALL population, adults in class 3 outperformed those in class 1 by 60 points or more on each of the three scales.

As noted previously, participants in adult education programs were very unlikely to report incomes from dividends, interest, capital gains, or other investments, the distinguishing characteristic of class 3. Thus, there were not enough adult learners to establish this latent class among adult education participants. In addition, there were no significant differences in the average scores for either the prose or document literacy scales between adult education participants identified as belonging to class 1 and those identified as being in class 2. Numeracy—for which adults in class 2 showed higher average scores (14 points) than those in class 1—was the only scale where there was a significant difference among adult education participants.

Table 6.6
Percent of Learners and Average Scores Overall and by Labor Force Status among AEPS Participants and the ALL General Household Population by Latent Class Analysis on Sources of Income

	Class 1			Class 2			Class 3					
	Percent in class	Average score		Percent in class	Average score		Percent in class	Average score				
		Prose	Document		Numeracy	Prose		Document	Numeracy	Prose	Document	Numeracy
AEPS												
Overall	15.2 (1.2)	214 (4.3)	222 (4.1)	191 (4.1)	84.8 (1.2)	220 (2.1)	229 (1.9)	206 (2.1)	n/a	n/a	n/a	n/a
Employment status												
Employed	7.9 (0.9)	206 (5.9)	218 (5.1)	188 (5.4)	92.1 (0.9)	217 (3.2)	228 (2.8)	206 (2.7)	n/a	n/a	n/a	n/a
Unemployed	21.9 (2.3)	222 (4.7)	226 (4.7)	192.6 (4.7)	78.1 (2.3)	227 (2.6)	233 (2.4)	205 (2.8)	n/a	n/a	n/a	n/a
Not in labor force	23.6 (3.2)	210 (9.3)	217 (7.6)	192.3 (8.1)	76.4 (3.2)	219 (5.5)	226 (5.2)	206 (4.3)	n/a	n/a	n/a	n/a
ALL												
Overall	9.4 (0.6)	237 (4.1)	229 (4.0)	219 (3.9)	65.3 (1.0)	262 (1.6)	264 (1.6)	252 (1.9)	25.2 (1.0)	297 (2.2)	301 (2.2)	299 (2.0)
Employment status												
Employed	2.5 (0.3)	253 (5.2)	251 (4.5)	239 (6.8)	65.4 (1.3)	265 (1.9)	266 (2.0)	255 (2.0)	32.1 (1.3)	298 (2.2)	302 (2.2)	300 (2.0)
Unemployed	16.9 (1.6)	221 (6.6)	216 (6.6)	200 (6.6)	73.6 (2.1)	247 (3.6)	251 (3.8)	231 (4.0)	9.5 (1.9)	281 (9.0)	291 (8.6)	284 (10.1)
Not in labor force	29.4 (2.1)	236 (5.1)	227 (5.2)	218 (4.8)	57.8 (1.8)	268 (3.0)	270 (3.1)	260 (4.1)	12.8 (1.4)	299 (5.4)	299 (5.3)	297 (5.5)

RESULTS BY LEVEL OF EDUCATION

The AEPS data on educational attainment are reported in six categories: no education, up to 8th grade, between 9th and 11th grades, completed high school, received GED certification or equivalent, and attained or completed some education beyond high school (ranging from two-year programs to bachelor's, master's, and PhD programs). These data were collapsed into a single category due to low cell frequencies for each of the individual categories associated with postsecondary education. Overall, results from the Learner Survey revealed the expected relationship between level of education and performance. As shown in table 6.7, those with higher levels of education demonstrated higher proficiencies on all three scales.

The relationship between education and proficiency is less clear for non-native learners. In part, this is due to the relative impact of their education outside the United States. As shown in table 6.8, some 24 percent of non-native participants reported they had completed up to 8th grade and 39 percent had some secondary education (i.e., between nine years of school and the completion of high school) outside the United States. An additional 28 percent reported they had had education beyond the secondary level in their native countries, of which 13 percent reported they had completed a bachelor's degree, a level of educational attainment that is higher than that of native adult education participants in the similar category for the native population who reported that they completed a bachelor's degree and most likely reflects the fact that these non-native learners are attending adult education programs to improve their English language skills as well as their English literacy skills. Only about 4 percent of non-native learners reported not completing any schooling before coming to the United States. However, as shown in table 6.8, their average scores are, for the most part, higher than those of non-native learners who reported completing as much as secondary education outside the United States. Given the relatively high average scores of this group, which represents 4 percent of the non-native learners, it is likely these individuals received at least some education after coming to the United States. Thus the relationship between educational attainment and skills for the adult learner population goes beyond levels of schooling and is affected by issues related to nativity and country of education.

RESULTS BY LANGUAGE AND NATIVITY

The U.S. population is becoming older and more diverse, and immigration has had a significant impact on both the general population and the workforce. During the 1980s, immigration accounted for about 21 percent of our nation's population growth, and that contribution rose to 31 percent during the 1990s.

Table 6.7
Percent and Average Score of Adult Education Participants by Years of Schooling Completed in the United States

	Educational attainment in the United States					
	No schooling in the United States	Up to 8th grade	9th to 11th grade	12th grade to completion of high school	GED equivalent	Some education after high school
Percent	33.5 (0.9)	8.8 (0.8)	41.3 (1.8)	8.2 (1.4)	3.1 (0.5)	4.1 (0.8)
Mean score						
Prose	177 (2.8)	225 (5.1)	242 (1.6)	247 (7.5)	257 (6.3)	257 (10.6)
Document	194 (2.3)	230 (5.0)	247 (1.7)	252 (7.6)	257 (5.7)	260 (9.8)
Numeracy	184 (2.5)	203 (4.0)	211 (2.0)	219 (9.0)	246 (7.1)	240 (10.5)

Table 6.8
Percent and Average Scores of Non-native Adult Education Participants by Years of Schooling Completed Prior to Coming to the United States

	Educational attainment prior to coming to the United States					
	No schooling prior to coming to the United States	Up to 8th grade	9th to 11th grade	12th grade to completion of high school	GED equivalent	Some education after high school
Percent	4.3 (0.8)	23.8 (1.9)	16.6 (1.3)	22.2 (1.6)	N/A	28.4 (1.4)
Mean score						
Prose	204 (10.8)	155 (4.5)	185 (5.3)	180 (3.1)	N/A	206 (3.6)
Document	209 (8.8)	177 (3.7)	196 (3.7)	195 (2.9)	N/A	218 (3.2)
Numeracy	182 (9.6)	164 (4.6)	184 (4.2)	183 (3.5)	N/A	208 (3.8)

The U.S. Census Bureau projects that between 2000 and 2015 immigration will account for some 50 percent of our population's growth and significantly more of the growth in our labor force. Fueled by both immigration and higher birth rates, the Hispanic share of the population is expected to rise from 14 percent in 2005 to just over 20 percent by 2030. More importantly, according to data from the American Community Survey, in 2004, some 57 percent of the Hispanic population between 16 and 64 in the United States was foreign born and more than half of this immigrant population lacked a high school diploma (Kirsch, Braun, Yamamoto, & Sum, 2007).

Given the demographic patterns we are seeing in the general population, it is not too surprising that close to half of all participants in adult education programs reported that English was not their native language. As shown in table 6.9, 29 percent of adult education participants reported they learned Spanish as their mother tongue, 7 percent learned an Asian language, 2 percent learned a European language, and 6 percent learned some other language.

As would be expected, English, as the testing language for the AEPS, played a role in overall performance. In all domains, learners with a mother tongue of English performed better than learners reporting other languages as their mother tongue. The differences in performance between those whose mother tongue was English and those whose mother tongue was Spanish averaged 26 points in numeracy, 47 points for document literacy, and 54 points for prose literacy (see Table 6.9). The impact of mother tongue was even more evident when the prose performance of those whose mother tongue was English was compared with those whose mother tongue was a language other than Spanish. Then, the average performance differences in favor of English speakers were only 21 points in numeracy and 51 points in document literacy but 70 points on the prose literacy scale, no doubt reflecting the distinct linguistic differences between English and these other languages.

Table 6.9
Mother Tongue and Skills on the Prose Literacy, Document Literacy, and Numeracy Scales

Mother tongue	Percentage		Performance					
			Prose literacy		Document literacy		Numeracy	
	%	<i>SE</i>	Mean	<i>SE</i>	Mean	<i>SE</i>	Mean	<i>SE</i>
English	55.5	(0.8)	246	(2.6)	250	(2.8)	216	(3.3)
Spanish	29.3	(0.5)	192	(2.9)	203	(2.3)	190	(2.4)
European ¹	1.8	(0.4)	198	(7.4)	212	(5.6)	193	(7.5)
Asian ²	6.9	(0.9)	176	(8.3)	199	(7.3)	195	(7.6)
Others	6.4	(0.7)	167	(5.5)	184	(4.7)	167	(4.7)

¹French, German, Greek, Italian, Polish, and Portuguese

²Chinese, Japanese, Korean, Tagalog, and Vietnamese

Immigrants were highly represented in the population of adult learners: 43 percent reported that they were born outside the United States. The data in table 6.10 show that proficiency, particularly on the prose and document scales, was related to nativity. Among native learners, there is a 9 point difference between mean performance on both the prose and document scales for those whose mother tongue was English versus those who spoke Spanish. Comparison of those same two language groups among non-native learners reveals much larger differences—39 points on the prose scale and 28 on the document scale. Comparison of learners with the same language backgrounds demonstrates that nativity has a major impact on performance. Native learners whose mother tongue was English scored, on average, 21 and 23 points higher than non-native learners on the prose and document scales, respectively. Native learners whose mother tongue was Spanish scored 51 and 42 points higher than non-native learners.

Nativity also showed an impact on performance differences among ethnic groups. One group of particular interest is Hispanics, as some 35 percent of participants in adult education programs are Hispanic. Data collected regarding nativity showed that 63 percent of the Hispanic participants in adult education, compared to 36 percent of the non-Hispanic population, reported that they were non-native. The data showed that there was a 30-point difference between the performance of Hispanic and non-Hispanic adult learners on

Table 6.10
Mother Tongue and Skills, by Birth Place

Mother tongue	Percentage		Performance					
			Prose literacy		Document literacy		Numeracy	
	%	SE	Mean	SE	Mean	SE	Mean	SE
Native learners								
English	94.7	(0.9)	247	(2.6)	251	(2.8)	217	(3.3)
Spanish	4.5	(0.7)	238	(7.3)	242	(8.0)	211	(7.6)
European ¹	0.3	(0.2)	c	c	c	c	c	c
Asian ²	0.1	(0.1)	c	c	c	c	c	c
Others	0.2	(0.1)	c	c	c	c	c	c
Non-native learners								
English	3.0	(0.8)	226	(14.5)	228	(12.8)	197	(15.2)
Spanish	62.6	(0.9)	187	(2.9)	200	(2.3)	188	(2.5)
European ¹	3.8	(1.0)	198	(7.6)	211	(6.4)	192	(8.2)
Asian ²	15.8	(2.1)	176	(8.2)	199	(7.3)	195	(7.6)
Others	14.7	(1.7)	166	(5.3)	183	(4.6)	166	(4.5)

¹French, German, Greek, Italian, Polish, and Portuguese

²Chinese, Japanese, Korean, Tagalog, and Vietnamese

the prose scale (see table 6.11). However, this difference disappears when we look at place of birth within these two groups. For example, average performance on the prose scale was similar for native Hispanics and native non-Hispanics (246 compared to 247 points). Similar performance levels were also found between non-native Hispanics and non-native non-Hispanics (186 as opposed to 180 points) in prose literacy.

This same pattern held for the document and numeracy scales as can be seen in figure 6.1, which illustrates that, in general, the performance pattern is more similar in regard to nativity than ethnicity. The lines showing the performance of Hispanic natives and non-Hispanic natives are essentially identical. Those for Hispanic non-natives and non-Hispanic non-natives are identical for document literacy and numeracy. The variation in mean scores on prose literacy for Hispanic and non-Hispanic non-natives is most likely due to the fact that the non-Hispanic non-native group includes speakers of languages that are markedly different from English, which has a significant negative impact on their English-language prose proficiency.

Of course, nativity, language, and ethnicity do not operate in isolation but instead interact, influencing proficiency in prose and document literacy in particular. The varying backgrounds, languages, and life experiences of individuals within those groups naturally affect the skills and knowledge they bring to the types of literacy and numeracy tasks represented in the Learner Survey.

IMPACT OF TESTING LANGUAGE

One assumption that might be made non-native learners are tested is that assessing them in a language other than their native tongue would put them at a significant disadvantage and not allow them to fully demonstrate their literacy skills. The AEPS addressed this issue by randomly assigning a group of Hispanic learners to either an English or Spanish version of the prose and document literacy items from the Learner Survey.

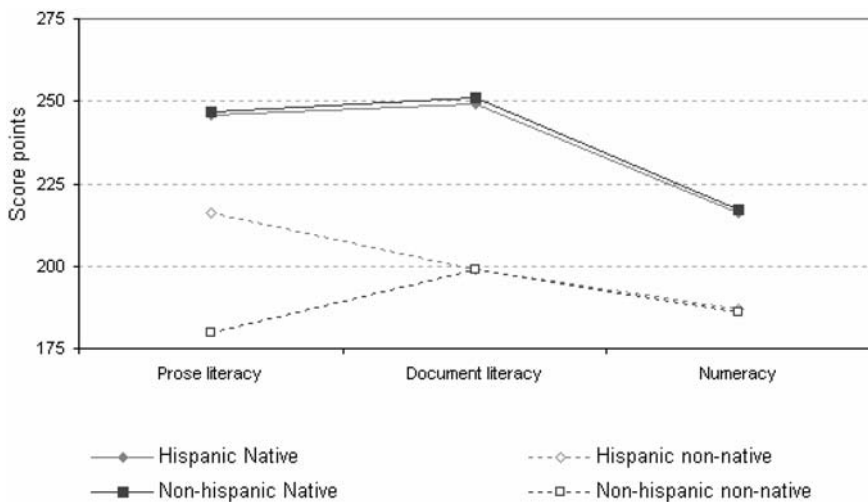
As expected, results showed that a representative sample of Hispanic learners demonstrated significantly higher average literacy skills in Spanish than a random equivalent sample of Hispanic learners who took the test in English. On the prose scale, those tested in Spanish had mean scores that were 29 points higher than those tested in English (see table 6.12). On the document scale, those tested in Spanish had scores that were 12 points higher.

These data also demonstrate that allowing for language differences did not eradicate differences in literacy performance. The largest percentage of Hispanic learners, whether they were tested in English or Spanish, performed at level 1. The average performance of the Spanish-tested Hispanic adult learners was, in fact, significantly lower than the average performance of adults in the general population (i.e., ALL), and not statistically different from the

Table 6.11
Ethnicity, Nativity, and Skills on the Prose Literacy, Document Literacy, and Numeracy Scales

	Ethnicity					
	Hispanic			Non-Hispanic		
	Overall	Native	Non-native	Overall	Native	Non-native
Overall						
Percentage	35.0 (0.1)	13.9 (0.8)	63.3 (0.9)	63.6 (0.6)	84.2 (1.2)	36.3 (0.9)
Prose literacy						
Mean scores	200 (2.6)	246 (3.6)	186 (3.0)	230 (2.5)	247 (2.6)	180 (4.3)
Percentage by skill level						
Level 1	64.1 (1.4)	32.5 (2.9)	73.3 (1.7)	40.1 (1.7)	28.9 (1.9)	74.3 (2.4)
Level 2	26.0 (1.2)	45.6 (2.5)	20.3 (1.2)	40.8 (1.4)	48.3 (1.7)	17.7 (1.7)
Level 3	8.9 (1.1)	18.8 (3.0)	6.0 (1.1)	17.5 (1.9)	20.9 (2.4)	7.1 (1.30)
Levels 4/5	1.0 (0.3)	3.1 (1.3)	0.4 (0.1)	1.6 (0.4)	1.9 (0.6)	0.9 (0.3)
Document literacy						
Mean scores	210 (2.1)	249 (4.0)	199 (2.3)	238 (2.6)	251 (2.9)	199 (3.7)
Percentage by skill level						
Level 1	60.8 (1.7)	26.2 (3.8)	70.9 (2.0)	35.0 (1.9)	24.8 (2.2)	66.5 (2.1)
Level 2	29.3 (1.5)	50.0 (3.2)	23.2 (1.4)	42.0 (1.4)	48.2 (1.8)	23.1 (1.4)
Level 3	9.4 (1.0)	21.7 (3.4)	5.9 (1.1)	20.8 (1.8)	24.5 (2.2)	9.5 (1.5)
Levels 4/5	0.5 (0.2)	2.1 (1.0)	0.0 (0.0)	2.1 (0.6)	2.5 (0.9)	0.9 (0.2)
Numeracy						
Mean scores	194 (2.2)	216 (3.5)	187 (2.5)	209 (2.8)	217 (3.5)	186 (4.0)
Percentage by skill levels						
Level 1	73.1 (2.2)	60.5 (3.5)	76.8 (1.8)	62.5 (2.4)	58.7 (3.1)	74.4 (2.2)
Level 2	23.2 (1.4)	34.0 (3.3)	20.0 (1.4)	26.4 (1.1)	29.9 (1.4)	15.9 (1.2)
Level 3	3.4 (0.6)	4.5 (1.4)	3.1 (0.6)	10.1 (1.7)	10.6 (2.2)	8.5 (1.4)
Levels 4/5	0.3 (0.2)	1.0 (0.6)	0.1 (0.1)	0.9 (0.2)	0.9 (0.3)	1.2 (0.2)

Figure 6.1
Mean Prose Literacy, Document Literacy, and Numeracy Scores by Ethnicity and Nativity



average performance of participants in adult education programs (i.e., AEPS). The average performance of the English-tested Hispanic adult learners on the prose literacy scale was also significantly lower than the average performance of the other groups of adults and adult learners.

These results suggest that while the testing language played a role in the average performance of Hispanic learners, they have not acquired basic literacy skills, either in English or in their native language. This is not surprising, given that they are participating in adult education programs. However, it is important to keep in mind that, on average, these adults have both a language and a literacy challenge.

CURRENT AND FUTURE CHALLENGES

As this chapter shows, participants in federally funded adult education programs have a range of challenges to meet in order to develop the literacy and numeracy skills needed in the twenty-first century. The AEPS data show that, across all three domains measured, the largest proportion of adult learners performed at level 1. While one would anticipate that those participating in adult literacy programs would have lower-level skills than adults in the general population, the finding that their demonstrated skills are concentrated at the most restricted literacy and numeracy level has implications for the intensity and duration of the educational interventions required for them to develop the skills needed to participate successfully in today's society.

Table 6.12
Skills in Prose Literacy and Document Literacy among Spanish-Speaking Learners Tested in English and Spanish

		Distribution by proficiency levels											
		Mean		Level 1		Level 2		Level 3		Level 4		Level 5	
Hispanic populations	Score	SE	SD	%	SE	%	SE	%	SE	%	SE	%	SE
Prose literacy scale													
English tested	200	(2.6)	62.2	64.1	(1.4)	26.0	(1.2)	8.9	(1.1)	0.7	(0.2)	0.3	(0.2)
Spanish tested	229	(8.9)	62.4	43.1	(3.7)	34.1	(2.3)	19.7	(2.1)	2.7	(0.5)	0.4	(0.4)
Document literacy scale													
English tested	210	(2.0)	50.5	60.9	(1.7)	29.2	(1.5)	9.4	(1.0)	0.5	(0.2)	0.0	(0.0)
Spanish tested	222	(6.1)	48.6	50.2	(3.2)	37.6	(2.0)	11.6	(2.1)	0.5	(0.2)	0.0	(0.0)

Skill levels, however, are not the only challenge that adult learners face. Changes in the workplace, in large measure driven by globalization and technological innovations, have increased the demand for workers with higher-level skills and more years of schooling. In fact, some two-thirds of the job growth between 1984 and 2000 occurred in professional, management, technical, and high-level sales occupations. Projections by the Bureau of Labor Statistics suggest that these same occupations will generate about 46 percent of all job growth between 2004 and 2014 (Kirsch et al., 2007). And, the ALL data showed that the workers in these job categories were much more likely to have access to employer-sponsored training programs, which, in a kind of rich-get-richer scenario, allows them to keep abreast of changing technologies and continue to improve their skills. One consequence of this shift in the composition of jobs has been the economic return to education and skills, resulting in the widening of the average income gaps between those with 16 years or more of schooling and those with a high school education or less. The challenge for the future will not be finding a job; it will more likely be finding a well-paying job with employer-supervised training, or one that offers opportunities for further training (Kirsch et al., 2007). Without the skills to compete for such jobs, those with restricted literacy and numeracy skills are likely to continue to fall behind.

The AEPS findings highlight the challenges faced by adults in ESL programs. Comparisons between the English and Spanish literacy of native Hispanics provide evidence that many ESL learners have the same literacy needs as the general adult education population. Therefore their challenge is not solely to acquire English language skills and map those on to some core set of literacy skills they possess in their native language. Rather, they need to acquire both English language and English literacy skills.

The implications of these findings are particularly important given that the number of adults who will need to develop this joint set of literacy and English language skills is growing at unprecedented rates. Over the period 2000–2015, the U.S. Census Bureau projects that net international immigration will continue to increase in both absolute terms and as a percent of the nation's overall population growth. In fact, immigration is projected to account for more than half of the nation's population growth during that period (Kirsch et al., 2007).

If we combine the existing skills distributions found in the general household population with the expected shifts in our demographics, it appears that the pool of human capital in the United States, as measured by these literacy domains, will decrease with a concomitant increase in inequality. For example, if we compare the percentage of adults at level 1 on the prose scale, as reported by the NALS, with the percentage that is projected by Kirsch, et al., for the year 2030, the percentage of 16- to 65-year-olds in the general population with the most limited set of English literacy skills is expected to grow from 17 to

27 percent (2007). This means that the increase in the number of adults in the United States at level 1 is expected to grow by more than the total number of adults currently participating in federally sponsored adult education programs.

Given such challenges, how can the adult education system best serve the needs of both current and future populations of adult learners? Are learners spending enough time in adult education programs to bring about the needed improvements in their literacy and numeracy skills? Are the instructional services they receive organized and delivered in a way that maximizes the learning opportunities of these learners? Is technology being used effectively to teach the information and communication technology skills that are becoming increasingly integrated with all aspects of our lives? The data from the Adult Education Program Survey, in combination with the economic and social trends outlined in this chapter, should cause us to question whether we as a nation are providing the resources that adult learners need to meet current and future challenges.

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Part Three

ADULT LITERACY BEYOND THE CLASSROOM

Chapter Seven

FAMILY LITERACY AND COMMUNITY LITERACY

Victoria Purcell-Gates

Family literacy is born within communities of practice. Practice is defined not as the repetitive doing of a skill but refers to the things that one does in one's world. Practice is defined as the beliefs, values, styles, and roles that make sense in the world. If reading and writing are things that make sense and that people do in their world and as part of their lives, then literacy (more specifically, print literacy) practiced within families is family literacy. Thus, family literacy refers to all the ways that people read and write, including what they read and write and why they do so, within family groups.

A PEEK AT THE PAST

Why are educators interested in family literacy? Educators first became aware of the term “family literacy” with the publication of Denny Taylor’s 1985 book of the same name. In this book, Taylor presents the results of a study of five different families and the ways that the reading and writing of print were woven throughout their daily lives. Taylor observed the families, visiting them in their homes, accompanying them on daily errands, and so on, documenting all instances of the use of print in their home environments. The focus of the study was actually the children in the homes, and Taylor’s underlying assumption about literacy in the home is captured in the title of the book: *Family Literacy: Children Learning to Read and Write*. Taylor was, in essence, documenting what it was that children were learning about reading and writing through their experiences using print in their home and

out-of-school lives, as well as through observing and participating in their parents' literacy activities.

Taylor's book helped to coin the term "family literacy," but she was not the only one who was interested in the roots of literacy development in the home, especially during the preschool years. During this time, a new field of literacy research on what is usually referred to as emergent literacy was growing. Today, the term "early literacy" is used as well for this developmental period. Emergent literacy researchers were interested in how young children begin to develop the awareness of, concepts for, and knowledge of literacy that are needed to learn to read and write. Although most agreed that children become readers and writers within the context of formal school instruction, the goal of the emergent literacy researchers was to explore children's early experiences with print use in their homes and communities before beginning school and during the early years of schooling. This was a clear statement by literacy researchers that formal instruction was not the only avenue for literacy learning. Rather, the belief was that literacy learning depended on, or was influenced by, out-of-school experiences with print, and that the things that young children learned from these experiences provided the basis for making sense of beginning literacy instruction in school.

Between 1985 and 2000, a great deal of research fleshing out this notion of emergent literacy was completed. Researchers documented the role of environmental print on children's early print knowledge (Goodman, 1984), the ways in which knowledge of letter-sound correspondences began in self-directed invented writing and spelling (Read, 1971), parent-child storybook reading routines (Harkness & Miller, 1982), and what the children learned about written language structure and vocabulary from these activities (Purcell-Gates, 1988). The researchers studied the development of spelling/writing abilities (Clay, 1975), the emergence of text comprehension abilities (Snow & Ninio, 1986), and the beginnings of motivations to read and write as the result of growing up with people who read and write for many different reasons (Cochrane-Smith, 1984).

In the midst of all this research centered around the homes of young children, some professionals and legislators were taking note of a fairly obvious but simplistic set of statistics. They highlighted the documented relationships between children's success in school (i.e., scores on reading achievement tests, grades, and teacher reports) and the degree to which parents involved themselves with their children's learning through such activities as monitoring and helping with homework and involvement with their children's schools. This, in combination with the belief (not that well documented) that children whose parents read to them do better in school, particularly with learning to read, led them to propose policy that called for the development of family literacy programs in which parents could learn how to become more involved with their

children's education and support their children with their learning in school. Thus, the term "family literacy" was appropriated, but with an altered meaning. It was changed from literacy that happens in families to programs that teach parents how to support their children's school success and engage in activities like storybook reading.

It is undoubtedly clear that I view the area of family literacy from the original perspective: literacy that happens in the lives of people outside a formal learning situation (i.e., school). In this way, I think of family literacy, and of literacy in general, as cultural practice. I will devote the rest of this chapter to exploring this perspective. I will present evidence to support my conviction that understanding family literacy practices is crucial to understanding and helping to facilitate children's literacy learning in school. I will then provide suggestions for families and for teachers of ways that they can build on the literacy practices that occur in children's homes. Many of these suggestions have been found to be effective in raising children's reading and writing scores on tests of literacy achievement and in increasing literacy practice in homes in ways that have been shown to be significantly related to early literacy success in schools for young children. By the end of this chapter, it will be obvious to the reader why I consider the transformed definition of family literacy (i.e., family literacy seen as ways to support children's learning in school), while certainly laudable, to be a simplistic and incomplete understanding of the relationships between the literacy worlds of children and the literacy instruction they receive and rely upon in school.

FAMILY LITERACY IS CULTURAL PRACTICE

What's cultural about the practice of literacy? First, please note the word "practice" in the previous sentence. Family literacy is about the practice of literacy, not about types of literacy or levels of literacy. The practice of literacy is just that—reading and writing events. These reading and writing events are behaviors, or actions, and they always are shaped by situations, or contexts.

Let me introduce the example of a working mother whom I will call Marge. Marge has three children, ages three, four, and eight, and she packs a lot of actions, or behaviors, into her day. She begins her day by rising early, showering, waking the children, and helping them get ready for school and day care. She feeds them and herself breakfast, listens to the news and the weather on TV while eating, and delivers the kids to school and day care. She then drives to work, where she spends eight hours as a claims adjustor for an insurance company. At five o'clock, she packs some files into her briefcase; drives her car to the day-care center, where her children await her; drives home; fixes dinner; helps the children with their homework; helps them take baths and prepare for school the next day; reads each child a story; and then settles down with

the files she brought home from work. She logs on to her computer, reads her e-mail and responds to friends and family members, and pays several household bills. Exhausted, she goes to bed at 11 o'clock after glancing at the newspaper and going through her mail.

Throughout this action-packed day, Marge read and wrote many different types of texts. These literacy events were always shaped by Marge's life as a mother who works as a claims adjustor and holds beliefs and values that shape her parenting, her choice of work and choice to work, her daily routines, her interests, and so on. On a broader scale, Marge's life is shaped by the North American culture and lifestyle in which it is situated. She has access to such things as a car, a computer, day-care options, libraries, televisions, and so on. Within society and her personal lifestyle, she read such texts as notes for teachers, day-care schedules, print about the weather on TV, road signs, claims forms, directions on frozen food containers, children's homework assignments and texts, electronic bank account statements, directions on shampoo bottles, and newspapers. She wrote such texts as notes to teachers, memos to herself, reports for work, checks to pay for child care, and letters to her family. Thus, the texts that Marge read and wrote and her purposes for doing so were embedded in social practices that were culturally shaped.

Doesn't everybody read and write these everyday kinds of texts? No. In some homes, moms chat on the phone with friends and family, never thinking to get the news from a newspaper. Mom may work not as a claims adjustor but as a nurse. The texts that are work related for this mom do not include claims forms, but perhaps hospital intake forms, doctors' instructions for patients, and drug dosage instructions. Before bedtime, Mom and Dad settle the children into bed and let them watch TV with the lights out for a half hour before it's time to sleep. This is a practice that carries over from their own lives when they were children.

In Central America, depending on the country and its political and economic realities, Moms may be seen reading community news from handwritten public placards, writing notes to families and sending them by personal couriers, or joining community members on the streets to watch soccer games and related scores and advertisements on giant TV screens mounted on the backs of flatbed trucks. There are infinite patterns of living in homes and communities around the world and within these different patterns there are the literacy practices that are shaped by them—literacy practices that mediate people's cultural and social patterns. In this way, literacy in families (as well as literacy writ large) is cultural practice.

Those of us who study literacy as situated within cultural and social contexts operate within a theoretical frame for literacy that reflects some or all of the following assumptions and beliefs:

- Literacy is best understood as a set of social practices; these can be inferred from events that are mediated by written texts.
- There are different literacies associated with different domains of life.
- Literacy practices are patterned by social institutions and power relationships, and some literacies become more dominant, visible, and influential than others.
- Literacy practices are purposeful and embedded in broader social goals and cultural practices.
- Literacy is historically situated.
- Literacy practices change, and new ones are frequently acquired through processes of informal learning and sense making (Barton & Hamilton, 1998, p. 7; Street, 1984).

It is important to note that within this framework, culture is seen as multiple and fluid. Culture refers to contexts for human activity that are shaped by social structures, languages, conventions, history, and goals. It even reflects considerations of geographical location, as in the statement “The culture of New England is different from that of Arizona.” In fact, because I think about this in the plural, culture in relation to literacy practice is always cultures, and cultures are constructed as multiple in that people usually participate in multiple cultural contexts. These contexts are fluid and shifting over time and life circumstances, overlapping, blending, and separating. These contexts can be thought of as nested in the sense, for example, that an immigrant from Guatemala might be a woman who is highly educated and participates within the legal system of the new country as a judge. Thus, she reflects the nested cultural realities of geographical location (Central America, Guatemala), legal status (immigrant), gender (women), education (graduate degree), and profession (judge). All these contexts, or cultures, transact to shape her life and her literacy practices. She moves across them fluidly as one or the other takes precedence for her at given moments in time.

THE PROBLEM WITH PROGRAMS FOR FAMILY LITERACY

Family literacy is born within communities of practice. In working within this framework for literacy, it is clear how this statement can be made. Thus, when one is thinking of the different types of family literacies that abound within different communities of literacy practice, it is crucial to keep the social and cultural communities of practice in the framework. Family literacy should not be thought of as a set of activities that can be taught or that can be transferred from one cultural community into another. Transferring a set of literacy activities that are shaped by and embedded within one sociocultural community to another is, in effect, trying to transfer one cultural practice into another culture. That simply doesn't work because cultural beliefs and behavior patterns shape cultural practices.

Cultural patterns and cultural practices, including literacy practices, constitute integrated organisms. Just as the human body will not accept a foreign transplant without massive doses of anti-rejection drugs, cultural communities of literacy practice do not accept foreign literacy practices. That is, they won't accept new other-culture literacy practices without changing those practices in significant ways. They must be changed, or shaped, to fit into the cultural organism that is the receiver community. I will elaborate on this point toward the end of this chapter with the example of the cultural practice of parent-child storybook reading.

The Greenhouse for Literacy Development

The ecological environment of literacy practice provides the conditions for literacy development of the children who grow within it. In this way, the literacy practices of families within communities can be thought of as constituting individual greenhouses for literacy development. What constitutes this environment?

To explore this, I will look at how children learn to speak and interact orally with others. Educators know that oral language development takes place within a context of oral language use. That is, from the moment of birth (and some claim this process starts before birth!), children find themselves in the midst of linguistic interaction with others. This interaction consists of gestures, routines, actions, and talk. Sometimes, the talk is directed to a baby, and other times not. From birth, a baby enters into this world of talk, participating as a language user. Over the first five years of life, within this environment of oral language practice, children acquire the ability to interact orally with people in their world. They learn the syntax of the language around them. They learn the words and meanings that are used in their language environments. They learn the phonological (sounds) systems of people who speak in their worlds. They also learn the pragmatics of the language that they participate in, such as when to say "thank you" and to whom, when to be quiet and when to speak, what to talk about at the dinner table, and what to talk about with their best friends. By age five they are competent language users of the language with which they are surrounded and in which they interact and communicate with loved ones in their homes and members of their social communities.

The same process occurs with written language development. Children begin to learn about reading and writing from the first instance of someone using print—reading and writing—in their worlds. While for virtually all children, the process of learning to talk begins at birth, this is not so for learning to read and write. There are far fewer literate people in the world than there are people who speak. If a child is born into a family that cannot or does not read and

write, then there is nothing in that environment that the child can use to learn about reading and writing.

Before the research on emergent literacy began, it was believed that children learned their oral language at home before beginning school and began to learn to read and write in school at the average age of six and a half. Educators now know that many children begin to learn to read and write before they enter formal schooling. What do these children learn about literacy in these early years?

To begin with, I want to introduce the greenhouse, or ecology, metaphor for written language development and think of an environment of literacy practice. Literacy practice can be thought of in several ways. In my research, I tend to approach literacy practice from the perspective of texts. In other words, I look at and document all the different texts that people read and write in the course of their daily lives. Here is a partial list of texts that I documented for one study that I did in a community of migrant farm workers in the United States: accident reports, Bible, bills, information books on pregnancy, calendar, catechism texts, checkbook, checks, church announcements, comic books, commercial driver's license manual, cookbooks, documents, flyers, food labels, forms, household products, informational texts on child development, informational texts on diet, personal letters, children's magazines, other magazines, maps, medical records, medicine directions, messages on refrigerator magnets, newspapers, notes from school, notes to family, novellas, savings account books, schedules, shopping lists, signs as labels (e.g., on bathrooms), regulatory signs (e.g., "No running in the hall"), songbooks, storybooks, tabloids, video labels, work logs, community announcements, and medical forms. Another cultural community would have a different array of texts that people read and write, for reasons that I have discussed above.

While texts are a key aspect of a literacy environment, they do not alone constitute the environmental greenhouse needed by young children to begin to learn about reading and writing. For children to learn about reading and writing within this literacy practice greenhouse, texts need to be read or written by people who are close to the child—family members, neighbors, members of activity groups like church or preschool sports teams, and others. These two aspects of literacy practice—texts and people reading and writing them for different culturally related purposes—constitute the center of an environment of textual practice that is essential for the formation of crucial fundamental concepts and skills needed to learn to read and write.

What Do Early Literacy Learners Learn from Cultural Practices of Literacy?

What do preschool or other young children learn about literacy within different textual practice environments in family homes and communities? What

happens with children who are not taught to read individual words by their parents or who are not among the relatively few children who are seemingly self-taught (Durkin, 1966)? Few children, irrespective of social class, income, and opportunity, learn to read and write to the point that they can independently read or write printed texts that they have never before seen (a commonly accepted benchmark for having learned to read and/or write). So, what do most children learn about reading and writing within their own individual literacy practice greenhouses?

Values, Beliefs, Texts, and Purposes for Reading and Writing

One can think about the answer to this question by visualizing a set of nested concentric circles, each representing a domain of literacy knowledge or understanding. The outside domain of the knowledge circle contains the values, beliefs, and practices that children experience and learn in their homes and communities. Within this context, children learn what literacy is, how it is used, who reads or writes which texts, and how essential or nonessential literacy is to life. In other words, children's definitions of literacy itself is a reflection of the definitions of literacy held by their parents, their relatives, their siblings, and other people with whom they interact. This notion of literacy is complete and makes sense to each child. While different definitions or conceptions of literacy exist due to differing sociocultural contexts, none of these are deficient or underdeveloped. They are simply different.

Natures and Forms of Texts Present in Their Lives

Constrained by those conceptions of literacy of their communities, children learn the natures of the written texts in use in their communities and the features of those texts (e.g., grocery lists, personal letters, written stories). This domain of knowledge, or learning, constitutes the middle circle.

What does this mean to learn the natures of different texts and their features? While I do not have space to explore this fully, I will address this through what is known in some academic circles as *genre theory*. Essentially, this theory asserts that language in use is made up of different forms. In written language, some examples of different forms, or text types, are grocery lists, personal letters, news stories, and fiction stories. We have documented hundreds of different textural forms, or genres, in the Cultural Practices of Literacy Study at the University of British Columbia. Genre theory holds that language forms such as these are sociocultural constructions (Reid, 1987). That is, these forms are constructed by social groups to meet their communicative needs. Different written language forms are not prescribed by rules, teachers, or by "language police." Rather, people construct forms of written language and use them and/or change them as needed. The social contexts within which written language

forms are used shape both the needs and purposes for the forms, and the forms that different texts take are guided by their communicative functions.

Some simple examples will help here. Take the grocery list. The sociocultural context of this textual form includes the following:

- An economic system that calls for commerce
- An economic context that includes stores that sell food (after all, grocery lists do not exist in the little rural communities in El Salvador, where the daily staples are only beans, corn, coffee, and sometimes rice, and these are usually homegrown)
- An economic context that provides enough money for people to buy more than a few items at a time

When these factors are present, it becomes necessary at times to find a way to remember all the items that an individual needs to buy during the next trip to the store. Because items need to be remembered, one feature of grocery lists is the presence of individual items (rather than a paragraph or two in which the writer writes about the need to buy these items). Since the language that people use to write a grocery list is composed of separate items, it is usually constructed as a list of items to make it easier to read and use during shopping. All this taken together represents a socially constructed literacy practice—values, beliefs, historical and economic contexts, text, and function. The form of the text is shaped by its function for the people who use it.

Other examples can be similarly deconstructed to reveal the relationships between textual functions and textual forms: letters to Grandma function to maintain family ties and to communicate and solicit personal information. The body of the letter contains information about recent events, declarations of love, questions about the well-being of Grandma, and so on. The letter is written in connected discourse in a familiar manner (compared to the discourse one finds in formal business letters), much like a personal conversation. Letters to Grandma usually open with a salutation and close with a sign-off. Different sociocultural groups form the salutations and sign-offs differently, reflecting cultural norms—for example, compare a typical North American salutation and sign-off to this Latin American salutation *Hola Victoria, le deseo lo mejor para este año* (I wish you the best for this year) and sign-off *Que el Señor la llene de muchas bendiciones, signature* (May God give you many blessings). Children learn the different textual forms and their features for the texts that are used in their homes and communities.

Another aspect of many types of written language is its decontextualized nature. This means that texts such as stories, notes, and personal and formal letters must be written, or shaped, to convey meaning without such oral language features as gesture, intonation, and interaction. This is true for most written texts, except perhaps for signs, comic books, advertisements, and subtitles in movies or on the television. This need for clarity within the text itself

results in longer and more integrated sentences and more attention to making clear who is being referred to and what is being talked about (without relying on a reader who can say something like, “What do you mean?” or “Who stole the dog?”). Again, children learn about this central aspect of written texts by experiencing the reading and writing of them in their homes and communities. Several significant emergent literacy studies focusing on different textual genres such as storybooks (Purcell-Gates, 1988), personal letters, and grocery lists (Harste, Woodward, & Burke, 1984) have documented this.

Nature of Print-Speech Match

As children are read to and helped to read and write the texts that are present in their lives, they begin to learn print concepts and the nature of the print-speech mapping that is used for these texts. This knowledge/skill dimension constitutes the innermost circle of the model for emergent literacy learning. Depending on the orthography of the language, they learn how print captures language, or speech, and the rules for doing so. For an alphabetic language like English, Spanish, French, or German, this knowledge includes the emerging insight that individual letters map onto individual phonemes (sounds) and that there is a system to this. They begin to learn that letters have invariant shapes (a *W* is no longer a *W* if it is turned upside down). They learn that numbers are different from letters and that number words are words but numbers are numbers. They learn that people read the words, not the pictures. They learn that reading takes place from the top left of the page to the right and then sweeping back to begin again at the left side of the line underneath, and so on. Of course, children whose family literacy practices involve other orthographies (such as Hebrew, Arabic, Mandarin, and so on) learn the print-speech mapping for those. For example, young children in Israel have been shown to “pretend write” a story beginning at what in America is the back page and from right to left.

Thus, when they begin formal instruction, children, or beginning learners of any age, take to school knowledge of the texts that exist in their home worlds; the values and beliefs about literacy practice that involve these texts; the understanding of how different texts from their worlds function; linguistic knowledge of the natures, forms, and features of these texts; and the way that these texts are formed through writing and reading of that writing. The textual practice worlds of children constitute family literacy, and family literacy shapes the understandings about literacy practice with which children begin formal literacy instruction in school. Different literacy worlds mean different types of knowledge brought to the school door. I will illustrate this with brief descriptions of some of the children with whom I have worked and studied:

- Five-year-old Megan knew that her mother got letters from her boyfriend and would read them aloud with her friends on the front porch of their house in South Boston. She knew the genre of letters—personal letters—how they sounded, and what kinds of words were in them. She also knew about texts like food container texts, store signs, and labels (Purcell-Gates, 1996).
- Seven-year-old Donny knew that his name could be written and read. He did not know anything else about print. No one could read or write in his family except to sign their names. He also knew that reading and writing were hard to learn and not worth the effort. His life was full without it, whatever *it* was. It had no value in his world (Purcell-Gates, 1995).
- The young children in the farm fields of southern Michigan travel between the United States and Mexico, and between Texas, Florida, and Michigan, with their parents, who are migrant farm workers. They know that print is on important documents that must be kept safe in a box and hidden in the room behind the blanket. Their ability to cross the border depends on these documents. These documents need to be shown to officials so that they can get into Head Start. They are needed in order to see the doctor. Perhaps most important, this type of print is needed in order to get food from the store. The children also know from the letters that go back and forth to families in Mexico, greeting cards, banners, and words on cakes for birthdays and weddings and other celebrations that print is sometimes part of family togetherness (Purcell-Gates et al., n.d.).
- Celia knew that print was a part of communicating with members of her family who had immigrated to the United States from El Salvador to avoid the death squads. She also knew that the Bible was written and read and knew much of the content. She knew that testimonials regarding the oppression and torture of her people were written to be read and shared. She knew that participation in the communal governance of her postwar community meant written agendas, minutes, and resolutions for the *asambleas*. Finally, since her mother was the proprietor of a small store in her community, she knew a few food labels as sight words (Purcell-Gates & Waterman, 2000).
- Five-year-old Laura knew that storybooks contain stories that can be read out loud and listened to. Each time a story is read, it sounds the same. It always has the same words in it and the same pictures. The words are storybook words. When asked to pretend to read from a book with pictures but no words, she can sound like a storybook. She can make up language that says: “There once was a brave knight and a beautiful lady. They went on a trip. A *dangerous* trip. They saw a little castle in the distance. A mean, mean, mean hunter was following them through the bushes at the entrance of the little castle” (Purcell-Gates, 1988, p. 158).

Relationships between Early Literacy Knowledge and School Success

What do the data show of the relationship between early literacy knowledge acquired in family literacy contexts and success in school? Two of my studies used a battery of early/emergent literacy assessments. The tasks assess an array of concepts and knowledges that are essential to learning to read and

write, and that research has indicated are learned or emerge over time as part of the emergent literacy period. These tasks include (1) intentionality or the understanding that print says something and is functional in people's lives; (2) written register, or knowledge of the syntax (grammar), vocabulary, and decontextualized nature of written language; (3) concepts of writing or the understanding that writing is the formation of letters and words that capture language; (4) concepts of print or Clay's (1979) array of print convention understandings, like "What is a letter? What is a word?" (5) directionality (read left to right); and (6) the alphabetic principle, or the understanding that print maps onto speech at the phoneme level. I used a series of play-like tasks to assess the degree to which children hold these concepts.

One study explored the ways that children make sense out of their beginning literacy instruction and if those different ways of making sense are related to how successful they are in learning to read and write (Purcell-Gates & Dahl, 1991). We nested this study purely within a low-income population because we wished to deconstruct the relationship of socioeconomic status to low reading achievement.

The sample for this study consisted of one classroom from each of three inner-city schools in the midwestern region of the United States. My colleagues and I selected 12 students from each classroom (6 boys and 6 girls) for assessment. We also chose two boys and two girls from these 12 for close observation over two years. We measured the children's entering literacy knowledge at the beginning of kindergarten, followed the four focal children and the classroom instruction for kindergarten and first grade, and used norm-referenced assessments at the end of kindergarten and first grade, as well as teacher assessments, to document their levels of success.

After following the same group of children for two years of schooling and administering pre- and post-tests of achievement, we found that the score for intentionality—the knowledge that print "says" something and that it functions in different ways in people's lives—was the best predictor of the level of end-of-first-grade success in reading and writing. The other early literacy concepts were also related to success in learning to read, with the exception of knowledge of written register.

How Can Parents Enhance Early Literacy Knowledge?

What is it that happens in homes that allows children to acquire early literacy knowledge? We know that knowledge of written language grows in the greenhouse of literacy practice, but how does this happen? What do parents do to foster literacy? Which textual practices are helpful for which types of early literacy knowledge? To explore the answers to these questions, I collected data from the homes of low-socioeconomic children to relate to the results of

the study described above. This subsequent study, which I refer to as the 20-home study (Purcell-Gates, 1996), had 20 volunteer families in the sample, each with at least one child between ages four and six, and 24 children in the sample. The families were of varied ethnicities, so I matched research assistants to homes by ethnicity. The research assistants collected an aggregated week's worth of observations in the homes (from the time the focal children got up in the mornings to when they went to bed). They noted all reading and writing events and indications of reading and writing events (like a letter waiting to be mailed). At the end of the data collection, we gave each focal child the same array of early literacy assessments used in the prior study. We also documented any school curricula for literacy for each child. I then conducted a series of analyses.

The results added complexity and depth to the picture of emergent literacy learning in the homes. First, the children's grasp of what I now called the big picture (measured with the intentionality task, which best predicted end-of-first-grade success in the K-1 study) was significantly related to the frequency of literacy events and the frequency of mother-child interactions around print in the home. The following recommendations for parents to foster early literacy development emerged from these studies:

#1: Read and Write a Lot

The most effective way to prepare children for school success in literacy is to read and write a lot for your own purposes in the presence of your children. Read different types of texts, such as recipes for cooking, newspapers for the news, magazines for enjoyment, and information articles for health tips. Write different types of texts, such as notes to touch base with family members, letters to complain about a service, lists for shopping, and diaries for reflection. The more you read and write, regardless of what you read and write, the more your child will learn that print is meaningful and functional and that it is possible and desirable to be able to read and write it.

#2: Involve Your Children in Literacy Events

This suggestion is actually a part of the one above and, together with #1, is documented as being the most effective way to prepare children for school success with literacy. While you are reading and writing for many different real-life purposes, involve your children. When you stop the car at a stop sign, point out to them that the word on the sign says "Stop" and explain that the sign is why you stopped. When grocery shopping, point out the different food products and the brands and information on the boxes. Talk aloud about what you are reading or read the text aloud. For example, you might say something like, "I need to buy Cheerios. Where is it? Oh, here it is, see? It says Cheerios here [pointing to the word]. Let's see how much sugar is in a serving. Here it is; it says that one cup has 35 grams of carbohydrates [pointing to the print];

that's sugar. Okay, I guess that's okay" (or not, depending on your nutritional beliefs). Answer all the questions your children have about print of the "What does that say?" nature. Simply telling them what it says is usually preferable to making a reading lesson out of your answer.

The second major finding of the 20-home study was that children's knowledge of the forms and natures of written language (measured by the written register task of pretend reading, the concepts of writing task, and the concepts of print task) was greater in homes where parents and others read and wrote more complex texts—like children's books, newspapers, magazines, books, and impersonal letters. The degree to which parents read these more complex texts was not related to their levels of education. Some parents with postsecondary degrees did very little reading and what they did was of simple texts, such as on food labels, lottery tickets, and coupons. Others without high school degrees read more texts like newspapers, reports, and the Bible, in addition to less complex texts such as those above.

Written language in longer, more complex texts is syntactically more varied and integrated and includes more different types of vocabulary words. It is also more clearly decontextualized. Knowledge of these aspects of written language puts young children at a distinct advantage when they enter school. Vocabulary knowledge alone has been found to be highly related to school success. When children begin writing on their own, if they have a feel for the syntactic possibilities for written text and for how it must contain within it all of the meaning (i.e., decontextualized), they will be more fluent and effective than those children for whom written language is almost like a second language. The basic concepts of print, which are related to reading and writing more complex texts in the home, are critical to being able to take from beginning literacy instruction. Without a sense of what letters and words are, or the understanding that the beginning of a word is the first letter on the left of the word, and so on, children often become confused and stray down nonproductive paths as they try to learn to read and write in school.

#3: Add More Complex Texts to Your Literacy Practices

People can often think of more complex texts that are functional within their existing literacy practices. For example, if you are interested in sports, in addition to following the games on television, purchase a newspaper and read the stories and statistics in the sports section. If a question comes up at the dinner table about Aunt Edna's diabetes, and you wonder what kinds of foods she can and cannot eat, you can go the Internet and surf the health sites, reading aloud for the others or printing out the relevant information. If your child asks you why the dinosaurs became extinct, tell your child that you will go to the library and get some books or articles that discuss this. Then read these with your child as you both explore the answer.

The Case of Storybook Reading

As promised, I now return to the cultural practice of reading to children as a routine. The final major result of the 20-home study was that written register—children's knowledge of the syntax or grammar, vocabulary, and decontextualized nature of many written texts—was related to the frequency with which parents read to their children. The results of the K-1 study also revealed, however, that there was no relation between this knowledge and success at reading and writing at the end of 1st grade. The effect of this practice may not show up until about 4th grade (Chall & Snow, 1988), when children are past the learning-to-read stage.

Other research and research reviews reveal other noteworthy findings about school and home literacy. Some research has shown that children learn about the structure of written language in kindergarten and 1st grade if their teachers read a lot to them as part of the daily routine (Purcell-Gates, McIntyre, & Freppon, 1995). There is no evidence that importing storybook reading into homes that would normally not include it for the purpose of preparing their children for literacy success is effective. Further, there is much anecdotal evidence that parents who are told to read to their children by well-meaning educators actually do so. Clearly, more research is needed on the effect of exporting storybook reading to homes where it is a foreign practice, given the common and absolute belief that all parents need to read to their children if they are to succeed in school.

All the suggestions for parents provided above are meant to take advantage of existing literacy practice cultures in the home. The take-home message is that parents can help their children acquire important early literacy concepts by using existing practices and do not have to incorporate foreign routines of reading and writing. Family literacy is naturally occurring literacy in families, and it is within those literacy practice greenhouses that young children begin to grow and develop as readers and writers.

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Chapter Eight

WORKPLACE LITERACY

Larry Mikulecky

The most commonly accepted definition of “workplace literacy” comes from the National Literacy Act of 1991: “an individual’s ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job.” In the 1990s, this term was often used synonymously with such terms as “basic skills” and “employee basic skills” to avoid the negative connotations associated with the word “illiteracy” and in recognition of the fact that workplace reading and writing are often integrated with the use of oral language, computation, and computers, and knowledge of workplace procedures. This definition also recognizes that one is not either literate or illiterate.

Workplace literacy is concerned with having skills sufficient for the tasks at hand. Workplace literacy is also a broad label that has been used to describe several quite different sorts of education related to the workplace (e.g., special programs focusing upon specific workplace-related literacy skills, basic skills and high school diploma/GED preparation programs offered in workplace settings, off-site welfare-to-work programs, and school-to-work transition programs that teach general workplace literacy skills). The label also has been used to describe particular literacy strategies, functions, tasks, and materials used in workplaces.

Who attends and what one observes in workplace literacy programs have shifted to reflect changes in the literacy abilities and levels of workers and the literacy demands of jobs. These changes have been particularly dramatic in the area of job demands but have also been apparent in workers’ changing literacy abilities.

These factors are connected. As workers increase their literacy abilities, their use of literacy to complete their job tasks also tends to increase.

Changes in Literacy Abilities and Demands

In 1890, the International Ladies' Garment Workers Union established the Cloak Maker's Social Educational Club in New York to teach members of the Cloak Makers' Union how to read and write English and how to become citizens (Cook, 1977). The workplace literacy demands of the cloak makers were not particularly strong, but the massive influx of Eastern European immigrants in the late 1800s presented the country with millions of workers with little mastery of English and even less mastery of literacy. Literacy demands were low, but literacy skills were even lower. In addition, union organizers knew that their members needed to be able to read and properly mark election ballots in order to develop more control over their working conditions.

By the early twentieth century, testimony by the director of the Bureau of Mines before U.S. congressional committees had begun to cite the many miners who were ill equipped to read safety warnings as a partial rationale for funding adult literacy programs (Cook, 1977). In 1910, so-called moonlight schools were established in rural Kentucky. These schools used the local newspaper to teach literacy skills to coal miners and other adults on nights when it was possible to use moonlight to walk to the Rowan County schoolhouse. Reading lessons were extremely simple; for example, the first lesson used only eleven different words (Cook, 1977).

Concerns about Literacy in the Military

Demands on workers' literacy for military work increased as both civilian and military jobs changed to require more literacy skills. During World War I, thousands of recruits needed help in writing letters home and needed to depend on officers or other soldiers for important job-related information presented in print. Thomas Sticht, in *The Military Experience and Workplace Literacy* (1995), reports that during the Civil War over 90 percent of enlisted men were involved in combat-related activities that called for little or no literacy, while craftsmen and clerical or technical personnel made up less than 10 percent of the force. Whereas 90 percent of the troops had been used as combat troops in the 1860s, less than half the force was used as combat troops 50 years later during World War I. The other half completed job tasks that made increasing demands on their literacy skills and abilities.

The decline in the percentage of general combat troops and increase in white-collar and blue-collar military jobs continued into World War II, when there were about equal proportions of each type. During World War II, the

U.S. military took the lead in teaching job-related reading skills to adults by using *Private Pete* and *Sailor Sam*, special reading materials produced by the military. Thomas Sticht (1997) reports that the stories in the books told the tale of a new recruit leaving home, going to a recruiter, riding a train to camp, being assigned a barracks, and so forth. Topics and vocabulary taken from barracks life, semaphore use, firefighting, elementary navigation, and seamanship were used to teach navy recruits to read. The materials reinforced and extended rudimentary basic reading skills while allowing learners to develop new vocabulary and concepts about military life.

By the late 1980s and early 1990s, the literacy level of the U.S. population had increased considerably, and so had the literacy demands for most jobs. In the military, the percentage of purely combat troops had declined to about 15 percent, and even those troops were expected to have a relatively high degree of literacy. The U.S. Department of Labor had convened the Secretary's Commission on Achieving Necessary Skills to work with employers, unions, and researchers to develop an outline of workplace competencies (including literacy) necessary for the twenty-first century (U.S. Department of Labor, 1992). The competencies identified by the commission helped shape the curricula of many workplace literacy programs through the end of the twentieth century. The commission concluded that successful workplace performance integrated written and oral communication with the following workplace competencies:

1. Resources: allocating time, money, materials, space, and staff
2. Interpersonal skills: working on teams, teaching others, serving customers, leading, negotiating, and working well with people from diverse cultural backgrounds.
3. Information: acquiring and evaluating data, organizing and maintaining files, interpreting information, and using computers to process information
4. Systems: understanding social, organizational, and technological systems; monitoring and correcting performance; and designing or improving systems
5. Technology: selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies

It wasn't just for high-tech jobs that workers reported having to use literacy on a regular basis. In the mid-1990s the National Adult Literacy Survey reported results of a national survey of over 26,000 representative adults. Employed adults also reported their literacy use on the job. In all job categories, including that of laborer, the majority of workers reported literacy use on at least a weekly basis, and most reported needing literacy on the job much more often. Frequent literacy use ranged from 98 percent for managers to 56 percent for farming, forestry, and fishing workers (Mikulecky, 2001).

Few studies before the National Adult Literacy Survey had gathered detailed information on the type and frequency of workers writing on the job. The

National Adult Literacy Survey provided some detail on the extent to which Americans wrote frequently on the job. Surprisingly high percentages of workers reported that they frequently wrote on the job (at least once a week). More than half of workers (54%) reported frequently writing reports, while 45 percent reported frequently filling out forms, and 40 percent frequently writing memos. In only two occupations—farming and manual labor—did less than 30 percent of workers report frequently writing reports. Three-fourths of managers reported writing memos regularly, as one might expect, but so did 58 percent of clerical workers, 51 percent of salespeople, and 40 percent of transportation operatives.

The presence of workplace literacy demands permeates even low-level part-time jobs. Tannock (2001) describes literacy demands encountered by youths applying for part-time jobs, such as bagging groceries or working in fast-food restaurants. Many applicants now must fill out extensive job application forms and must take multiple-choice tests such as personality, customer service, and food handler tests before being employed. After employment, they must fill in daily and sometimes hourly forms on job duties and read and use service scripts to ask customers if they wish to purchase additional food or products. Tannock goes on to point out that successful youths must also be sophisticated enough to know how to read, manipulate, and negotiate all these literacy tasks to maintain personal integrity while keeping their jobs. In the twenty-first century, literacy demands are present at all levels of employment.

The need to use literacy related to computers and the Internet to do one's job expanded rapidly beginning in the late 1990s. The U.S. Department of Commerce reported that as of "September 2001, about 65 million of the 115 million adults who are employed and age 25 and over use a computer at work" (National Telecommunications and Information Administration, 2002, p. 57). In the 13 months between August 2000 and September 2001, the percentage of adults using the Internet at work increased from 26.1 percent to 41.7 percent. By 2003, the Department of Labor reported that 77 million Americans, or 55 percent of employees, were using computers as part of their jobs (Bureau of Labor Statistics, 2005).

An important part of many jobs included the ability to participate in continuing training, often using computers. In 2000, the U.S. military surveyed combat medics to determine their readiness to receive training and access job-related medical information on the Internet. Nearly 80 percent of combat medics indicated they already had the ability to use e-mail, word processing, and the Internet for communicating and accessing information (Stein, Mays, Abbott, & Wojcik, 2000). Since the vast majority of workers have expanded literacy abilities and experiences, more use of these abilities is often added to job demands. The 20 percent of combat medics without computer literacy abilities are likely to soon find e-mail, word processing, and Internet lit-

eracies are new workplace literacy demands. The same is true of individuals with below-average literacy abilities in other jobs in which the average literacy ability of workers is rising.

INFLUENCE OF IMMIGRATION, NEW CERTIFICATION PROGRAMS, AND RETRAINING

During the later twentieth century and early twenty-first century, the United States experienced an immigration surge reminiscent of the immigration surge of the late nineteenth and early twentieth centuries. Between 1980 and 2000, the number of people in the United States who spoke languages other than English at home more than doubled to one in five individuals; this figure is projected to double again by 2025 (U.S. Census Bureau, 2001). Close to one half of the students in adult literacy classes reported that they were also there to learn English as a new language. In the early twenty-first century, Department of Labor initiatives included funding for several million dollars in grants to special workplace language training programs focused on Spanish speakers and other language groups, as well as policy guidelines to emphasize ESL training as part of other broad departmental initiatives (U.S. Department of Labor, 2006). The Employment Training Administration through the High Growth Job Training Initiative funded several grantees in the biotechnology, health-care, hospitality, energy, retail, and advanced manufacturing industries to develop training curriculum and related products that could be used by workers who are learning English. In the hotel industry, project HERE was funded to deliver occupational English training to 2,000 new citizens and immigrant workers for entry-level hospitality positions through a partnership of employers, educators, and government. Occupational English proficiency training was offered on site to 450 incumbent workers at 10 major area hotels. Other projects focused on community organizations, health and safety training, and developing digital literacy materials (U.S. Department of Labor, 2006).

Other influences on workplace literacy in the twenty-first century were occupational certification programs and transitions to community college training programs. Moderate and higher-paying jobs in many occupation areas became associated with official certifications that required written tests of knowledge. For example, truck drivers who wished to haul particular loads or work for higher-paying companies were required to pass the commercial driver's license examination. Study materials and the written examination called for literacy well beyond basic levels. In the moving and storage industry, written examinations and certification programs were developed for becoming a certified moving consultant or a registered international mover. These and many other certifications provide individuals and companies with competitive edges. Workplace literacy programs are sometimes needed to

help individuals prepare for these examinations for certification, and these programs often operate in conjunction with training sponsored by industry.

To be competitive in the global economy, employers in manufacturing and service industries (or subcontractors to such employers) found it important to receive certification from the International Organization for Standardization (ISO) as part of the ISO 9000 certification process. This certification essentially involves documenting each stage of production or service in order to make sure all employees are able to follow the documentation, and using quality assurance processes that involve employees in data collection and record keeping, as well as a variety of other activities related to literacy and mathematics. To gain and maintain certification, audits are done to determine that what has been described and documented is actually occurring. This certification process has increased the literacy demands for many workers, as employers that are not ISO certified have tended to disappear or decrease in size, while ISO-certified employers have grown in size and number. For more detail, see Jo Anne Kleifgen's (2005) detailed documentation of the increased and new literacy demands brought about by the ISO standards for "a small company competing in a capitalist economy and feeling the pressure to adopt the official literacies of a high competitive market" (p. 467).

Workers displaced by technology or job outsourcing also often must acquire retraining and further education if they hope to maintain their standard of living. New occupations offering remuneration comparable to that paid in workers' previous jobs often require extended training at a technical or community college. Although displaced workers may have graduated from high school, the literacy skills of many are not sufficient for succeeding in vocational and community college classes. Many students must take workplace literacy programs before or as they receive community college training; many of these programs are offered by community colleges. These workplace literacy programs often involve learning new vocabulary, new technologies, study skills, and academic strategies that go far beyond the eleven words learned by adults in the first classes of the Kentucky moonlight schools of the early twentieth century.

Workplace Literacy Examples

Analysis of workplace literacy tasks usually reveals that tasks rarely lend themselves to isolated examples of just reading and writing. Tasks labeled as involving workplace literacy often involve a mixture of listening, speaking in a professional manner, taking notes, using a variety of reading and skimming strategies while reading from paper and computer screens, doing arithmetic to calculate needed information, and responding in both oral and written form. Take, for example, a typical customer service representative task. The customer service representative might start by answering a telephone inquiry from someone requesting late payment of a bill. While using a headset to speak to the

customer, the customer service representative asks for the customer's name and other relevant information, calls up the customer record on a computer screen, and checks the payment history. This requires rapid reading of print organized in blocks on screen. The customer service representative needs to decide how reliable the customer is and if any extension of time can be given. Written policy guidelines are accessed via a help screen. These guidelines include job aids with rules concerning the length of an extension and whether some percentage of the bill must be paid immediately. After calculating the effect of the rules (in this case using another function of the computer), the customer service representative tells the customer the result and probably initiates a discussion on the possibility of the customer paying as required. If the customer service representative is unable to answer the customer's questions during the brief time the customer is on the phone, a letter will need to be sent. A word-processing program with several dozen form letters will be called up on the screen. The customer service representative will be expected to select an appropriate form letter from menus, modify the address and body of the form letter, and print a letter and envelope to be mailed to the customer. These jobs in the rapidly growing service sector are not high-paying jobs, but they do call for skills that challenge the bottom half of high school graduates who compete for them.

Canadian researchers have produced the most detailed listing of workplace literacy skills for a wide range of jobs. Human Resources and Skills Development Canada, as part of its Essential Skills and Workplace Literacy Initiative (2006), produced nearly 200 worker task profiles based on more than 3,000 interviews. The profile for each occupation describes several dozen job tasks categorized by the initiative's nine essential skill areas (i.e., reading text, document use, numeracy, writing, oral communication, working with others, continuous learning, thinking skills, and computer use). Tasks are categorized by five levels of complexity ranging from 1 (basic tasks) to 5 (advanced tasks). The classification for typical writing tasks for bricklayers, for example, is level 2 because the job involves less complex writing tasks, such as the revision of work orders, writing estimate sheets on the cost of materials or labor, and filling out simple forms (e.g., incident reports).

Some sense of the workplace literacy demands of typical occupations can be gathered through a review of the reading demands of three occupations with salaries that range from 25 percent below average to 10 percent above average. Higher-paying jobs requiring a higher level of skill tend to have considerably greater workplace literacy demands.

Receptionists and Switchboard Operators

Receptionists and switchboard operators greet people arriving at offices, hospitals, and other establishments; direct visitors to the appropriate person or service; answer and forward telephone calls; take messages; schedule appointments; and perform other clerical duties. They are employed by hospitals, medical and

dental offices, and other offices throughout the public and private sectors. This is a relatively low-paying job with an income about 25 percent below average, according to the Essential Skills and Workplace Literacy Initiative (2006).

Some examples of reading tasks, with their corresponding level of complexity ratings, are:

- Reading phone messages and passing them along to the appropriate individual (1)
- Reading memos regarding policy, procedures, security, personnel changes, and daily events (1)
- Reading mail and forwarding it to the appropriate individual, along with any necessary forms (1)
- Reading forms related to the office, such as insurance forms and hospital admitting forms (2)
- Reading notes from supervisors explaining job tasks or giving instructions (2)
- Reading operating manuals for computer systems and software to fix equipment when it breaks down or learn new software functions (3)
- Reading client files to answer client questions and to prepare the physician or dentist for appointments (3)

Automotive Service Technician

Automotive service technicians inspect, diagnose, repair, and service mechanical, electrical, and electronic systems/components of cars, buses, and light/commercial trucks. This job pays about 5 percent below average, according to the Essential Skills and Workplace Literacy Initiative (2006).

Reading tasks in this occupation, along with their corresponding complexity levels, include:

- Reading e-mail, notes from other colleagues, and short descriptors on parts (1)
- Reading comments from service representatives and customers on work orders to get subjective accounts of problems and understand work scheduled for customers' vehicles (2)
- Reading instructions and safety warnings on product labels and notes on assembly diagrams (2)
- Reading instructions and safety warnings on product labels and notes on assembly diagrams (2)
- Reading articles about service and repair innovations in automotive periodicals and magazines to broaden their knowledge of the automobile service industry (2)
- Reading bulletins and incident reports received from automobile manufacturers that describe recall details and recurring faults with particular models (2)
- Reading repair manuals to find technical information for each model in order to diagnose and repair mechanical faults (3)
- Scanning the labels on automotive parts for part numbers, serial numbers, sizes, colors, and other information in order to confirm that parts are the ones specified on work orders and repair manuals before they are used (2)

- Filling out job estimates as well as problem, defective parts identification, and warranty forms as well as motor vehicle inspection forms and fleet maintenance forms in order to highlight any deficiencies and to establish that regular maintenance has been performed, and accident and insurance forms to give professional opinions about of the causes of accidents and the extent of resulting damage (2)
- Obtaining information about vehicles to be serviced by looking at work orders and scanning for details such as car make, model, and year; service operations required; and the time for pick-up, as well as reading short descriptions of problems provided by the customers or service advisors (3)
- Entering repair and service data onto work orders or into electronic billing and database systems, including the time spent, parts used, steps taken to repair each car, and comments to explain unusual repairs or additional parts used (3)
- Finding out about electrical, hydraulic, coolant and other systems by studying schematic diagrams (e.g., a technician might locate the devices and connections in the accessory circuit as the preliminary step in repairing a faulty radio) (3)

Paramedic

Paramedics administer pre-hospital emergency medical care to patients and transport them to hospitals or other medical facilities for further medical care. As in many of the growth occupations in health care, to be certified, an individual usually needs to complete a college, hospital-based, or other recognized program in emergency medical technology or courses in emergency health care and supervised practical training. Success in these programs requires a moderately high degree of academic literacy skill. This occupation pays about 10 percent above average, according to the Essential Skills and Workplace Literacy Initiative (2006).

Reading tasks in this occupation, along with complexity levels, include:

- Reading notes, medical files, and patient charts to become aware of the condition of the patient, to initiate a treatment plan as per medical direction and/or protocol, and to make a working diagnosis and initiate a treatment plan (2)
- Reading do-not-resuscitate orders to be aware of what is to be done for a patient who is subject to these orders in order to apply directives, using medical discretion in regard to pain relief and palliative measures (3)
- Reading memos from management, coworkers, and other medical professionals in order to gain an understanding of new procedures and to interpret, evaluate, and apply the that information (3)
- Reading specialized material (e.g., *The Compendium of Pharmaceutical Specialties*) to obtain one or two pieces of very specific information, such as the names of medications; to integrate and synthesize information with information gleaned from other sources in order to expand understanding of the care to be applied; and to do an in-depth analysis in order to develop and contribute to protocols to bring about changes and improvements in procedures (4–5)
- Reading a variety of trade magazines, journals, and other professional literature to be aware of current practices (3)

These examples, plus hundreds of others and samples of workplace materials, are available on the Essential Skills Web site (2006). What is striking about these examples is the pervasiveness of literacy in daily work and how different these materials and tasks are from what most students experience in school classes.

Issues Associated with Workplace Literacy

Scholarship on workplace literacy has focused upon several issues related to how programs are organized, who should pay for programs, and the gaps between rhetoric used to describe and justify workplace literacy programs and what actually occurs in the workplace.

Program Organization

Most workplace literacy classes meet only a few hours a week and then for a limited number of weeks. Mikulecky, Lloyd, Horwitz, Masker, and Siemantel (1996) found that though some programs might offer as much as 200 hours of instruction, typically programs offer less than 50 hours of instruction. This is the equivalent of less than two weeks of instruction that a child would receive during the school year. Even though (or perhaps because) there is little instructional time, there has been a good deal of discussion and contention around what workplace literacy instruction should focus upon and how to most effectively use the limited time.

According to Jurmo (2004), the types of workplace literacy programs can be classified as those that

- 1) Focus primarily on the specific literacies used for the job (sometimes called functional context education) since past research has shown that there is only a little transfer from short-term general literacy instruction to being able to read and write on the job
- 2) Focus primarily on general skills or possibly on a goal, like receiving the equivalent of a high school diploma, since job skills and even employers may change
- 3) Have a balance of job-related and learner-centered goals and activities, often developed through collaboration with employers, unions, and educators

There are arguments for and against each of these ways to organize workplace literacy programs, but all the arguments are overshadowed by the severe limitations placed upon a program providing fewer than 50 hours of instruction. Not much can be accomplished in so short a time, no matter what approach is used. Mary Ellen Boyle (2001), a critic of workplace literacy programs, has observed that “concern about the nature of the curriculum serves to obfuscate the minimal impact such programs can have, notwithstanding the employer focus or curriculum designs” (p. 85).

Some programs have tried to address the problem of limited time by encouraging students to attend a series of classes and by offering a menu of classes

on several topics. Other programs have encouraged workers to extend their training from workplace literacy classes to other technical classes available through community colleges.

Employers often lean toward programs focusing heavily on specific workplace skills of immediate use while employees and unions tend to favor more general and learner-centered programs. Indeed, some employers have expressed concern that they might lose employees to other employers or occupations if they provide too much general education. A survey of 121 workplace literacy programs revealed that about 45 percent focused almost completely on workplace skills, another 45 percent used a combination of workplace and learner-center approaches, and only 10 percent limited themselves to just general skills (Mikulecky et al., 1996).

Who Should Pay for Programs?

The type of workplace literacy program offered is heavily influenced by who pays, and nearly everyone would like someone else to pay. Some employers argue that the government should pay since all of society benefits from an educated workforce and business has already paid once for public education through taxes. Acknowledging the public benefit of an educated workforce, but also pointing out the immediate benefits to employers, government often calls for joint government/employer support. Government funding has usually been limited to one to three years of full or partial funding, with the expectation that business would eventually pay for ongoing support of programs. Workers and unions argue that unless a program is offered during work hours, when an employee is being paid, the employee is also being asked to pay with his or her time. It is argued that when employees are paying in this fashion, they should have more voice in the goals of workplace literacy programs. Some programs have experimented with offering classes that take up one hour of worker time and one hour at the beginning or end of a shift.

Nelson (2004) examined the question of whether jointly funded government/employer workplace literacy programs should continue once government funding ends. She examined 50 workplace programs funded in Massachusetts between 1988 and 2000 and found that 48 percent continued for at least one year after government funding was discontinued. This finding is somewhat deceptive, however, since the results differed so much by employer size. Ninety-three percent of large firms (i.e., 14 of the 15 programs employing 500 or more workers) continued their workplace literacy programs, while only 23 percent of mid-sized firms (i.e., 100–500 employees) continued their programs. There were only two small employers (i.e., fewer than 100 employees) in the study, and both continued their programs. After size was controlled for, neither industry type nor union involvement was a significant factor in explaining results. Reasons given for continuing or discontinuing workplace literacy programs were diverse but tended to cluster around recognized multiple

benefits to both employers and employees, continuing/discontinuing leadership of the company or workplace literacy program, and in a few cases the sense that the government-funded program was able to resolve literacy problems after three years.

Gaps between Rhetoric and Reality

Workplace literacy has long been entwined with the political rhetoric of national competitiveness and safety. As early as the beginning of the twentieth century, some advocates of workplace literacy programs characterized these programs as solutions to the problem of deficient, illiterate workers, who were blamed for causing a host of safety and productivity problems. Illiterate mine workers were linked to the problem of mine safety (a dubious proposition at best), and employers who offered literacy classes were seen as taking the high moral ground and possibly deflecting some criticism about mine safety.

In the 1980s and 1990s, some literacy scholars began to critically examine this rhetoric and contrast it with what they observed in workplaces and workplace literacy programs. Their studies and analyses addressed the oversimplification and dangers of this blame-the-worker rhetoric. (One such oversimplification was the belief that if the worker had more literacy skills, problems of safety and competitiveness would disappear.)

Sarmiento (1989) presents analyses from labor union perspectives that decried and argued against the tendency to blame workers' literacy levels for labor/management problems that were much more complex than a lack of simple reading and writing abilities among employees. Others described the efforts made over several decades by employees through their unions to secure both broad-based and specific education and training with sufficient scope to make a difference (see, e.g., Hensley, 1993).

Several extensive studies challenged an overly simplified view of solving complex problems by just hiring literacy instructors or by just teaching literacy skills directly related to a job (i.e., functional context approach). These studies challenged the blame-the-worker rhetoric by documenting the broader context of the workplace and workplace literacy programs and by focusing upon the complexities of what actually occurred in the workplace and in workplace literacy programs. Researchers such as Gowen and Hull have identified a number of flaws and outright dangers in taking an overly simplified functional context approach. Gowen's (1992) study of a workplace literacy program in a hospital describes attempts to construct written manuals, guidelines, and directions for workplace tasks based on official job descriptions and official guidelines for how entry-level hospital workers were to do their jobs. In one case, guidelines for how janitors were to retrieve used needles from trash cans might have endangered the workers if the guidelines had actually been followed. In addition, Gowen's observations and interviews reveal that many workers sought

literacy support for goals outside the workplace and reacted negatively to only being offered literacy training for jobs they wished to move beyond. Hull and her colleagues did a series of studies of workplaces and workplace literacy programs that tried to capture the complete work context and counter the belief that workplace literacy programs were really preparing employees for actual workplace literacy demands. In a 1993 study of a community college program designed to prepare learners for banking occupations, Hull found that there was little correspondence between the approaches used in classes and what was called for in actual jobs. In a later study, Hull, Jury, Ziva, and Katz (1996) found a large range of literacy tasks in electronics jobs. Some tasks were ones that workers needed to do individually, but others were collaborative and allowed workers to help and teach each other. This evidence was offered as a counter to rhetoric claiming that downsizing of the workplace was forcing employers to seek or retain only employees with literacy levels sufficient for independent functioning on the job.

Some of the rhetoric associated with workplace literacy programs suggested that workplace literacy classes increased workers' abilities to democratically participate in workplace decision making and gave them access to promotion and higher standards of living. Hull and her colleagues (1996) performed a series of studies in the electronics industry and found that most of the complex literacy activities involved workers monitoring themselves with little decision-making power and that literacy skills needed to perform jobs did not seem to transfer to the skills needed for promotion to more desirable supervisory positions.

Boyle (2001) conducted interviews with human resource managers who offered workplace literacy programs and her own critical analysis to address why, if workplace literacy programs do not teach much literacy, they continue to exist. She posited several possible explanations in answer to this question, including that workplace literacy programs are (1) of symbolic value since literacy is seen as a good in and of itself, (2) less expensive than restructuring wages and benefits more equitably, (3) a way to assimilate immigrants and socialize workers into the team and group processes of the new workplace, and (4) a way for those in power to occupy the moral high ground by offering hope (perhaps false hope) of worker advancement through education.

Predicting the Future of Workplace Literacy

Workplace literacy in the future is likely to be influenced by at least three trends. These are the continued literacy growth and education of the adult population, new sorts of literacy emerging from new technologies, and technological aids that replace literacy tasks for some workers and create new ones for other workers.

Education and Workplace Literacy Demands

A clear trend over at least the last 150 years has been for demands on workers' literacy in many occupations to increase as the average literacy level of workers in those occupations increased. It is very likely that this trend will, to some degree, continue as employers seek ways to more effectively, efficiently, and profitably provide goods and services. The example of the increased electronic literacy of combat medics making possible more use of electronic communication and tools illustrates this trend of increased literacy demand both following and leading increased literacy skills among workers.

New Electronic Literacies

As new forms of electronic literacy have emerged (e.g., e-mail, the Internet, electronic spreadsheets, and electronic presentation media), these forms have been incorporated into the workplace. This is very likely to continue as the cost of handheld devices decreases while memory and programming complexity increases. Information is increasingly presented on screen or other visual displays in a mix of print and three-dimensional visuals that can be controlled by the user. This, too, is likely to continue. These new mixed literacies call for the user to search and navigate through higher levels of visual and print detail, requiring new or at least modified interpretation, search, and decision-making skills. In the military, pilots already activate information in Heads-Up displays through trained-eye focus. It seems likely that the literate worker of the near future will need to learn still more tools. In addition to being able to simply activate new literacy tools, workers will be expected to compose intelligent questions while using search engines and expert systems efficiently in real time on the job.

Electronic Performance Support Systems and Expert Systems

Many current workers interact with computer screens and enhanced help systems to do the jobs previously performed by dozens of others. Knowing how to use support systems allows people with moderate education and training to perform at higher levels. Employees using computer programs can identify potential drug interactions in prescriptions, diagnose automobile problems, answer thousands of customer service questions, and even provide lifesaving second opinions to rookie emergency room physicians. In some cases, the expert systems support the employee, and in others they replace him or her by allowing others (including customers) to do what was formerly someone's job.

Many low-level and lower-midlevel jobs disappear when customers pump and electronically pay for their own gasoline, schedule their travel online, and check themselves in at the airport. These trends increase the number of more complex computer programming and computer maintenance jobs. This phenomenon of electronic job support and replacement will expand as cheap

computer memory and speed make it possible to develop job supports and expert systems for more and more job tasks. Many low-level and lower-midlevel jobs already involve simply moving from one computer-supported job task to another.

In a sense, the resources to develop and maintain electronic support systems are available because the workers using these systems can be paid at very low levels (i.e., very low pay because nearly anyone can now do the job and the job could disappear entirely with the next wave of new technology). On the positive side, such “dumbed down” jobs can temporarily support people who have gained little from our education system. On the negative side, very little learned in such jobs is likely to be of much use in moving up to jobs at the middle skill level, and some (perhaps many) people will be trapped in jobs well below their ability levels.

These support systems tend to widen the gaps between job levels and social classes. It is nearly impossible, without extensive training and additional education, for workers to move from low-level jobs (sometimes supported and dumbed down by computers) to higher-paid and midlevel jobs that require search skills, critical judgment, and additional training. What one learns by following step-by-step directions on a computer screen and selecting yes/no options does little to prepare one for promotion. One can rarely learn enough to be promoted while doing such jobs.

Midlevel jobs are characterized by to the use of support systems, which employees must be able to operate with a good deal of facility to perform at levels well beyond their own personal knowledge and expertise (i.e., not knowing the answer, but being able to find it quickly). In addition to enhanced search skills, middle-level workers must know enough about an occupation to determine when the computer-generated advice and information seem inappropriate. Ranges of skill and expertise within these midlevel jobs is and will continue to be fairly wide and call for entry-level skills at or beyond what is currently expected of average high school and two-year postsecondary graduates. Being prepared to keep up with new knowledge and tools is a requirement of these jobs.

Lucrative top-level jobs will call for the ability of workers to go beyond what is programmed into information systems for doing traditional daily work. These jobs will require workers to deal with atypical situations and problems, use multiple literacies to invent or extend systems to solve problems, and create new knowledge. Such jobs will call for continued mastery of one or more knowledge bases plus skills in using many different information systems.

The gap between low- and midlevel jobs is likely to grow, as will the gap between mid- and top-level jobs. Crossing the gaps will require higher literacy levels, broader skill sets, and the access and ability to benefit from more

extensive formal education. These gaps between employment levels will tend to stratify social classes and make class boundaries less permeable.

CHALLENGES FOR INDIVIDUALS, EDUCATORS, AND SOCIETY

Workplace literacy challenges will continue to require many types of learning. Some of these challenges will involve learning to keep up with new technologies and job tasks created by changing job descriptions. Simply doing one's job will increasingly require communicating electronically with many displays of print and learning how to quickly locate and use accurate information and to make judgments about when the electronic support systems are wrong. In addition, it is also highly likely that cyclical formal education for new employment will be required as workers' jobs disappear or are outsourced to less expensive locations and employees.

For educators, workplace literacy changes bring several challenges. Larger percentages of the population will need to be educated to achieve higher skill levels than has ever been accomplished before. Ways to increase the knowledge and skills of adults who have not sufficiently benefited from the traditional education they once had or for whom high-quality traditional education was not available must be found. In addition to broadening formal education to include more complex knowledge and skills, educators will be challenged to find ways to continue educating adults using new venues and learning formats. It seems clear that the increased demands for education will create a problem of access if the only access is through an instructor and classroom with limited availability. More time for learning and guided instruction must be woven across the day and not limited by the administrative convenience of educators.

For society, the main challenges created by changes in workplace literacy have to do with social class. As the gaps between job levels and social classes widen and as it becomes more difficult to bridge these gaps, we will all be faced with choices. Can we find ways to make the boundaries between social classes more permeable? If we cannot or choose not to do this, can we tolerate the changes to lifestyle (i.e., increased violence and limited freedom) that always occur when inequities are glaringly apparent and there is little hope for many of gaining a higher quality of life for oneself and one's family? These are questions that not only involve workplace literacy but are part of larger issues related to political vision and will.

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Chapter Nine

LITERACY IN LATER LIFE

Anne DiPardo

Stereotypical images of the elderly, born of our own hopes and anxieties concerning who we might become if we're fortunate enough to attain old age, are as pervasive as they are taken for granted. Whether kindly, crusty, or wry, the older adults we meet on television and in films are generally a little out of step, perhaps touchingly quaint. Ask adolescents what first comes to mind when they think of senior citizens, and the litany will likely include wheelchairs, walkers, a propensity for staring peacefully at the horizon, and a certain misty-eyed preoccupation with the past. It's a little hard to reconcile these images with those of still-glamorous 55-plus movie stars that crowd the pages of the American Association of Retired Persons' glossy publications alongside advice on such matters as online dating, political lobbying, and adventure travel.

With regard to literacy practices, elders are commonly imagined composing memoirs, writing to distant loved ones, thumbing through the yellowing pages of keepsake books, or reading to a young child nestled in rapt attention. Granted, these are among the more benign images in this age-phobic society of ours, and they'll likely be with us for some time to come. To contemplate changing conceptions of later life, however, is to realize that today's elders are expanding our sense of what is possible, both by living longer and by having much to say and do. It's a safe bet that baby boomers won't rest until they make us see that elders are perfectly capable of mastering newer literacies—Blogging, instant messaging, and Web surfing along with their grandchildren—and using literacy to explore, question, and cross boundaries, and make their voices heard.

Often, only our own aging brings the full realization that diversity, struggle, and psychological complexity stay with us throughout the human life span. As we honor the intricacies of a particular group of people endeavoring to negotiate their later years in whatever ways they find meaningful and satisfying, generalizations tend to give way to questions, and recommendations to fresh ways of thinking about the roles that literacy can play in the lives of twenty-first-century elders. The scant research on older adults' literacy practices tells us little more than what we might already have assumed—that reading habits established at an early age tend to carry over, for instance, or that elders read for a range of purposes (Smith, 1993). It seems that few of us—creatures of habit that we are—suddenly take up regular literacy activities just because we've time on our hands in retirement, though those of us who have always relied on reading and writing to communicate, express ourselves, and connect are likely to embrace the written word with redoubled enthusiasm.

Where older people crave such activities, the available opportunities have important consequences in terms of the social interaction they provide, the larger social purposes they serve, and the effects they ultimately have on participants' minds and spirits. Programs and services for older adults are profoundly influenced by a society's conception of the roles and identities of its older members—and, in the case of programs involving literacy, also by conceptions of what it is to read and write in engaging and meaningful ways. As conceptions of both literacy and aging are provoking considerable debate these days, such programs are necessarily in a period of flux and change, an instability soon to be further complicated by the approach of a population of older adults unprecedented not only in terms of its size, but also its penchant for activism.

To explore older adults' literacy practices, then, is to contemplate changes in the field of gerontology, our nation's demographics, available reading and writing venues, and also expanding opportunities to use literacy to connect across generational and social boundaries. The discussion that follows will take up several dominant themes in scholarly and community-based work with elders. I turn first to the implications of the successful aging movement for our thinking about literacy in later life then address two common foci in literacy programs for older adults—reading and writing groups devoted to life-history review and efforts to engage older adults in intergenerational service activities. In closing, I address the larger implications of new perspectives on literacy and aging and consider the challenges and opportunities that lie ahead.

GERONTOLOGICAL PERSPECTIVES ON LITERACY

Until recently, gerontologists interested in older adults' literacy practices have focused primarily on the relationships between literacy and the losses of

memory, mobility, and motivation that can come with old age. (Of particular note is research on diminished eyesight due to such age-related maladies as glaucoma or macular degeneration, leading to medical and technological innovations intended to slow the process of aging and make the most of remaining vision.) Meanwhile, this focus on the physiological and cognitive decline has attracted its share of critics. In recent years, the so-called successful-aging movement (Rowe & Kahn, 1998) has called into question the inevitability of old-age pathology, arguing that there is much we can do to remain fit, happy, and active. If we eat well, exercise wisely, and remain vigorously engaged in the world around us, goes the argument, we need not devolve into frail old people teetering around nursing homes—rather, we can become stereotype-busting, vital members of society, enjoying life and making important contributions to the greater good.

In some respects, the successful aging movement harkens back to what has long been known in the gerontological literature as continuity theory, which argues that well-being in later life is contingent on an ability to draw on healthy roles, habits, and identities forged across a lifetime of introspection and civic engagement (Atchley, 1989). This perspective suggests that literacy activities that provide meaning and satisfaction earlier in life can and should be carried over to our later years, continuing to play a significant part in how we manage our health and finances, stay connected to family and friends, and find entertainment and relaxation. Literacy can be regarded as part and parcel of a successful old age, especially where it promotes intellectual stimulation, a sense of personal efficacy, and social connection.

As appealing as all this is, the successful-aging movement has not been without its thoughtful skeptics. Cultural historian Thomas Cole (1992) traces the successful-aging conception of virtuous self-preservation back to the Victorian belief that just as surely as bad living leads to decrepitude, virtue and impeccable hygiene can ensure a high-quality later life. He argues that the truth is never quite as simple as this—that while we can indeed do much to take care of ourselves, old age is inevitably marked by uncertainty and vulnerability to the whims of fate. Our final years are a time of paradox, Cole maintains—perhaps not as terrible as the medicalizing, pathologizing discourse would have it, but seldom quite the transcendent, self-determined experience that the successful-aging literature describes. In this complicated time of life, it's a fair bet that literacy practices vary both across populations and particular individuals, assuming multiple forms and functions, and shifting and evolving over time. Just as literacy can impart satisfaction, meaning, and a sense of agency at any time of life, so too can it inform later life in ways that are as significant as they are diverse.

In response to traditional gerontology's emphasis on scientific data and approaches to ameliorating the pathologies of old age, scholars in the humanities

have recently argued the need to understand the historical and cultural influences on our images of elders in society, as well as the “moral, aesthetic, and spiritual issues” that can attend the aging process (Cole & Ray, 2000, p. xi). Known collectively as humanistic gerontologists, these critics call for greater attention to issues of meaning, value, and representation—such as how prevalent images of the elderly in popular books, magazines, and films are serving to reify stereotypical views of elders and to perpetuate their unduly narrow social roles (Wyatt-Brown, 2000). As the title of literary scholar Margaret Morganroth Gullette’s book *Declining to Decline* (1997) suggests, humanistic gerontologists share the successful-aging movement’s desire for more positive late-life years that provide opportunities to offer one’s insights and services to the wider society.

While much of the research on literacy in old age has focused on dealing with illness and cognitive deterioration, this new interest in the cultural, political, and historical contexts of aging raises a host of provocative questions. We’ve much to learn, for instance, about how elders themselves describe the differences between the way their generation is depicted in print and their own self-perceptions. Beyond probing *what* and *why* older adults read and write, we might come to deeper understandings of how our perspectives change over time—for example, by asking older adults to reflect on their writing then and now, or to consider how their responses to favorite novels have shifted upon rereadings at different times of life.

Clearly change is in the air as both academics and the general public ponder what it means to grow old in today’s world, endeavoring to reach beyond the medicalized, problem-focused perspectives of traditional gerontology to new possibilities and avenues of inquiry. As we will see next, these new perspectives on aging have also shaped two particularly strong currents in contemporary literacy programming for older adults—writing groups focusing on life review, and innovative volunteer efforts that forge connections across generations.

LITERACY TO LOOK BACK AND WITHIN: THE PERSONAL MEMOIR

Over the past several decades, efforts to encourage, support, and understand elders’ life-history narratives have been guided by psychologist Robert Butler’s (1963) concept of life review. Arguing that a tendency to reminisce is a natural part of old age, Butler took exception with the traditional belief that looking back is somehow pathological or an early indication of encroaching senility. Gerontologists have drawn on Butler’s work in arguing that memoir writing offers a host of benefits, including an enhanced ability to cope with the challenges of old age, as well as a sense of dignity and satisfaction. Across the social sciences and humanities, many scholars have come to

regard such narratives as both expressing and creating personal identities. If we understand the stories we tell about our lives as constructed rather than discovered whole, then it makes sense to pay attention to the different stories we might create and their consequences for the quality of our lives and for our understandings of who we are or might become (Sarbin, 1986). To tell satisfying stories about one's life experiences is to hold a rich perspective on one's past, present, and future. The construction of such narratives in old age can be especially meaningful as moral, aesthetic, and emotional concerns often assume center stage (Myerhoff & Ruby, 1992). Along with concern for crafting graceful and engaging stories, elder writers may have a particular interest in pondering questions of value and worth (Did I do the best I could? How do I feel about these events now?).

The urge to reminisce about one's life and to reflect on the vicissitudes of old age is reflected in an abundance of memoirs by the elderly, including such notable examples as books by former president Jimmy Carter (1998), writer Doris Grumbach (1993), and psychotherapist Florida Scott-Maxwell (1968). The tendency to reminisce is also evidenced by the many memoir-writing groups springing up at senior centers around the country. (For practical advice on creating and guiding such groups, see Birren & Deutchman, 1991.) Writing teacher and humanistic gerontologist Ruth Ray (2000) finds that memoir writing can bring up elders' multiple and sometimes conflicting identities by provoking a critical process of dialogue with oneself and others and, on occasion, conflict and struggle.

In addition to traditional self-narratives—written individually, though inevitably informed by conversation both in and beyond a given support group—efforts to facilitate elders' memoir writing have encompassed a range of related approaches and texts. Guided autobiography, for instance, begins with group exploration of particular themes in human development, followed by individual writing, and then group sharing and discussion (Birren & Deutchman, 1991). Daybooks or diaries can become important avenues for reflecting on the experiences of later life, whether they remain privately held or are publicly circulated and made available to inform others' meditations on their own life trajectories. Examples of published daybooks include May Sarton's late-life diaries (1996) and Carl Klaus's accounts of retirement (1999) and life as a widow (2006).

Often such notebooks register the emotional complexity of the social, cultural, and biological experiences of aging, providing an outlet, as Florida Scott-Maxwell (1968) puts it, for those who “wave away crossword puzzles, painting, petit point, and knitting” (p. 65), preferring to record their confessional and sometimes blunt thoughts in the “only safe place” (p. 20). Echoing Thomas Cole's (1992) discussion of paradox and uncertainty in old age, Scott-Maxwell (1968) savors the private opportunity to make grand pronouncements and shift moods and topics at will:

What fun it is to generalize in the privacy of a note book. It is as I imagine waltzing on ice might be. A great delicious sweep in one direction, taking you your full strength, and then with no trouble at all, an equally delicious sweep in the opposite direction. My note book does not help me think, but it eases my crabbed heart. (p. 15)

The pervasiveness of this urge to ruminate and reflect notwithstanding, philosopher and social essayist Simone de Beauvoir (1972) urged the elderly to avoid a preoccupation with reminiscing, arguing that “in old age we should wish still to have passions strong enough to prevent us turning in upon ourselves” (p. 540). We must, she emphasized, “go on pursuing ends that give our existence meaning—devotion to individuals, to groups or to causes, social, political, intellectual or creative work” (p. 3). I turn next to an array of innovative programs that reflect this interest in forging vital connections, with a particular eye to helping, understanding, and connecting across generations.

LITERACY TO REACH OUT: LITERACY AND INTERGENERATIONAL ENGAGEMENT

A promising new range of literacy-related programs for older adults are endeavoring to connect elders to children and adolescents through shared reading and writing activities. Such programs bring to mind the influential argument of psychologist Erik Erickson and his colleagues, who found that older adults often feel a profound desire to promote the well-being of future generations—an attitude that they termed “grand generativity” (Erikson, Erikson, & Kivnic, 1986, p. 74). This altruistic desire is reflected in a number of popular books, including Mitch Albom’s (1997) best-selling account of his visits with a dying professor named Morrie, quadriplegic psychotherapist Daniel Gottlieb’s letters to his autistic grandson (2006), and psychologists Kenneth Lakritz and Thomas Knoblauch’s interviews with compassionate elders (1999).

While many of us have seen this spirit in action in our own communities and families, it is admittedly far from automatic or guaranteed. Freed of the responsibilities and burdens of raising their own children, older adults often assume a more relaxed attentiveness toward grandchildren and other youngsters. Alternatively, elders’ lack of contact with the very young can lead to mutual stereotyping and disdain. As older adults represent a powerful voting bloc, it is imperative that the decisions they make at the polling booth be informed by keen understandings of the needs, interests, and promise of the young, including those with cultural, linguistic, or socioeconomic backgrounds that are different from their own.

Perhaps most prominent among such intergenerational literacy efforts are the variety of tutoring programs, which may be locally based or affiliated with such umbrella organizations as the Retired and Senior Volunteer Program, a

branch of the national volunteer network known as Senior Corps. Such high-quality programs provide systematic preparation and guidelines, often offering special preparation in working with culturally diverse young people (Blake, 2000). In partnership with teachers and schools, such programs tap into an often underused segment of the population to ensure that students are receiving the individual help they need to bolster their reading and writing skills.

In addition to face-to-face tutoring, literacy outreach programs offer a number of related opportunities. One local program, for instance, engaged senior-citizen volunteers and 8th-grade students in joint readings of young-adult novels and weekly correspondence in shared response journals (DiPardo & Schnack, 2004). As young people and elders read books together about the Holocaust, elder partners wrote about their memories of the Second World War, offering the perspectives of those left behind on the home front as well as those who experienced warfare firsthand. In addition to fostering more thoughtful reading, such correspondences or pen-pal exchanges also offer incentives for young people to work on their writing, as the chance to address an interested real-world audience can foster increased interest in clarity, correctness, and rhetorical effectiveness. In many instances, such exchanges can foster reciprocal learning, as young people share their lives, interests, and expertise with elders—as in one innovative program in which teens teach older adults how to surf the Internet and send e-mail (Haynes, 2002).

A number of programs engage elders in literacy-related activities with the very young as well. Often such programs invite older adults to read aloud to small children, whether as Senior Corps “foster grandparents” or as classroom volunteers who provide early literacy experiences imbued with emotional warmth and caring attention. Innovative preschool programs located adjacent to senior housing offer opportunities for old and young to interact around literacy-related activities, such as reading and listening to stories. For example, One Generation, a Los Angeles-based organization, provides day care for frail older adults that are coordinated with parallel programs for young children between six months and six years old. Innovative efforts such as these provide noncoercive yet structured opportunities for the old and young to interact, filling an important gap both for young children who may not enjoy regular contact with grandparents and for elders who lack ready access to grandchildren.

Other opportunities that combine literacy activities and civic engagement are emerging in what has come to be known as the service learning movement in schools and colleges (see Service Learning Clearinghouse, 2007). In an effort to create learning opportunities that connect course objectives to public challenges, educators are inviting students to move beyond classrooms and libraries into a host of community settings, in many instances providing opportunities to interact with older adults around issues of literacy. Students may conduct oral history interviews with elders for courses in history,

aging studies, composition, or sociology, for instance, and collaborate with these older adults in developing their course papers. As in programs designed for younger students, these partnerships may involve such activities as joint reading and journaling or exchanges of ideas via e-mail or instant messaging. Through such activities, elders enjoy opportunities to offer their perspectives to young adults, while students are able to connect ideas they are encountering in textbooks and lectures to the actual experiences of living people.

In her book about aging entitled *Another Country*, best-selling author Mary Pipher (1999) laments our society's tendency toward age segregation. "We have street gangs of ten-year-olds, and old-age ghettos in which our elders are more and more cut off from the real world," she writes. "Children play with cyberpets while old women stare out their windows at empty streets" (p. 11). Efforts to engage elders and the young in literacy activities can clearly address emotional as well as academic challenges, satisfying older adults' need for stimulation and a feeling of usefulness as well as young people's need for caring attention. The design of vital and productive programs depends, however, on the still-emerging understanding that older adults can live vibrant later lives, contribute to the greater good, and master the emerging literacies of an electronic age.

LOOKING TO THE FUTURE: NEW LITERACIES AND THE NEW AGING STUDIES

Future efforts to engage older adults in satisfying and productive literacy activities will continue to be influenced by new scholarly perspectives on the aging process, an increasingly activist older population, and a growing recognition of elders as a diverse, powerful, and too-often-underused segment of the population. Such efforts will no doubt be informed as well by rapidly changing conceptions of what it means to be a fully literate person in today's world, with ever-evolving digital technologies and growing capacity to connect across cultural, linguistic, and political boundaries.

Those presently approaching old age likely recall school-based literacy instruction emphasizing discrete skills (e.g., vocabulary lists, sentence diagramming, spelling tests) and reading lists of canonical works (e.g., *Julius Caesar*, *Silas Marner*, *The Scarlet Letter*). Traditionally, skilled literacy has primarily meant an ability to comprehend literal meanings in the texts we read and grammatical felicity in the writing we produce—surely abilities that still matter, though they are arguably no longer enough. Elders' posting on the American Association of Retired Persons' issues blogs (n.d.), for instance, engage in dynamic high-stakes discussion of everything from hospice care to wellness strategies, from prescription drug benefits to global aging. These written conversations not only serve multiple purposes—informing, comforting, lobbying,

and so on—but also reach out across geographic, cultural, and socioeconomic differences. Using such tools effectively requires not only a capacity to master new technologies, but also the savvy to use literacy to interact around issues of personal, national, and global significance with a wide and diverse community of fellow participants.

Meanwhile, humanistic gerontologists are promoting yet another set of literacy skills—that is, the capacity to critique the stereotypical images of older adults that pervade texts of all kinds (e.g., Featherstone & Wernick, 1995). Books that provide more satisfying portraits of older adults are finding a ready audience among the elderly (see Wyatt-Brown, 2000) and will likely come to inform the age consciousness of younger readers as well. These representations of the elderly may show both their vulnerability and their knowing gaze, such as the frail but insightful elders in Anne Tyler's best-selling novel *A Patchwork Planet* (1998). In an effort to confront old-age stereotypes directly, psychiatrist Allan Chinen (1999) has written a set of “fairy tales for the second half of life” in which elderly protagonists are not only prominently featured, but also shrewd, wise, and triumphant. Much as images of female presidents in film and television may serve a role in preparing the country for an actual woman in the real White House, such tales can change the way we imagine the old, replacing images of the evil crone in the deep woods with elders whose long years on the planet have made them insightful, compassionate, and judicious. As popular images change, so too might a society's view of what older adults have to offer and how they might participate in meeting the challenges facing our society and world.

Those who study conceptions of the human life span have argued that much is amiss in the traditional ascendance-and-decline view of development over many decades of living. In old age, these scholars tell us, some of us manage to achieve actual wisdom, developing enriched understandings of the interdependency of rationality and emotion, mind and body, and self and world (Labouvie-Vief, 1994). While a person could conceivably become wise at any age, these scholars describe a kind of sagacity that generally comes only after years of living and searching. The wise elder is said to move beyond the reductive either/ors that shape so much public discourse these days, deftly balancing reflection and worldly engagement, acknowledging the ambiguity of life's big dilemmas yet maintaining an ability to act, and integrating critical assessment with compassion and intuition (Sternberg, 1997). That is, wise elder tend to take in a big purview, managing to be at once introspective and outward looking, attending to the needs of family, friends, and community, as well as society and the world.

Granted, old age doesn't always bring wisdom any more than active participation in literacy activities necessarily brings satisfaction, empowerment, and social benefits at any stage of life. Nevertheless, as we begin to see beyond the

rigid stereotypes that have both constrained who elders can become as well as our collective ability to tap into what they understand and have to offer, we find that older adults' participation in literacy can hold great value in both private and public terms. As today's elders explore new tools and find fresh uses for familiar ones, they are poised to give us more robust conceptions of how literacy activities can not only enrich one's subjective experience of old age but also bring to the wider society deeper understandings of later life and ready access to the wisest among us.

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Chapter Ten

INTEGRATING TECHNOLOGY AND ADULT LITERACY EDUCATION

David J. Rosen

This chapter addresses the incorporation of technology in adult literacy education, how technology is used in the classroom and computer lab by teachers and learners, and how it is used by adults learning at home, at work, and in other places with access to the World Wide Web.

WHAT IS ADULT LITERACY EDUCATION?

Throughout this chapter, adult literacy education refers to a range of programs offered by paid professionals and volunteers in community-based organizations, public schools, colleges, workplaces, libraries, and other organizations. It includes basic literacy, adult basic education, adult secondary education, and preparation for college. It includes numeracy as well as literacy and English for speakers of other languages.

WHAT IS TECHNOLOGY?

Information and communications technology, or simply technology, refers here primarily to computers and the Internet but may also include computer peripherals, such as printers, and other electronic devices, such as cameras, portable digital audio players, televisions, and videocassette recorders used for teaching and learning.

ACCESS TO COMPUTERS AND THE INTERNET: AT SCHOOL, HOME, AND WORK

According to the Pew Internet and American Life Project (2006), which collects data on Americans' use of the home computer and the Internet, 73 percent of American adults—consisting of nearly equal numbers of women and men—now use the Internet. This is a dramatic change since the 1995 Rand Corporation Study on the use of the Internet, which coined the term “digital divide” (Anderson, Bikson, Law, & Mitchell, 1995). That study documented a huge chasm between the better-educated, more affluent, and younger Americans who used e-mail and other Internet services and everyone else who didn't. The Rand Corporation study urged universal access to e-mail so that by 2005 nearly everyone in America would have an e-mail address. At the time, it was hard to imagine that nearly all Americans would have an e-mail address; yet a decade later, we were well along that path. Throughout the country, the majority of adults now have e-mail. In Boston, for example, even many homeless adults have e-mail, and there is a free downtown storefront computing center where they can check their e-mail and use the Web.

The Pew Internet and American Life Project (2006) reports that 88 percent of individuals between 18 and 29 years old and 84 percent of those between 30 and 40 use the Internet. While only 32 percent of those 65 and older use the Internet, that figure is higher than many expected, and it is growing. There is still a digital gap based on color (white, non-Hispanic 73%; black, non-Hispanic 61%). That gap has also narrowed, however, as has the gap between urban and suburban (75%) and rural access (63%). The biggest gaps are related to household income (of those earning at least \$75,000 per year, 91% or more have access, while of those earning less than \$30,000 per year, only 53% have access) and educational attainment (91% of those who attended college have access, while only 40% of those with less than a high school education have access).

Most Americans now have the Internet at home, and 62 percent of those also have high-speed access. People who do not have a computer and access to the Internet at home may use one at work or have access to one at a local public library or a community computing center. The digital divide, however, has not been bridged for all Americans. Many poor and undereducated Americans, the people served by adult literacy education programs—particularly those who live in rural areas or who are African American—do not have access at home.

In many cases, even those who do have home access may not actually use it. Adult literacy educators have found that some learners, especially women, who live in homes where there is Internet access may not have sufficient computer comfort and competence to take advantage of this access. They may be discouraged from getting basic computer skills by family members who prefer

not to share the computer. At the end of this chapter, we will look at the digital divide problem again to see what is being done, and what more can be done to bridge the digital divide for low-literate Americans.

COMPUTER LITERACY

In a class discussion about using technology that I observed a few years ago during a visit to a community-based adult literacy program in Boston, an instructor used the term “computer literacy.” A student near me turned to another and said, tongue in cheek, “I told you. They want to teach everyone here to read, even the computers.” Of course, computer literacy is a metaphor referring to the basic skills one needs to use a computer. It refers to competence and comfort in using computers; the ability to easily and fluently word process, save, and find files; send and receive e-mail; navigate Web pages; and search the Internet for information. The definition of computer literacy changes frequently, however, as new applications are created. For example, some people might now regard sending instant messages, blogging (writing Web logs), and uploading digital videos to public Web sites as basic computer skills.

Is computer literacy important for those enrolled in adult literacy education programs? If so, why? In a society where adults are increasingly expected to use a computer at work, to complete daily living tasks such as applying for a driver’s license, ordering movie tickets, and finding driving directions online, students in adult literacy education classes need to learn these skills too. Some useful instruction is available by computer. For example, instructional software provides students with additional practice as they learn how to decode words or can help English language learners acquire better listening and pronunciation skills. Computer software offers useful tools for improving basic skills. For example, as Antonia Stone (1996), founder of the Community Technology Centers Network, has demonstrated, word processing can be used for improving writing for learners at all levels, including basic literacy. Using most of these computer-assisted instruction programs and tools, however, requires basic computer competence and comfort.

Some recent research suggests that situations where students must have to drop out of classes—often for reasons out of their control—could be changed if students were offered online learning options for periods when they could not attend class (Comings, 2000; Reder & Strawn, 2006). This, of course, would require comfort and competence in using a computer and the Web. In some adult literacy education programs, programs in colleges, community-based organizations, schools, and libraries, students learn to use computers soon after enrolling, even as they are learning basic reading and writing skills. In these programs, computers are nearly as common as pencils, and computer literacy begins immediately and is infused with learning in reading, writing, numeracy, and other studies.

WHAT DO ADULT LEARNERS NEED TO KNOW ABOUT COMPUTERS?

Many adult literacy education programs, and some states, have defined what students need to know and to do in order to achieve above-basic competence in computer use. Arizona and Maryland, for example, have created lists of adult education computer use standards (Arizona Department of Education, 2005; Maryland State Department of Education, 2004). These include using input devices such as keyboards and mice; navigating various software applications; saving and finding files; printing documents; solving routine software and hardware problems; using productivity tools; using computer-assisted instruction; managing personal information; using online resources to communicate, collaborate, and find information; critically evaluating information found on the web; organizing results of research; creating presentations; understanding, describing and practicing responsible uses of technology; knowing how to properly care for, maintain, and upgrade hardware and software; and demonstrating healthy computer ergonomics such as appropriate posture and hand/wrist positions. Not stated explicitly in these competencies, but underlying them all, is a fearless attitude toward using technology. Technology educator Marc Prensky (2001) refers to adults over 30 as “digital immigrants,” because they must acquire basic technology skills. It is hard for “digital natives,” those born in the 1980s, who have grown up with computers, and for whom operating computer games and using instant messaging are second nature, to understand a generation that might find these machines intimidating.

WHAT DO TEACHERS NEED TO KNOW?

Teachers are often the gateway to their adult students' attainment of technology literacy. Yet when teachers themselves are not comfortable and competent, the gate is closed. Unfortunately, this contributes to the digital divide. Older adult literacy education teachers, who are more often digital immigrants than digital natives, have had few opportunities to learn and use these skills. If teachers do not have regular daily access to a computer with high-bandwidth access to the Internet at work and at home, and if they do not have opportunities to be exposed to new applications, to practice them, and to apply and evaluate them with students, they do not get over the computer literacy barrier and do not feel comfortable, competent, and willing to take risks in using technology in the classroom.

What are these risks? Integrating technology has many challenges. For example, if a teacher plans a lesson that depends on access to the Web, that access could disappear just when it is needed; if the teacher needs to print something, the printer could malfunction; if every student needs to go to the same Web page at the same time, that number of simultaneous users will slow

access to some Web sites a crawl or cause a crash; if there is one Web site that it is critical to the lesson, it may malfunction the day the teacher needs it. Sometimes even the best plans go awry. At a technology conference in a hotel in Austin, Texas, a few years ago, just as I was ready to do a Web-based presentation, the hotel's Internet service went down. Always prepared with a backup plan, I had saved the critical pages to my laptop, but I hadn't realized that someone had changed the settings on my laptop the day before, and I couldn't get it to work. These glitches are so common that a group of adult literacy education and technology advocates has created a Web page of them that also offers some solutions (www.TechGlitches.com).

Underlying these risks is the possibility of a teacher looking foolish before a group of students who know more than the teacher does about technology. The teaching paradigm in most adult literacy education classes is what some refer to as "sage on the stage" or in some cases "guide by the side." Neither of these is successful, however, for integrating technology in a classroom. A new paradigm that acknowledges that the teacher is a learner too, that there may be students who have more technology expertise than the teacher, and that everyone needs to help each other learn is needed. I would call this paradigm "We're All In This Together." This shift requires courage and practice. For some teachers, it is not easy; yet it may be the most important change to bring about real integration of technology. Digital natives know that to learn technology, you must dive in, swim around, and use whatever knowledge you—and those around you—have to solve whatever problems you face. You may recognize this as a strategy set for playing computer games, the hatchery of the digital native.

Some states have defined teacher competencies for integrating technology with adult students. The U.S. Department of Education-funded AdultEd Online project, sponsored by the University of Michigan's Project IDEAL and the Sacramento County, California, Office of Education, has defined competencies for teachers' technology integration. AdultEd Online (2006) has also developed an assessment instrument, a professional development planning process, and online resources to enable teachers to attain competency in using technology.

WHAT DOES IT MEAN TO INTEGRATE TECHNOLOGY IN ADULT LITERACY EDUCATION?

One of the most widespread applications of computer technology in adult literacy education is computer-assisted instruction, or computer-assisted language learning. Nevertheless, little research is available on its effectiveness in adult literacy education. Computer-assisted instruction is used for drill and practice, direct instruction, and in some cases managing instruction. Early

computer-assisted instruction was text based with a questions-and-answer format. Then, drill and practice was increasingly followed by game formats. Now, software often incorporates simulations, graphics, audio, and video. Some adult literacy education computer-assisted instruction is entirely simulation. A learner may solve problems in an office, solve a mystery, or measure objects on a shop floor. In one of these simulations, "The Office," learners use interactive online tools, such as simulated computers with e-mail, and reference books to look up information. In another, a numeracy simulation for learning statistical process control, learners use an interactive micrometer to measure "widgets" (LexIcon Interactive Media Solutions, n.d.). Drill and practice may be effective in helping students memorize numerical facts, improve spelling, or improve decoding skills; however, the strategic use of computer-assisted instruction requires an experienced teacher and close monitoring so that students use the software effectively. Too often, when computer-assisted instruction is not carefully planned, students find it repetitive and boring, or they become frustrated when they get stuck and can't get past a technical obstacle. When planned well and monitored carefully, however, computer-assisted instruction can accelerate learning, provide more and different kinds of explanations, offer more opportunities to practice at one's own pace, and give regular, systematic feedback on learning attained. Some students find some kinds of computer-assisted instruction, especially simulations, very engaging.

Computer-assisted instruction comes in small packages designed to do one, or just a few things. For example, beginning-level English listening skills, numerical fact drill and practice, spelling of lists of common words, or English grammar may be the focus of computer-assisted instruction. These software programs are relatively inexpensive, and they vary in quality. Computer-assisted learning also comes in much larger packages called integrated learning systems. These address much more, such as all levels of English language learning, or all levels of basic skills. An integrated learning system is more expensive and almost always includes an objectives-based learning management system to help teachers assign lessons and track students' progress. Some common examples of these include PLATO, ELLIS, Skills Bank/Skills Tutor, and Aztec Learning Systems. A useful list of integrated learning systems and other commercial and free software can be found at Newsome Associates (n.d.).

Over the past several years, many teachers and some curriculum developers have developed free education software, much of which is on the Web. Some teachers have created their own classroom Web sites, or class online learning groups, by using Yahoo groups, Trackstar, or Quia, for example. Teachers in states such as Arizona have indexed online instruction to the state English language learning standards for adults. These will be found at the Splendid ESOL Web (Pima College Adult Education, n.d.). I have created Web-based

lists of free adult literacy education Web-based learning resources that can be found at Newsome Associates (n.d.).

With the enormous amount of commercial and free instructional software now available, how does a teacher, and how do students working on their own, choose the best software to meet instructional and learning objectives? There are many strategies, ranging from casually asking colleagues to formally evaluating software and testing it out with students. Most teachers who use instructional software ask for software recommendations from colleagues in their school or program, at workshops and conferences, and in online discussions about software, for example on the National Institute for Literacy Technology electronic discussion list. Some consult lists of software, such as those found in the software reviews section of "The Literacy List" (Newsome Associates, n.d.). Some, who may also use these as initial strategies to narrow down what software products to review, will also review the software against a set of criteria and test it out with their students. *Software Buyers' Guide* by the Northwest Regional Literacy Resource Center (n.d.) has a quick and simple set of criteria for software review. The Adult Literacy Resource Institute (1999) in Boston several years ago brought together a group of teachers, reviewed several software review instruments, and developed one comprehensive instrument called the Software Evaluation Worksheet. The key questions in all these software review instruments involve suitability for the intended users based on what their learning needs and objectives are, how easy the software is to navigate, whether or not the software is engaging, and ultimately whether or not it enables the intended population to accomplish their learning objectives efficiently.

Computer-assisted instruction, particularly in its early years, was sometimes disparaged by teachers who found its cookie-cutter workbook approach did not add much value to learning, especially in light of the additional expense, training, and time required to use it effectively. Although some teachers still do not like using computer-assisted instruction, many more have found it helpful as a supplement to learning when students use it under the guidance of a skilled teacher.

CONSTRUCTIVIST APPROACHES TO ADULT LEARNING WITH TECHNOLOGY

A different approach to learning, sometimes called project-based learning, or constructivism, does not employ technology to deliver instruction but instead looks at ways that students can use electronic technology as a set of project organization or presentation tools to accomplish learning-related purposes. Constructivism is a theory of cognitive growth in which learning is thought to be an active process, one in which a person constructs new ideas or concepts

while transforming existing knowledge. Meaning is made from one's experiences and from a cognitive structure based on those experiences. A learner constructs knowledge by actively connecting and absorbing new information or experience into his or her existing knowledge structure. The new knowledge or ideas become useful and integrated as the learner sees relationships among existing concepts and knowledge and the new ideas. The learner selects and interprets information, constructs hypotheses, and makes decisions by relying on a cognitive structure of schema, or mental models. Constructivism is often regarded as an approach that is participatory, engaged, and learner centered.

Electronic technology offers many basic skills opportunities to learners whose teachers use constructivist approaches. Adult learners, like other adults, want to use computers for communication, finding information, shopping, and entertainment. Some of the tools needed for these personal uses are the same as those needed for educational uses and meet a range of learners' high-priority needs. These may include e-mail, finding information through online search engines, word processing, or finding and watching video files. Other tools include reading or contributing to electronic discussion lists (Listservs); making graphics; publishing articles, flyers, and Web pages; searching or creating databases; and using spreadsheets.

Those who want to learn to write, or to improve their writing skills, find that word processing makes learning to write easier, especially when they learn word-processing skills at the same time that they are learning writing skills such as spelling, sentence building, and paragraph construction. Adding to, erasing, and moving text are all easier with word processing than writing by hand. Built-in spell-checking programs are handy, especially for adults who are new writers. The process of writing, getting corrections, and editing is much easier electronically. Many adults appreciate that after extensive editing, their final writing product, printed out, looks good and is not blemished by erasure marks or smudges or marked with edits. For certain kinds of writing, and for other reasons, adults need to search for and verify information. Library research is still useful but with online search engines, online encyclopedias, specialized electronic discussion lists, Web pages that can be easily and quickly edited by readers (wikis), and subject-matter indices (portals), adult learners may search from home, work, or school. Learning to use these research tools to improve one's writing has the added value that conducting research may be applied to other areas of learning.

A constructivist approach begins not with a curriculum and a set of intended learning outcomes, but rather with a question, problem, decision, topic, presentation, or product of interest to students. For example, learners may be interested in improving access to health information in their community, and the project might be producing brochures or slide presentations for community education meetings on asthma, nutrition, smoking, cholesterol, or other

health concerns. Adult learners may want to improve voter turnout in their community and, to do so, may research the rules for voter registration and produce a multilingual community digital slide presentation on how to vote, and why. They may want to start small businesses and may want to research and present information on how to write a business plan and how to secure a business loan. In the process of doing research and making presentations, students acquire reading, writing, speaking, and listening skills. They may also acquire numeracy skills or specific content knowledge that will help them in daily living and/or on tests. They use CD-ROM or online encyclopedias, dictionaries, and other electronic research tools to search for answers to their questions; they use computers to do word processing and publish the results of their projects; and they use presentation software to show their projects in class and in the community. Depending on the project, they may also create tables, charts, graphs, spreadsheets, and databases.

Some teachers and students make Web pages to present their learning. For over a decade, Susan Gaer, a community college instructor at Santa Ana College in Southern California, has worked with English language teachers of adults and children across the world to do projects that result in student Web presentations. Learners submit recipes in English for an international cookbook. They research the cost of common food items in their neighborhoods, such as pizza, and then compare prices and the cost of living in different communities. They write about cultural or ethnic home remedies. They do intergenerational cultural projects in which they interview family members. They match up with classes in other parts of the world for international “community virtual visits” (Gaer, n.d.). Another project, developed by the Literacy Telecommunications Collaborative in Boston, has students create virtual visits for computer stores, home-buying agencies, museums, libraries, and state capitals (Rosen & Macdonald, 2004). In each case, a group of students actually visits the site and conducts interviews, takes digital photos, makes audio files, and then creates a virtual visit of the actual visit for those who may be interested in learning about the organization but cannot visit in person.

ASSISTIVE TECHNOLOGY AND UNIVERSAL DESIGN.

Technology offers adult learners with disabilities—those who are blind or sight impaired, those who are deaf or hearing impaired, or those who have learning disabilities or specific reading disabilities—an opportunity to participate in classes and make progress in learning. Assistive technology, such as a browser that reads Web pages out loud, a speech recognition program that allows someone to write through dictation, special devices for typing or executing commands for those who can't use a keyboard, provides special access. Universal design is an approach to creating learning environments that

provide a full range of access tools for everyone, including those with disabilities. For example, a sidewalk curb cut benefits those in wheelchairs, but the majority of those who use them are bicyclists, roller skaters, and people pushing strollers; this benefits them as well. Handicapped-accessible bathroom stalls that accommodate wheelchairs also benefit able-bodied people who need more room. Useful universal design-learning features for those with disabilities, now standard issue in many computers, include the capacity to easily enlarge text and voice recognition programs, and other features, such as some text readers, can be installed for free. Florida TechNet (n.d.) provides a list of good resources for adults with learning disabilities, including assistive technology resources.

NEW USES OF TECHNOLOGY FOR LEARNING

New digital technologies are being developed every year. Some are potentially useful to teachers and adult learners; some are not. To determine if they are useful, new technologies must be tried, evaluated, and discussed. If they appear to add value to teaching and learning, then their authors' claims should be researched and proved. As of May 2007, there are at least four new technologies that appear to have potential for adult literacy education: wikis, podcasts, m-learning, and learning portals.

Wikis

Wiki-wiki is a Hawaiian word that means "very, very quickly." A wiki is a Web page where anyone can quickly add or change text. Wikis, where people come together to learn and add to knowledge, are used for a variety of purposes. The best-known wiki application is a free worldwide encyclopedia called Wikipedia. Other free and useful wikis include the Adult Literacy Education Wiki; wikiHow, a collection of ever-increasing articles and sets of instructions on how to make or do things; and Wikimapia, a detailed worldwide map onto which one can add information.

The Adult Literacy Education Wiki (<http://wiki.literacytent.org>) is designed for practitioners, researchers, and learners to pose and answer important questions in the practice of adult literacy education. It is intended to help teachers, tutors, administrators, and other practitioners easily find professional wisdom and research regarding specific questions about practice. It is a practitioner's professional development site, a community of practice. The Adult Literacy Education Wiki covers topics ranging from basic reading and writing for adults and adult basic education to adult secondary education and English language learning. There are, as of this writing, 30 topic areas, including adult literacy professional development, assessment, basic literacy, curriculum

development, English for speakers of other languages, family literacy, learning disabilities, numeracy, project-based learning, reading, and technology. In some topic areas, in addition to discussion, there is a summary, glossary, and a list of further resources. These resources are often links to research.

WikiHow (<http://www.wikihow.com>) describes itself as “the How-To Manual that anyone can write or edit.” This is an excellent resource for those who teach writing. Students can pick something they believe they know how to do well, such as cooking, a sport or hobby, a kind of home repair, pet care or training, or a home health remedy. The teacher can introduce a format, such as that used on wikiHow—title, introduction, steps, tips, and things you’ll need—and then ask each student to write a wikiHow article using the format. These articles can then be edited in pairs, in small groups, by the class as a whole, or by the teacher. The editing process enables the writer to see how others might misunderstand the writing and to understand how to write more clearly and completely. The articles can then be posted on wikiHow. Once posted, there is a good chance that they will be revised again. The site has a group of friendly editors who look at each new article, usually within a few hours. Because wikis have an accessible history of the changes to each page, the writer can see each person’s edits and learn how the article has been improved. The writer also has the pleasure of having an article published for the world to read!

Wikimapia (<http://wikimapia.org>) is useful for learning map-reading skills, but because it is a wiki and an individual can put boxes on the map with text and links to Web pages, it is also useful for students who want to improve their reading and writing skills. A group of students who live in the same area, for example, can zoom in on a map of their neighborhood, often to the rooftop level, and can label the structures or geographical features that are important to them. This could be a useful activity for two classes to share in a classroom virtual visit project.

Podcasts

Podcasts are digital audio files that can be listened to on a computer or a handheld digital listening device known as an MP3 player. (One example of an MP3 player is an iPod.) Through a protocol known as an RSS (really simple syndication) feed, a person can automatically have these files downloaded and saved on a computer and then they can be synched with a portable MP3 player. Learners can download audio presentations, language learning audio files, and other audio files and listen to them while commuting or waiting for appointments—anywhere and anytime. English language learners might find these useful for improving listening skills. Students who have difficulty reading and want to learn certain kinds of content (for example for the GED social studies test) could get the content from articles downloaded in audio files.

M-learning

Mobile learning (m-learning) is text-based audio, or visual instruction delivered through a mobile phone or Web-accessible PDA (portable data assistant). While digital immigrants complain that the screen or keyboard is too small and cumbersome for this to be useful, digital natives are already using mobile phones to access information and to get and read directions and maps, and in some countries (the United Kingdom, Australia, and South Africa, for example), they are being used for adult learning. Web-accessible PDAs often have a larger screen and an attachable full-size keyboard. For some video MP3 players there are high-quality goggles through which to view the images and text. It is likely that as technologies merge there will a variety of kinds of reasonably sized, lightweight, Web-accessible, affordable portable devices. These could be portable learning assistants for adult literacy education students.

Learning Portals

Some teachers object to using the World Wide Web with their students because it is so easy for them to get lost or distracted. Learning portals may be the answer to this problem. A learning portal is a Web site that selects and organizes learning resources and often displays them in its own browser, so it is very easy for a Web neophyte to find his or her way. A particularly useful example of this is a free plain-English portal developed by the Westchester County Public Library in New York called Firstfind.info. Designed for low-literate library patrons who want to use the Web to answer questions in areas that are of interest to adults, such as education, family, government, health, jobs and job training, housing, technology, Firstfind.info is also used by some adult literacy education teachers to find suitable information at a reading level their students can handle.

TECHNOLOGY PLANNING

A few states (Arizona, California, Hawaii, Vermont, and Massachusetts, for example) have state adult literacy and technology plans. In these states, and others, schools and programs often have technology plans as well. Technology planning usually involves administrators, teachers, adult learners, a technology coordinator, and others coming together to prepare for technology to be integrated in teaching practice and be made widely available to students. The planning process increases understanding, commitment, and ultimately the resources to implement the plan. A particularly useful tool, developed by the Outreach and Technical Assistance Network in California (n.d.), is an online technology plan form for adult literacy education programs. The process includes forming a planning team, determining the scope

of the plan, creating a vision statement, assessing the current state of technology integration in the program, establishing goals and objectives, addressing funding issues, creating a staff development plan, and a creating a strategy for evaluating and revising the plan over time.

WHAT DO WE NEED TO DO TO BRIDGE THE DIGITAL DIVIDE?

In 1995, one of the conclusions of the Rand study was that individuals' accessibility to e-mail is hampered by low income, low levels of education, and racial gaps in the availability of computers and access to network services. The authors recommended looking at "creative ways to make terminals cheaper; to have them recycled; to provide access in libraries, community centers, and other public venues; and to provide e-mail 'vouchers' or support other forms of cross-subsidies" (Anderson et al., 1995, p. 15). Most of these recommendations have been implemented, and they have made a difference. Many more Americans have computers at home and access at work and elsewhere. Access is not the same as regular use, however. Many low-literate or limited-English-proficient adults who are not comfortable and competent using computers live in homes with high-bandwidth access to the Web. In addition to continuing to make sure all families have access, we must now redouble our efforts through adult literacy education programs and in other ways to ensure that immigrant and low-literate adults can comfortably use technology at home. This means that basic computer skills, like reading, writing, and numeracy, must be a mainstay of every adult literacy program. It means that adult education teachers must have these competencies themselves. To acquire these skills, states need to make a considerably greater investment in paid professional development so that teachers have the training and the time to try out, evaluate, and integrate new technologies in their practice.

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Chapter Eleven

RESOURCES FOR ADULT LITERACY

Jackie Taylor

Adult literacy education is an emerging profession that has positive effects on the lives of learners and the practitioners who teach them. Adult learners often report important outcomes resulting from improved literacy skills. Teachers often report entering the profession not on purpose but quite by accident because they stumbled into the profession and fell in love with it. As Quigley (2006) reminds us, the earliest definitions of “profession” were not about “competence, or knowledge, or working full-time, or career aspirations, or having a framed diploma on the wall” but about “professing one’s personal commitment to a vocation—to a calling” (p. 11). A married couple who had earned their GEDs and moved on to college once told me about how adult literacy education helped them break intergenerational cycles of poverty:

Our kids were growin’ up to be like us.... We found we had to do these things [go back to school] in order to create a new life with our kids. And now they’re on the same page we are. My daughter continually says she can’t wait to graduate high school so she can go to college. It’s great to hear that. Our older boys—when we first got together, they didn’t want to go to school; they didn’t care nothin’ about goin’ to school because that’s the way we were. When we changed that scenario, certain mentalities were broken.

Adult literacy is more than reading and writing; it involves instructional areas like basic computer skills, getting health information, family or intergenerational literacy, English language learning and civics education for immigrants, workplace basic skills, and basic skills for the homeless and the

incarcerated. Adult learners come to programs for the most part voluntarily (though there are exceptions)—unlike the mandated K–12 system. They choose to strengthen their literacy skills for a variety of purposes despite the constraints of daily responsibilities. They bring a wealth of personal experience and expertise to the adult literacy education classroom. Staff in such programs most often reflect the diversity of the community and perform their responsibilities in ways that even some certified professionals may be unable to accomplish. What other emerging profession has thousands of volunteers and thousands more part-time professionals? What do they know about adult literacy education that is not apparent to the public at large? Even the term “adult literacy,” which might refer to reading and writing, has broader meanings that embrace a range of literacy skills used for multiple purposes that are essential for adults to carry out their roles and responsibilities within the family, workplace, and community. This chapter is especially for those who are considering careers in adult literacy education. As an adult educator, I will guide you along some pathways in my field, shedding light on resources that I hope you find valuable in your journey.

ADULT LITERACY'S HISTORY

To understand why adult literacy is an emerging profession, it is useful to look at the field's history. A valuable resource in doing that is *The Rise of the Adult Education and Literacy System in the United States: 1600–2000* by Tom Sticht (2002). Sticht recounts the rich history of adult literacy and its roots in social change, including the moonlight schools that were started in 1911 by Cora Wilson Stewart. The struggles and successes of advocates to advance the profession of adult literacy education resulted in the establishment of the Adult Education and Literacy System by Congress in 1966 with the passage of the Adult Education Act. This system of government-funded education programs allocates funds for the hiring of a greater number of full-time and part-time teacher professionals. Now under Title II of the Workforce Investment Act, more than 4,000 state, local, and community-based organizations annually receive federal funds for adult education.

WHAT RESOURCES ARE AVAILABLE FOR UNDERSTANDING THE ISSUES IN ADULT LITERACY?

In December 2005, the National Assessment of Adult Literacy (NAAL), released by the National Center for Education Statistics, reported that 93 million adults (45% of the adult population) have basic skills deficiencies in reading, writing, or math; 30 million of them have very limited skills; and 11 million of them cannot communicate in English. Yet only 3 percent of the

93 million undereducated adult Americans have access to adult education and family literacy services, which is primarily due to limited funding (McLendon, 2006). The National Institute for Literacy hosted a series of Webcasts on the NAAL that describe and present the assessment results; these can be found on the institute's Web site. Another useful source of information on the NAAL is the Web site of the U.S. Department of Education's National Center for Education Statistics in the Institute of Education Sciences. The National Council of State Directors of Adult Education has also produced a series of resources on the NAAL that provide useful information for discussing the assessment results with stakeholders in the community and the media, including fact sheets, talking points, frequently asked questions, and an archive of newspaper articles.

Another way to learn about the need for adult literacy services is to examine the U.S. Census Bureau data. The Office of Vocational and Adult Education in the U.S. Department of Education has created both state and regional profiles from the 2000 census that present the census data by number of years of school completed, age, gender, poverty level, and other critical descriptors.

A valuable resource for understanding the current state of the adult literacy field is *Four Lay-of-the-Land Papers on the Federal Role in Adult Literacy*, the first informal publication produced by the National Commission on Adult Literacy (2006). This independent, blue-ribbon national commission was founded on October 9, 2006, by the Council for Advancement of Adult Literacy and the Dollar General Corporation to chart a course for the future of adult literacy. Over the next two years, we can expect the National Commission on Adult Literacy to continue to make background papers developed for the commission available to the general public.

WHAT IS THE NATURE OF THE ADULT LITERACY TEACHING PROFESSION?

While systems of government-funded education programs provide greater numbers of full-time and part-time teachers, the adult literacy education workforce is still an emerging profession. Eighty percent of instructors are part time, and thousands are volunteers. Yet while many adult educators have training in teaching primary or secondary education, few, when they begin teaching adults, have the knowledge and skills necessary to teach adults and to address the unique needs of learners who seek adult literacy services. The types of resources available in the field (or the lack thereof) reflect the current state of affairs in the professionalization of the field, the availability of funds, and resources helpful in leveraging and advocating for funds.

HOW CAN YOU LEARN MORE ABOUT THE FIELD OF ADULT LITERACY?

Strategies

- Research the impact of adult literacy on learners' lives. Start by talking with adult learners. If you do not have access to anyone who may be participating in an adult literacy program, then view the online video *Stories of Lives Changed*. Produced by the University of Tennessee (2001), this video shares the stories of adult learners whose lives were changed by their participation in adult literacy in welfare reform programs.
- Investigate what your town or community is doing to address adult literacy issues. Talk to adult literacy providers. Seek out adult literacy programs affiliated with libraries, public schools, and community colleges; inquire with basic education programs offered by religious organizations, workplaces, and union halls. Start locally, but if you need assistance finding local, adult literacy providers, see the section below titled "Finding Programs and Job Opportunities."
- Talk to teachers online. Subscribe to any of the National Institute for Literacy's (n.d.b) national discussion lists for adult literacy, which are helpful for those who want to learn more about the adult literacy field. Information posted on electronic discussion lists (Listservs) often leads to other useful sites on the Internet. The institute's discussion lists have a searchable database of list postings. Moderators often summarize discussions with guest speakers, and they are archived. Professional associations such as Teachers of English to Speakers of Other Languages and the Association of Adult Literacy Professional Developers and some state professional development centers also sponsor their own discussion lists. Several associations are listed in the resources section of this chapter. Check with the ones that interest you to learn how to subscribe.
- If you are entering the field, investigate your options for professional development and take advantage of them (see section titled "Adult Literacy Professional Development").
- Talk with people in organizations, agencies, and social services that seem peripherally connected to adult literacy (e.g., prison ministries, VISTA, missions, American Indian reservations, cultural centers).
- Read books and watch movies recommended by adult learners or adult educators for learning about the unique experiences of adult learners (see, e.g., Adult Literacy Education Wiki, n.d.b).
- Always ask questions. Find out from adult learners and adult educators what works where they are, what doesn't work, and why they think this is so. Identify promising practices and adapt them to your situation.

CAREER PATHWAYS IN ADULT LITERACY

Adult educators come from diverse backgrounds and fields of study and follow career pathways through adult literacy that are equally varied: pathways leading from positions as volunteer tutors to program and state directors, adult learners to program managers, and part-time teachers to professional

development staff or university researchers. They come from fields like art and architecture, social change movements, the Peace Corps, and K–12 teaching, among others. Adult educators often happen upon adult education and then never wish to leave. But where is the front door to adult literacy? Does the field need one? Would having a front door such as a teacher certification requirement limit the diversity among staff that the field now enjoys—and must have? Can the field support enough full-time positions and provide adequate working conditions to recruit committed, compassionate, high-quality adult educators and keep them? These questions and others have generated a debate in the adult literacy field about program quality, of which career pathways are a part. What questions are central for you in this debate?

A variety of inspiring stories that describe how people entered adult literacy education can be found in the 2002 special summer issue of *Field Notes*, a newsletter funded by the Massachusetts Department of Education and produced by the System for Adult Basic Education Support (Balliro, 2002). More stories can also be found in the Adult Literacy Professional Development area of the Adult Literacy Education Wiki (n.d.a).

While the passage of the Adult Education Act in 1966 created new opportunities for a paid adult literacy workforce, in general, the workforce is not a stable one. Factors such as varied soft-money funding streams that have created insecure positions, inadequate federal and state funding that do not enable full-time positions, and poor working conditions make it challenging—though not impossible—for adult educators to build a stable career. This lack of stability may contribute to higher attrition rates than those seen in elementary and secondary education. Where this is true, the field of adult literacy is faced with a very serious barrier to improving program quality. Organizations like the Association of Adult Literacy Professional Developers advocate program and state policies to improve working conditions and other support for teacher professional development. Adult Literacy Professional Developers is a national association of adult literacy professional developers that advocates in this area.

Some programs, even small community-based programs, do provide full-time positions and benefits for part-time staff. One example is WAITT House, a small Boston community-based organization that keeps the needs of students and staff at the forefront of all decisions. WAITT House increases salaries as the cost of living rises or, when it cannot do this, provides additional vacation leave; the agency provides health insurance to full- and part-time staff and offers generous vacation leave to keep teachers fresh. The organization believes that these basic benefits have helped them to avoid many management and service delivery problems, such as high staff turnover, training more new staff than necessary, inconsistencies in instruction, and discomfort

among students because of a high turnover rate among teachers. WAITT is an acronym for “We Are All In This Together.”

Adult educators and program administrators collaborate within the program and community to build career pathways in adult literacy. For a list of strategies used by teachers, program administrators, and others, visit the Adult Literacy Professional Development area of the Adult Literacy Education Wiki (n.d.a).

How does one get started in the field of adult literacy? While most enter the K–12 field through teacher preparation programs, most often the front door in adult literacy is literally at the door of the adult literacy education program.

TEACHER EDUCATION

Do teacher certification, licensing, or endorsement programs adequately prepare teachers to teach? Do K–12 teacher preparation programs leading to certification benefit the adult educators who may be required to participate in them? Some argue that adult literacy is so qualitatively different from other teaching fields that an entirely separate adult education certification should be offered; others argue that intensive in-service training in combination with teaching and performance assessments would better prepare adult educators than an academic program. Others argue that the demands of the job are similar to K–12 and all that is needed is the addition of a separate endorsement. Finally, requiring certification or endorsements would prevent some nontraditional but highly effective educators from teaching because they cannot afford to attend a four-year institution. These debates have led states to handle licensing in different ways, ranging from offering full adult education license preparation programs to only requiring an elementary or secondary school teaching license. To learn more about this debate and the issues surrounding teacher preparation and certification in adult basic education, you may wish to read *Professionalization and Certification for Teachers in Adult Basic Education* (Sabatini, Ginsburg, & Russell, 2002).

Teacher preparation programs that specialize in adult literacy education are not common, although many colleges and universities offer some coursework specific to adult education (Sabatini et al., 2002). Higher education courses and related degree programs benefit adult educators who choose to return to college to develop their careers beyond the adult literacy classroom.

IF YOU WANT TO TEACH IN ADULT LITERACY EDUCATION, WHERE SHOULD YOU BEGIN?

Teacher certification or licensing is usually not required to teach in community-based programs or community colleges, but it is usually required to teach

adults in local education agencies (public schools) or state correctional institutions. To determine adult literacy education teaching requirements, begin by inquiring at the program where you would like to teach. To find out the certification requirements for your state, contact your state's Department of Education. See the U.S. Department of Education (n.d.a) for listings of state education agencies.

FINDING PROGRAMS AND JOB OPPORTUNITIES

There are several resources that can help you find adult literacy programs. A searchable database of U.S. literacy programs called *America's Literacy Directory* is available online as a joint service of the National Institute for Literacy, the U.S. Department of Labor, the U.S. Department of Education, and Verizon. The database can also be accessed through the institute's toll-free number (800-228-8813).

Adult learners, volunteers, and aspiring teachers can also find programs through ProLiteracy America. ProLiteracy America, the U.S. division of ProLiteracy Worldwide, has approximately 1,200 member programs in all 50 states and the District of Columbia. Another useful resource for finding family literacy programs is the search engine made available by the National Center for Family Literacy.

Some states maintain state hotlines or online resources dedicated to helping learners find programs. For example, the Massachusetts Adult Literacy Hotline provides program referrals, and callers can receive information regarding a variety of services, including adult basic education, English language learning, GED preparation, and GED testing sites (800-447-8844). Contact the state professional development center in your area to find out whether hotlines exist in your state (see U.S. Department of Education, n.d.b, for a listing of state professional development centers). Organizations post job opportunities on their Web sites and to the National Institute for Literacy's online discussion lists.

ADULT LITERACY PROFESSIONAL DEVELOPMENT

Most states have a professional development resource center or related agency dedicated to addressing adult literacy professional development needs. All their services are available, usually free, to people working in publicly funded programs. Those who work in programs that are not publicly funded may have access to some of the services and/or resources available. Whether you are making a career choice in education or you want to learn more about professional development in adult literacy, this next section will provide an overview of the types of professional development resources available.

Recent Research on Adult Literacy Professional Development

The National Center for Adult Learning and Literacy's Professional Development Study (Smith, Hofer, Gillespie, Solomon, and Rowe, 2003) offers insights about how teachers change as a result of their participation in professional development, and ways programs can support teachers in their professional growth and learning. Professional development is one resource for facilitating professional growth, but it should be offered in an environment supportive of change. Smith, et al. (2003), found that the professional development model used did not matter as much as factors that influenced teacher change due to teachers' participation in professional development. Factors included working more hours in adult education; having a well-supported job (good benefits, adequate paid preparation time, paid professional development release time); having a voice in decision making in the program; having one's first teaching experience in adult education; being relatively new to the field; having access to colleagues; not having an advanced degree (above a bachelor's), and spending more time in professional development. Smith et al. found that teachers and administrators should become advocates for the supports they do not have and should continually strive to obtain the best conditions possible that support professional growth and learning. Teachers—especially highly skilled, knowledgeable, and caring teachers—are the key to helping adult learners achieve their goals. Programs that support teacher professional development should strive to increase access to quality professional development for teachers, allow teachers to participate more in decision making, set expectations that teachers must continue learning through professional development, create well-supported jobs for teachers, and increase opportunities for teachers to share ideas and participate together in professional development. Teachers in adult literacy education should expect high-quality professional development, pinpoint what they want to gain from professional development, use professional development to continually improve their skills, dedicate themselves to learning throughout their careers, strive to increase collegiality and teacher decision making in their program, and collaborate with colleagues to improve teacher working conditions (Smith et al., 2003).

As teachers consider their needs for ongoing professional development, they should recognize that there is a growing expectation from the federal level that all education be based on evidence—the integration of professional wisdom with the most rigorous research available should be utilized in making decisions about how to plan, deliver, support, and evaluate instruction and program management. Teachers are being encouraged to become consumers of research for areas in which it is available—to access it, judge the quality of the research and what it means for their situation, integrate it with their own professional wisdom acquired through experience, and use it where they feel it

applies. Professional development is a vital link between research and practice, so in order to integrate research with their own work, it is critical that teachers be able to access professional development and choose what will meet their needs best.

A wide variety of approaches and methods should be used to offer professional development so that there is something for teachers (and other program staff) at all levels, and for all areas of adult literacy education. The Association of Adult Literacy Professional Developers has a useful matrix of approaches and methods on the resource section of their Web site for people who plan professional development. Professional development can be organized into four main kinds of delivery: face-to-face professional development (conferences, workshops, courses), online or hybrid professional development, program-based professional development, and supported individual learning.

Face-to-Face Professional Development

State literacy resource centers or state professional development providers usually offer single-session workshops, though it is better if you create a professional development learning plan that provides opportunities to apply what you have learned, share ideas and obtain feedback from colleagues, make improvements, and measure competence based on performance. Single sessions are helpful for networking, sharing and generating ideas, and sparking interests. But a combination of professional development approaches and methods should be used to strike the right balance. State adult education conferences are held in most states by the state literacy resource center and/or the state professional association. ProLiteracy sponsors an annual conference, as do the American Association for Adult and Continuing Education and the Commission on Adult Basic Education. However, conferences can be expensive to attend. Contact your professional association to find out if it offers scholarships to attend any of these events. For a listing of state, national, and international conferences relevant to adult literacy education, see the Developing Professional Wisdom and Research area of the Adult Literacy Education Wiki (n.d.c).

Online or Hybrid Professional Development

In addition to face-to-face professional development, there are also online courses and hybrid learning. Hybrid, or blended, professional development involves learning opportunities that integrate face-to-face with online components in a sustained learning experience over time. Research from the K-12 field shows that single-session workshops are not effective in sustaining long-term changes in teacher practices. A listing of free or inexpensive online profes-

sional development opportunities can be found on the Adult Literacy Education Wiki at Online Professional Development Opportunities for Instructors of Adult Education and Literacy (Rosen, n.d.).

Program-Based Professional Development

Program-based professional development provides practitioners opportunities within an adult school or program to share ideas about teaching. As long as the professional development is of high quality and uses effective principles of professional development, local opportunities offered by the program may support teachers in benefiting from professional development. Program-based professional development may take the form of study circles, practitioner research, peer coaching or mentoring, or project-based learning, among others. The National Center for the Study of Adult Learning and Literacy (n.d.) has developed an exceptional array of study circle guides that can be downloaded for free. These guides help individuals design and facilitate study circles based upon the National Center for the Study of Adult Learning and Literacy's research and offer opportunities for teachers to examine research implications, judge their applicability, and use the research in their classrooms and programs.

Supported Individual Learning

Self-study is also an effective way to engage in professional development, especially for practitioners who enjoy studying on their own or find it difficult to attend professional development courses. For those who are interested in learning about research design, a resource that may prove useful is *Becoming an Educated Consumer of Research: A Quick Look at the Basics of Research Methodologies and Design* (Dimsdale & Kutner, 2004), which offers insights into research methodology and design. Another resource that may be useful for becoming a wise consumer of scientifically based research is a brochure from the National Institute for literacy titled *What Is Scientifically-Based Research? A Guide for Teachers* (Baxter & Reddy, 2005). A listing of adult literacy practitioner and research journals can be found in the Developing Professional Wisdom and Research area of the Adult Literacy Education Wiki (n.c.d.).

Finding Professional Development Materials Based on Research and Knowledge Gained by Experience

The National Center for the Study of Adult Learning and Literacy (NCSALL) was, for ten years, the only federally funded research and development center focused solely on adult learning. Although NCSALL no longer exists, its efforts in improving practice in educational programs that serve adults with limited literacy and English language skills have been preserved

on its Web site. NCSALL's materials can all be downloaded for free; these materials include teaching and training materials; Web-based videos designed to connect NCSALL research with program practices; research reports, summaries, and briefs; and *Focus on Basics*, a quarterly journal designed for adult literacy practitioners.

The National Institute for Literacy, a federal agency that provides leadership on literacy issues, offers some valuable resources for connecting research and practice. Once solely focused on adult learning, the institute now addresses literacy across the life span. Of particular interest to adult educators is the institute's Literacy Information and Communication System, a dynamic online database of quality resources in adult literacy (National Institute for Literacy, n.d.a). It serves as a single point of access to diverse literacy-related resources and public discussion lists as well as professional development opportunities. New efforts are underway to build upon these resources for the field.

NATIONAL DISCUSSION LISTS

As a part of the Literacy Information and Communication System, the National Institute for Literacy (n.d.b) supports several national discussion lists for individuals interested or working in adult literacy. Established in 1995, the National Institute for Literacy's discussion lists give thousands of literacy stakeholders online opportunities to discuss the literacy field's critical issues; share resources, experiences, and ideas; ask questions of subject experts; and keep up to date on literacy issues. The institute's lists provide a means for free ongoing professional development for practitioners in the following areas: adult literacy professional development, assessment, adult English language learning, family literacy, focus on basics, health and literacy, learning disabilities, poverty, race, women and literacy, technology and literacy, workplace literacy, and other special topics.

Subscribers often report that the lists are instrumental to their practice. In a 2003–2004 evaluation commissioned by the RMC Research Corporation, subscribers reported using the lists to:

- Read research reports and findings in order to keep informed of developments in practice
- Share and access information
- Network and share expertise/experiences
- Gain knowledge about adult learners
- Increase professional knowledge of current news and events
- Acquire information related to classroom instruction and resources
- Strengthen subject knowledge and skills to improve instructional practice
- Learn about and benefit from professional development

- Communicate with experts in the field
- Benefit from aspects of program planning, including assessment and technology
- Learn about professional organizations and agencies

To subscribe to this free resource, go to the institute's Web site and click on "Discussion Lists."

The Adult Literacy Education Wiki is a collaborative online space where practitioners can ask and answer critical questions about adult literacy education practice. It provides practitioners the opportunity to learn about adult literacy, including English language learning, numeracy, and adult basic and secondary education. The purpose of the Adult Literacy Education Wiki is to provide an online forum where practitioners can connect research and practice. It is a community of practice with links to research for practitioners, researchers, learners, and others.

The Association of Adult Literacy Professional Developers (n.d.) updates a list on national professional development initiatives that involve connecting research and practice annually. For more information, visit the publications area of their Web site.

DEGREE PROGRAMS IN ADULT EDUCATION

Graduate programs in adult education are usually targeted at adult literacy practitioners looking to extend their career into other areas of adult literacy, such as professional development, research, administration, or teaching in higher education. In 1999, as a project funded under Pro-Net, Evans and Sherman developed a guide to graduate programs in adult education. This guide was considered a snapshot of graduate programs in adult education that were offered in the United States between 1999 and 2000. An updated listing is currently under development by the National Institute for Literacy.

Further information for learning about the field of adult literacy may be found through the state literacy resource center or professional development provider in your state.

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RESOURCES IN ADULT LITERACY: ANNOTATED BIBLIOGRAPHY

Connecting Research, Policy, and Practice

- Comings, J. (2003). *Establishing an evidence-based adult education system*. NCSALL Occasional Paper. Boston: National Center for the Study of Adult Learning and Literacy. Retrieved December 28, 2006, from http://www.ncsall.net/fileadmin/resources/research/op_comings3.pdf
- Comings describes steps that could lead to the development of an adult education system in which decisions are based on professional wisdom and empirical evidence.
- Comings, J., Garner, B., & Smith, C. (Eds.). (2000–2006). *Review of adult learning and literacy* (Vols. 1–3). National Center for the Study of Adult Learning and Literacy. Retrieved January 6, 2006, from <http://www.ncsall.net/?id=493>
- Essential to understanding current issues, latest research, and best practices in adult literacy, *Review of Adult Learning and Literacy* features articles on critical topics, annotated reviews, and current updates in policy and practice.
- Comings, J., Reder, S., & Sum, A. (2001). *Building a level playing field: The need to expand and improve the national and state adult education and literacy system*. NCSALL Occasional Paper. Boston: National Center for the Study of Adult Learning and Literacy. Retrieved December 28, 2006, from http://www.ncsall.net/fileadmin/resources/research/op_comings2.pdf
- Building a level playing field* describes issues in adult literacy and makes the argument for a greater commitment to expanding and improving the adult education and literacy system. The authors argue that if this commitment is not made, then the nation will have two different populations: one that is successful in the new economy, and one whose lack of education prevents them from achieving success and leaves them on the margins of society.
- Comings, J., Soricone, L., & Santos, M. (2006). *An evidence-based adult education program model appropriate for research*. NCSALL Occasional Paper, Boston: National Center for the Study of Adult Learning and Literacy. Retrieved January 7, 2007, from http://www.ncsall.net/fileadmin/resources/research/op_comings4.pdf
- Comings, Soricone, and Santos synthesize the research, theory, and best practices for adult education and put forward the key elements for organizing and managing a program. The authors use available empirical evidence and professional wisdom to describe a program model useful to practitioners and program administrators for designing programs to help learners achieve their goals.
- Focus on Basics*. [quarterly journal]. (1997–present). Boston: World Education, National Center for the Study of Adult Learning and Literacy. Retrieved December 30, 2006, from <http://www.ncsall.net/index.php?id=31>
- A quarterly publication of the National Center for the Study of Adult Learning and Literacy, *Focus on Basics* shares best practices, current adult learning and literacy

research, and how research is used in practice. Written for a general audience, the journal makes NCSALL research relevant to those working in adult literacy and is useful to others who are interested in learning about adult literacy. Comprised of 31 issues in eight volumes, *Focus on Basics* is timeless in many ways and should serve as a valuable resource for years to come.

Zachary, E. M., & Comings, J. P. (2006). *How do you teach content in adult education? An annotated bibliography*. NCSALL Occasional Paper. Boston: National Center for the Study of Adult Learning and Literacy. Retrieved January 7, 2007, from http://www.ncsall.net/fileadmin/resources/research/op_content_biblio.pdf

Zachary and Comings list resources that identify research and professional wisdom in reading, writing, math and numeracy, English as a second language, general education development, adult learning theory and adult education instruction, and technology and adult education. The book claims not to be exhaustive, but it is thorough. Useful for any adult educator seeking content-based instructional resources, it includes journals relevant to adult literacy education.

Perspectives in Adult Literacy

Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). *Women's ways of knowing: The development of self, voice, and mind*. New York: Basic Books.

Based on a study of 135 women's lives, the authors describe five perspectives from which women view the world and draw conclusions about truth, knowledge, and authority. This book is essential for understanding women as learners when they find their voice and use it to gain greater control over their lives.

The Change Agent. [biannual newspaper]. (1994–present). Boston: World Education, New England Literacy Resource Center. Retrieved January 6, 2007, from <http://www.nelrc.org/changeagent/index.htm>

The Change Agent is a biannual newspaper for adult educators and learners. Originally conceived in 1994 as a tool to educate and mobilize teachers and learners to apply their advocacy skills in response to impending federal funding cutbacks from adult education, it has since promoted social action as an important aspect of adult learning.

Demetron, G. (2005). *Conflicting paradigms in adult literacy education: In quest of a U.S. democratic politics of literacy*. Mahwah, NJ: Lawrence Erlbaum.

Demetron provides an historical perspective of adult literacy theory, policy, and practice and research over the last quarter century. The book focuses on Freirean-based participatory literacy movement, the British-based New Literacy Studies, and its focus on literacy practices in various roles of adults' lives, and the U.S. government's focus on workforce readiness.

Freire, P. (2000). *Pedagogy of the oppressed: 30th anniversary edition*. New York: Continuum International.

This book is essential for understanding adult literacy education from a radical teaching perspective. For the politically driven educator, Paulo Freire described his experience and draws inspiration from his struggles to lift up the oppressed in Brazil, his home country. One of his most reader-friendly writings, *Pedagogy of the Oppressed* discusses how traditional pedagogy works to reinforce the status quo, as well as the "banking model" of education. The chapters outline a philosophy of education that can bring about radical change.

Quigley, A. (1997). *Rethinking literacy education*. San Francisco: Jossey-Bass.

Rethinking literacy education critically challenges assumptions and literacy agendas that have formed efforts in education. Quigley discusses myths, rhetoric, and stereotypes about literacy, the view of adult literacy through the eyes of teachers and program administrators, program recruitment and retention issues, and transformative action for effective change. This book urges practitioners to reconsider their current practices.

Quigley, A. B. (2006). *Building professional pride in literacy*. Malabar, FL: Krieger.

Quigley offers a useful way for practitioners to critically examine our field and our own individual practice by providing tools for us to reflect upon our work as adult educators. He includes a chapter on the history of adult literacy, as well as chapters to guide teachers in reflecting on their teaching philosophy, whether it is liberal, progressive, vocational, humanist, or radical. *Building Professional Pride in Literacy* provides tools for teaching adults, as well as tools for practitioners to examine how we create our own knowledge through practitioner inquiry.

Zepezauer, M. (2004). *Take the rich off welfare*. Cambridge, MA: South End Press.

Zepezauer puts welfare reform into sharp perspective. *Take the Rich off Welfare* is helpful for anyone who challenges the belief that it is our poor who place a burden on society, and useful for adult educators teaching in the welfare reform system.

Resources for Programs

National Adult Education Professional Development Consortium. (n.d.). *State resource library*. Retrieved December 22, 2006, from <http://www.naepdc.org>

While this resource is designed to support state directors of adult education, the state resource library resources are easily adaptable for use in adult literacy programs. This site offers resources in thinking about program planning, marketing and recruitment, curriculum and instruction, distance learning, and more.

Taylor, J., Smith, C., & Bingman, B. (2005). *Program administrators' sourcebook: A resource on NCSALL's research for adult education program administrators*. Cambridge, MA: National Center for the Study of Adult Learning and Literacy. Retrieved May 14, 2007, from <http://www.ncsall.net/fileadmin/resources/teach/PASourcebook.pdf>

Taylor, Smith, and Bingman presents the findings of all NCSALL research related to key challenges for programs, implications for adult literacy programs, and strategies for implementing change based on these implications. This publication is useful for program administrators and others who want simple access to all the findings from NCSALL research and discussion on how administrators might use research to improve programs. The book ends with a foundational chapter entitled "Advocacy for Program Improvement," which highlights access points for influencing policy, roles of administrators in advocacy, areas for advocacy based on NCSALL research, and resources.

U.S. Department of Education, Office of Vocational and Adult Education. (n.d.). *Community partnerships for adult learning*. Retrieved December 15, 2006, from <http://www.c-pal.net>

This is an excellent resource for learning about the need for partnerships in adult literacy services. Beginning with a program self-assessment, the site guides users through a toolbox of resources for building communities, considerations for curriculum and instruction, professional development, workforce development, technology, program management, and more.

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