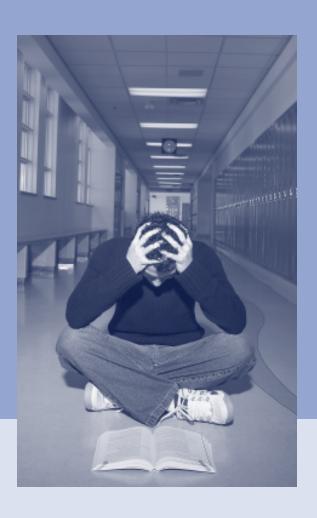
Reading at Risk



The State Response to the Crisis in Adolescent Literacy



The Report of the NASBE Study Group on Middle and High School Literacy Revised Edition

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Executive Summary

resident Bush has called reading the "new civil right." Certainly, such a statement emphasizing the essential nature of reading is warranted. If anything, however, the sentiment understates the indispensableness of reading skills. Reading is a basic human right. An inability to read in today's world is to be consigned to educational, social, and economic failure—an existence entirely devoid of meaningful life, liberty, or the pursuit of happiness.

Yet, despite the fundamental importance of reading to personal fulfillment and two decades of rising academic standards and student achievement, the education system still needs to address one of our nation's most serious problems: that approximately 70 percent of adolescents struggle to read.* The young people enrolled in middle and high school who lack the broad literacy skills to comprehend and learn advanced academic subjects will suffer serious social, emotional, and economic consequences. As a country, the repercussions of a national literacy crisis will seriously hinder this nation's ability to sustain its social, political, and economic well-being in this century.

The scope of this literacy problem is staggering. According to the National Assessment of Education Progress (NAEP), approximately two-thirds of 8th-and 12th-graders read below the proficient level, and one-quarter are unable to read at the most basic level. For minority students, the figures are even more depressing: almost half of African American and Latino 8th-graders read below the basic level. It is estimated that about half of the incoming 9th-graders in urban, high-poverty schools read three years or more below grade level. The simple and sad fact is that very large numbers of students entering secondary school cannot comprehend factual information from

their subject matter texts and struggle to form general understandings, develop interpretations, and make text connections.

The tragic consequences of such low student achievement levels for both individuals and society are well documented. Poor academic skills are consistently linked with higher dropout rates, entrance into the juvenile justice system, and unemployment. Indeed, one-third of all juvenile offenders read below the 4th-grade level and about two-thirds of prison inmates are high school dropouts. The figures overall are disconcerting enough, but the truly disastrous outcomes for portions of the student population segmented by race, ethnicity, and income level reverberate through our national education system. Even more distressing is that the figures reported for grade 12 performance do not reflect the low achievement of those students who have already left the system.

Amid these discouraging statistics, there have been some promising signs of progress in the field of literacy research. Policymakers who recall the "reading wars" of the 1990s may be surprised to learn that there has been a remarkable convergence among researchers about what constitutes effective reading instruction, particularly with regard to teaching adolescent literacy skills.

Unfortunately, there remains a huge gap between these proven practices and their adoption among educators, where what has remained unchanged in too many secondary schools and classrooms is the nature of teaching reading itself. States can no longer afford to neglect taking to scale those practices that are well-documented and that have been demonstrated to be effective.

^{*} Sources for all data and other information contained in this summary may be found in the chapters that follow and in the endnotes beginning on page 70.

The first place for policymakers to start is understanding what works and then designing the overall system to ensure that the knowledge about effective practice is applied to all content areas for all students. Specifically, there is general consensus among researchers about the five major factors for advanced literacy skills and the ability of adolescents to understand and learn from what they read: speed and accuracy when reading text, vocabulary, background knowledge, comprehension, and motivation.

What becomes apparent, however, after examining the scope of the problem, understanding the research, and looking over the wide breach between research and practice, is that it will take a full-scale effort by states to truly address this issue. Despite the indisputable importance of literacy instruction, however, NASBE's Study Group on Middle and Secondary School Literacy found that only a very few states have begun to think systematically about how state policies and practice should support a new approach to the education of adolescents. Rather, improvements have more commonly been made at the margins, with scattered sites served by a disparate collection of programs while most secondary schools remain impervious to significant change. It has been easier to focus attention on the early grades and hope that reading successes in the primary years will translate to resolving the problems in middle and high schools.

States, specifically state boards of education, have a significant role to play in making student literacy a priority for all students at all grade levels.

Simply put, literacy is the linchpin of standards-based reform. As literacy skills improve, student achievement rises not only in reading and writing but across the curriculum spectrum, a benefit that has profound consequences for the ultimate success of standards-based reform. Indeed, a state literacy strategy incorporates those elements considered essential in the design of the larger standards-based reforms efforts. Thus, a key finding of the Study Group 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.

The importance of connecting reading and writing across the curriculum has never been more clear.

Indeed, comprehension instruction that promotes strategic behaviors to encourage active and purposeful reading and writing (something with which most struggling readers have trouble) should not only be taught explicitly, it should be incorporated into content area teaching, beginning in the early grades and continuing through high school. This is especially important for low-achieving students.

Of course, any state plan to improve adolescent literacy must be considered within the state's overall accountability system. Fortunately, adolescent literacy goes to the essence of school improvement: fundamentally transforming curriculum and instruction and applying the important principles of research-based practice towards the goal of all students achieving high standards.

The transformation of the day-to-day practice of our middle and secondary schools begins with the fundamentals of school effectiveness and good instruction and then goes a step beyond—to continuously monitor, course correct, and infuse our growing knowledge base about teaching students to read and write well. Nothing less than a new paradigm is required—one based on joint problem solving, collaborative practice, and collective accountability that engages students in purposeful reading and writing in the service of subject area learning. State boards of education must craft a comprehensive state literacy initiative that jettisons the old system for a new vision of teaching and learning for all students.

To accomplish this, states must take a broad system approach to ensuring that students have the literacy skills they need by strategically attending to: 1) alignment of content standards, curricula, and assessments; 2) development of a high-quality teacher workforce that understands the importance of literacy instruction and how to do it; 3) use of data to identify student needs and monitor the efficacy of instruction; 4) development of district literacy plans that use research-based literacy support strategies in all content areas; and 5) design of organizational structures and leader-ship capacities to sustain and enact these elements strategically. All of these elements should be addressed in a state's comprehensive literacy strategy.

The following are the steps states need to take in implementing a literacy plan.

STEP #1: Set state literacy goals and standards, ensuring alignment with curricula and assessments, and raising literacy expectations across the curriculum for all students in all grades.

What we want students to do by graduation must inform what goes on at all grade levels. Hence, it is essential to develop state standards that reflect developmental literacy skills and to design curricula and instruction grounded in the research about effective practice. While the majority of states now have standards that meet our common core criteria, policymakers must ensure that proficiency standards are sufficiently rigorous—something called into question by the significant gap that exists in some states between how many students are meeting state reading standards versus how many of those same students are reaching proficiency on NAEP. In addition, most states continue to lag behind in developing curricula to accompany standards.

STEP #2: Ensure that teachers have the preparation and professional development to provide effective, content-based literacy instruction.

Teachers must have considerable knowledge to use research-based literacy strategies in content-area instruction. States have only recently begun to redefine the requirements for middle and secondary teachers concerning knowledge of reading strategy instruction. Although revised standards may reflect sophisticated literacy skills inherent in mastering content standard, states typically need to do much more to ensure that content teachers know about the textual demands of their subjects and have the ongoing supports to build literacy skills appropriate to the requirements of the discipline.

STEP #3: Strategically use data to identify student needs, design cohesive policies, and evaluate quality of implementation and impact.

The story of adolescent literacy begins with data—good data based on multiple indicators that can answer a range of essential questions for different purposes. States typically collect summative data based on state assessments and high school exit exams, which can be used to evaluate overall district and school reading achievement and to compare relative performance by different units of analysis such as school, district, or

subgroup (race and ethnicity, language, gender, disability, and income level). States need to use a number of data sources on literacy performance given the variability in reading performance outcomes across assessments.

STEP #4: Require the development of district and school literacy plans that infuse research-based literacy support strategies in all content areas.

Redesigning standard practice in middle and high schools is no easy task. It requires leveraging policies to ensure that districts focus on equipping and supporting schools to infuse research-based instructional practices as part of a schoolwide focus. It embodies planned system-wide elements—which have been shown to be effective in studies of high performing districts—including: creating a climate of urgency regarding improving reading achievement; fostering a culture of shared accountability for student learning; designing the central office as a support and service organization for schools; providing a high level of resources devoted to professional development on research-based practice; and equipping leaders to exercise data-driven instructional leadership.

State policies should build district capacity to help teachers and leaders work collaboratively to pursue viable solutions to advance the literacy levels of adolescent learners. It begins with designing coherent district and school literacy plans that can provide teachers and school leaders with the tools, resources, and training to provide literacy instruction within content-area teaching. Districts and schools should design comprehensive programs and supports based on detailed information on students' needs. State policies should also develop accountability and oversight mechanisms to ensure that programs are implemented effectively and result in improving students' reading skills and content learning.

<u>STEP #5</u>: Provide districts and schools with funding, supports, and resources.

Schoolwide literacy initiatives require sufficient funds to provide schools and teachers with the necessary resources and supports to differentiate instruction for students across abilities and grades. There are numerous implications for resource-related decisions on staffing, time, instructional organization, assessments, curriculum, textbooks and materials, and professional development. It is largely impossible for schools to implement schoolwide literacy interventions without the funding and resources to go beyond day-to-day operations.

Moreover, states must target additional funds and resources to high-poverty districts and schools where large numbers of students struggle with foundational literacy. Because large numbers of minority and low-income students perform below basic on state and national reading assessments, politicians and the public must be willing to commit in this area if they are serious about the goal of high levels of performance for all students.

STEP #6: Provide state guidance and oversight to ensure strong implementation of comprehensive quality literacy programs.

States need to craft detailed guidance on the key specifications for district and school-based literacy plans. To ensure the quality of programs, there should be well-defined expectations for what elements districts and schools need to address in order to support quality reading instruction. Rhode Island, for example, requires schools and districts to report to the state the reading level of all students who fail to attain proficiency on reading state assessments; submit school improvement plans and district strategic plans to the state that outline the mechanisms by which students who are reading below grade level will attain at least grade-level abilities; and conduct periodic district evaluations based on student performance of the effectiveness of their literacy program.

Accomplishing all these aspects of a state plan will not be easy. It will require strong state leadership to enlist the multiple constituencies in framing a vision and setting the public agenda. It will also require finding common ground among the reading experts, administrators, and practitioners who will implement state policies, and the key players who can deliver the political and social capital. In addition to state and local boards of education, planning must include governors, legislatures, members of the business community, professional associations, universities, and most importantly, the professions, particularly teachers. People support what helps them and what they help create—and they resist what they don't understand or value. States must work closely with their teachers and administrators to identify the needs of struggling readers and to identify solutions that are viable for districts and schools.

The problem of low levels of literacy among our nation's adolescents is enormous—and getting worse because the stakes are climbing higher. This nation is confronted with the realities of low literacy levels among many young adults, while at the same time facing the growing imperative of providing everyone with a high-level education that includes training through and beyond high school. Moreover, the literacy crisis threatens to derail the ongoing implementation of standards-based reforms and to regress on advances in academic achievement that have already been made. The goals of improving adolescent literacy and achieving success in standards-based reform are inextricably intertwined.

Given the scope and seriousness of the problem, the Study Group urges state policymakers to become more engaged in developing and overseeing comprehensive literacy policies that address the reading needs of students along the entire K-12 continuum. The current low level of adolescent literacy is not a problem that can be solved in isolation with some extra tutoring or supplementary programs for those unable to read well—it will take a concerted statewide policy and program effort that reaches deep into districts and the instructional practices of teachers across the curriculum. The challenges to success are daunting, but the alternative is too bleak to contemplate.

* * *

Note: Please refer to the "State Policymaker's Literacy Checklist" on page 56 of this report for a more detailed listing of the actions states should take in tackling this important issue.

Preface

t is widely recognized that young people in America need sophisticated literacy skills to negotiate a rapidly changing global and knowledge-based economy. Those who do not leave public education with the ability to read, write, speak, and think effectively will be ill-equipped to meet the demands of employment, advanced training, and civic participation. Yet, while we acknowledge the importance of educating our citizens to high levels of knowledge and skill, we do not yet possess systematic strategies to one of our nation's most serious problems: that approximately 70 percent of adolescents struggle to read.1 Young people enrolled in middle and high school who lack the broad literacy skills to navigate complex content-area learning will suffer serious social, emotional, and economic consequences. And collectively, the repercussions of a national literacy crisis will seriously hinder this nation's ability to sustain its economy and well-being into the 21st century.

In February 2005, the National Association of State Boards of Education (NASBE) launched its Study Group on Middle and Secondary School Literacy, convening state board members and other experts from 22 states to examine the issue of ensuring that all students have the advanced literacy skills needed to meet rigorous academic standards. As the Study Group discussed and synthesized the reading research and its wide ranging implications for the education system, the Group's members found they needed to define more explicitly how we would approach the crisis of low literacy achievement for large numbers of older students.

First, the Study Group wanted to acknowledge that the differences in achievement and outcomes (e.g., graduation) documented for students who differ by ethnicity, language, and income were not independent of major disparities in educational systems across all levels—

classrooms, schools, districts, and states. Indeed, many youth of color attend schools where they receive instruction from a greater number of inexperienced and poorly qualified teachers, exacerbating, if not causing, low literacy skills.² All this led the Study Group, as befits a national organization whose members are responsible for the education of all students in their state, to recognize the imperative for state policymakers to eliminate the disparities in the degree to which different groups have access to quality reading instruction and supports.

Second, the Study Group wanted to emphasize the importance of literacy instruction beyond the instituting of technical exercises and routines leading to decoding text. From the teacher's perspective, it's about understanding the learner and his or her unique talents and strengths, about how to help students develop a voice that enables them to truly be a participant in their own learning. To cultivate the kind of education that the changing world now demands requires furnishing environments that promote a sense of belonging and that allow dialogue, collaborative expression of personal views, and support for unique abilities and talents.³ For students, it's about the empowering role of literacy as a fundamental aspect of communication that enables individuals to inform themselves, to inform others, to make informed choices, and to clearly express ideas and emotions. It is this aspect of literacy—along with the equally empowering act of taking on a page of text and "getting it," so that success builds on success—that is at the core of students being engaged in schooling and finding meaning and direction in what they learn.

Third, the members sought to provide the Group's guidance for strengthening literacy development of adolescents within the context of the standards-based reform efforts underway in their states. Similar to K-3

early reading initiatives, the benefits stemming from middle and secondary schoolwide initiatives are likely to produce stronger outcomes than applying strategies piecemeal. Schools must support literacy in all classrooms—whether in mathematics, social studies, or language arts—and in so doing, teachers need to know their students and how to instruct and apply key strategies to foster subject matter learning. The Group decided to take a "systems" approach to ensuring that students have the requisite literacy skills to meet high standards by strategically attending to: 1) alignment of content standards, curricula, and assessments; 2) use of data to identify student needs and monitor the efficacy of instruction; 3) use of research-based literacy support strategies in all content areas; 4) quality professional development and supports; and 5) design of organizational structures and leadership capacities to sustain and enact these elements strategically.

Fourth, the Study Group members recognized the larger social and economic concerns that many educators and social scientists contend must be addressed in order to solve the pressing problems of low literacy rates. The members held that while this may be true, there is still a great deal that the education system can and must do. While low literacy levels—with their attendant social and cultural underpinnings—are not a new situation, the evolving global information age has placed new demands on schools to educate students to high levels of academic proficiency that cannot be ignored.

Finally, the Study Group underscored the importance of ensuring that all students—at all grade levels—acquire the literacy skills needed to meet the challenges people will face as 21st century workers and citizens. There are two imperatives at work: first, a moral imperative because of the dire individual consequences for students who lack advanced literacy skills; and second, an economic imperative, because the nation's economic health depends upon our ability to educate its citizenry.

Early on, the Study Group found that only a few states have begun to think systematically about how state policies and practices can support a new approach to the education of adolescents. Efforts have more commonly been made at the margins, with scattered sites served by a disparate collection of programs, while most secondary schools remain impervious to significant change. Despite our considerable knowledge about what works, there is a substantial breach between research and practice—and a marked reluctance on the part of many middle and high schools to provide content-based literacy support. For the most part, it has been easier for policymakers and educators alike to focus attention on the early grades and hope that success in the primary years will translate to resolving the problems in our middle and high schools.

The Study Group intended to learn not only from national experts and research, but also from the experiences of the states and our individual members who have begun the daunting challenge of crafting and implementing state-level policies to bolster middle and secondary school literacy. After viewing the data and the enormity of the task, the Study Group posed the key questions that would help define its approach and final recommendations:

- What does the research tell us?
- What are primary implications for practice and what are the essential considerations for building capacity of districts and schools?
- What are the implications for preparing and supporting teachers?
- What are the implications for state and local planning?

The world is changing at an incredible pace; schools must prepare students for a vastly different world characterized by a shift from an industrial economy to a postindustrial economy based on knowledge. And there is no reason to believe that future changes will be less dramatic than those already observed. Leaders at all levels recognize the urgency in transforming middle and high schools to ensure that the nation has a highly literate and technologically fluent workforce. The intent of this report is to help policymakers construct frameworks in their states and districts that can bring real solutions to literacy and learning problems to all schools and students.

Chapter 1. The Nature and Scope of the Problem

wenty years have passed since A Nation at Risk and the introduction of standards-based reform—considered "Act I" according to Carnevale and Desrochers in their examination of the unfolding economic, demographic, and educational context of our time.4 Standards-based reform has now been around long enough so that some states can point to significant progress in helping all groups of students improve their achievement levels. Increasingly, however, the nation is confronted with the realities of low literacy levels among many young adults, while at the same time facing the growing imperative of providing everyone with a high-level education that includes training through and beyond high school. These authors point to the unforgiving pace of economic and demographic changes that will not permit another two decades for "Act II"—the implementation of high standards with appropriate curricula and assessments.

The scope of the literacy problem is staggering. According to the National Assessment of Education Progress (NAEP), approximately two-thirds of 8th-

and 12th-graders read below the proficient level. If that's not distressing enough, about one-quarter are unable to read at the most basic level. These students performed substantially below grade level, demonstrating only miniscule to partial mastery of the prerequisite knowledge and skills fundamental for success in their respective grades. For minority students, the figures are even more disturbing: almost half of African American and Latino 8th-graders read below basic level.⁵ Accordingly, it is estimated that about half of the incoming 9th-graders in urban, high-poverty schools read three years or more below grade level.6 This means that large numbers of entering students cannot comprehend factual information from their subject matter texts and struggle to form general understandings, develop interpretations, and make text connections.7

Despite the rising demands for advanced literacy and communication skills, reading performance as measured by NAEP has stagnated over the past three decades.⁸ The average reading performance of 17-year-olds has

Table 1. NAEP 2005 Grade 8 Data: Percentage Achieving at Each Level

Race/Ethnicity	< Basic	Basic	Proficient	Advanced
White	19	43	34	3
African American	49	40	11	*
Latino	45	41	13	1
Asian/Pacific Island	der 21	40	34	5
American Indian/ Alaskan Eskimo	39	43	17	1
All	27	42	28	3

^{*} Rounds to zero

remained relatively constant: average reading skills demonstrated on 1999 NAEP exams are no higher than they were on the NAEP tests in 1971, and literacy gaps among racial and ethnic groups persist. About 28 percent of 12th-grade public school students scored below the "basic" level on NAEP 2002 reading assessment—a figure that excludes the large number of students who drop out of high school prior to 12th-grade and who characteristically have limited reading skills. Similarly, the performance of 8th-graders has shown little change: their performance from 2002 to 2003 declined by one point; wide disparities across subgroups remained largely the same (see Table 1 on page 10). 10

We must acknowledge what these numbers mean: not only are large numbers of all students performing below proficient, the numbers have profound implications for the future well-being of students from different cultural and racial backgrounds. Only 13 percent of African American, 16 percent of Latino, and 17 percent of Native Americans are reading at or above proficient level compared to 41 percent of white 8th-graders.

Nor does the long-term trend for 8th- and 12th-graders, as shown by the 2004 NAEP reading scores, provide any reason for optimism. After small gains in the early years of NAEP testing, the 8th-grade scores have been essentially flat. Twelfth-grade scores increased during the 1980s, but have dropped again over the last decade until the average score today is the same as it was in 1971 (see Table 2, below).

And NAEP is not the only yardstick showing these problems. Indeed, fewer than half of all students meet their state's reading proficiency standards. A 2004 report from RAND Education identifies major concerns in meeting the No Child Left Behind (NCLB)

goal of 100 percent proficiency of all students. The report states that fewer than half of all students reach proficiency standards for reading on either state assessments or on the NAEP. Likewise, the disparities in the achievement of subgroups of students pose a considerable challenge to schools and districts in reaching the national proficiency goal. These differences lead to continued under-representation of individuals from different ethnic and socio-economic groups in professions that depend on post-secondary education. The authors conclude that "simply mandating standards and assessments is not going to guarantee success," and that "policymakers, schools, and teachers need to step up and accept the orphaned responsibility of teaching students to read to learn." ¹¹

In summary, only about one-third of 8th- and 12th-graders read at or above the proficient level as measured by NAEP. That is, only this small proportion of students can demonstrate solid academic performance, competency over challenging subject matter, application of that knowledge to real-world situations, and the analytical skills appropriate to the content. The knowledge-based global economy demands more from our schools: no longer is it sufficient to adequately prepare only one out of every three young people for college-level work. In the coming decade, close to two-thirds of the newly created jobs will require some form of postsecondary education. The comments of the newly created jobs will require some form of postsecondary education.

The consequences for both individuals and society of such low student achievement levels are well documented. Poor academic skills are consistently linked with higher dropout rates, entrance into the juvenile justice system, and unemployment. Studies show that the problem disproportionately affects minorities: according to an Urban Institute report, half of all African American, Latino, and Native American

Table 2. Long-Term Trend Average Reading Scale Scores

	<u>1971</u>	<u>1980</u>	<u>1992</u>	<u>2004</u>
12th Graders	285	285	290	285
8th Graders	255	258	260	259

students who entered high school in 2000 did not graduate in 2004.¹⁴ The data presented below make it clear that the negative impact of low literacy rates cuts a wide swath of poor outcomes for young people:

- High school dropouts are four times more likely than college graduates to be unemployed and 3.5 times more likely to be arrested in their lifetime.
- In the face of stiff competition for jobs and markets, more than 80 percent of American businesses complain that high school graduates lack adequate reading and writing skills and spend more than \$60 billion per year to bolster employees' basic competencies.
- One-third of all juvenile offenders read below the 4th-grade level and two-thirds of prison inmates are high school dropouts.
- Only about 32 percent of high school graduates are adequately prepared for college, and of those who matriculate, more than half must take remedial courses.
- U.S. 11th graders have placed close to the bottom, behind students from the Philippines, Indonesia, Brazil, and other developing nations, on international comparisons of performance on reading assessments.
- Seventy percent of unemployed Americans, aged 25 to 64, read at the two lowest literacy levels.
 These adults cannot read a bus schedule or write a letter explaining an error on a credit card bill.²⁰

Why Adolescent Readers Struggle to Read

There are a variety of reasons why many middle and high school students struggle to read. First, it is important to recognize the breadth of literacy skills and strategies that older students must use to grapple with texts that are expository, dense, and full of new and difficult vocabulary. To meet the performance standards across content areas, students need to transact meaning from disciplines that have unique organizational structures and concepts. Students are expected to locate and paraphrase information found in lengthy, complex passages in

texts dealing with literature, social studies, science, and math. Competencies at this level include the ability to connect interrelated ideas, synthesize information, and draw conclusions about main ideas and the author's purpose.

Second, studies that deconstruct students' low performance on state reading assessments show that struggling readers manifest a number of distinctive patterns of performance that contribute to their belowstandard scores. Some students read haltingly, word by word, contributing to low reading fluency, whereas other students were strong in word identification and fluency, yet struggled with deriving meaning from texts. Students within this group of "automatic word callers" demonstrated difficulty in word meaning and comprehension for different reasons. Many in this group are second language learners who are still learning the complexities of English and developing the vocabulary necessary to read and understand new material, while others with adequate decoding skills fail to read for meaning. These findings serve as a caution to policymakers and administrators who may be inclined to intervene uniformly across all students who score "below standard" on standardized reading assessments. 21

Third, 4th-grade marks a transition point from learning to read to reading to learn. Students are expected to read and comprehend greater amounts of complex expository material each year. Hence, the primacy of early literacy has been well established: students who are not reading moderately well by grade 3 will likely encounter difficulties reading throughout their school career.²² The good news is that scientists estimate that with proper instruction, fully 95 percent of all children can be taught initial reading.²³ We know that even children who begin with a disadvantage in letter, sound, word, and concept knowledge can learn to read and write well with explicit, systematic instruction in key areas: the phonological system (phonemic awareness and phonics); fluency and vocabulary; and comprehension.

The bad news is that after grade 4, far too many older children are not getting the individual instruction (beyond incidental teaching) they need to read increasingly content-area texts. This apparent stall in most

The Link between the Achievement Gap and Literacy

There is no doubt that achievement gaps show up very early, well before children get to school. Reading achievement data show that even at the beginning of kindergarten, children from the lowest socio-economic status (SES) quintile were already substantially behind better-off peers. And as children progress through school, it is clear that low-income children, taken as a group, are more likely to become less skillful readers than those from higher income families.*

What is important to remember, however, is that the socio-economic characteristics affecting students' background knowledge and vocabulary development do not stand independent of other important schoolbased factors that are closely linked with students' reading competency. Based on an analysis of survey data on how the black-white gap shifts in relation to age-related changes, Phillips concludes that "taken together, we estimate that at least half of the blackwhite gap that exists at the end of the 12th grade can be attributed to the gap that already existed at the beginning of 1st grade. The remainder of the gap seems to emerge during the school years."²⁸ It is clear, then, that disparities in achievement have roots both in out-of-school experiences and deep in the structures of schools.²⁹ As the Education Trust points out, students who need more often get less. For example:

- Findings indicate that school specific factors (e.g., rigor of curriculum, teacher preparation, class size) tend to exacerbate differences found in students' home environments. For example, classes with higher numbers of minority and limited-English proficient students were more likely to have a class size of 25 or greater.
- Similarly, the percentage of secondary-level core courses taught by a teacher without at least a minor in that field was significantly greater in high-minority (29 percent of courses) versus lowminority schools (21 percent); the disparity was even greater in relation to income, with highpoverty schools having more than twice as many

- courses taught by an out-of-field teacher as low-poverty schools.
- Studies by Ferguson speak to possible underlying considerations that may further impede achievement: the neediest students are more likely to have limited reading material in schools as well as in homes, are less likely to be enrolled in advanced placement and honors classes, and more often experience lower grade point averages and lower expectations.

While all students benefit from excellent instruction, in general, the more risk factors children have, the greater is the need for more intensive support and explicit instruction. In particular, the transition to reading to learn is critical for many minority students as the press for vocabulary and prior knowledge become more acute. Second language learners often face considerable challenges in dealing with text structures and vocabulary and need more explicit supports to comprehend subject matter texts. Unfortunately for culturally and linguistically diverse student groups, there is a serious lack of districts that have systems in place to address the needs of students who enter middle and high schools with significant reading problems. Gaps in reading achievement are exacerbated by entrenched ways of thinking, inadequate approaches to literacy instruction, and inconsequential teacher-student interactions. Despite increased diversity and student mobility, systems are underprepared in terms of personnel and instructional materials.

Any serious intent to raise adolescent literacy must challenge the "business as usual approach," which will continue to fail large numbers of disenfranchised students. We must confront the fact that testing alone without comparable intensive efforts to improve the quality of instruction will not suffice to close reading gaps. Nor can we find comprehensive solutions without considering the core beliefs and values needed to make changes in teacher preparation, professional development, textbooks, curricula, and assessment.

^{*} It should also be noted that while reading difficulties are exacerbated by issues of poverty, struggling readers and comprehenders is an issue that cuts across SES. We only have to look at the small numbers of students performing at the advanced levels of NAEP to see that the adolescent reading problem is prevalent in large cities, small cities and towns, suburbs, and exurbs across the country.

children's achievement at grade 4 has been referred to as the "4th-grade slump" by Jeanne Chall and her colleagues and, more recently, the "4th-grade plunge" by the American Federation of Teachers. ²⁴ Moreover, there are indications that on average, students lose ground in upper grades: national scores decline after 4th grade.

What we know is that the focus on early reading is necessary, but not sufficient. Reading for meaning and applying effective strategies to comprehend text does not happen automatically upon learning how to crack the code. Yet literacy support at upper levels is limited to remedial and special education programs, and many hold the false conception that if reading is addressed adequately at lower levels there will be no need to address literacy in the middle and high schools. While good early reading instruction means that fewer students will later need intensive support for basic writing conventions and decoding, it will not eliminate the need for ongoing support to ensure that all students have the skills to understand content-area texts in the upper grades.

But as we have seen from the NAEP and other data, millions of young people lack essential literacy skills. Sadly, this problem only snowballs, because without these skills and without the supports to deal with demanding subject matter texts, students lose the motivation and self-efficacy so important to maintaining their investment in learning. Studies examining the differences between low- and high-performing readers in the United States suggest that one of the strongest discriminating factors is how a student perceives himself or herself as a reader.²⁵

Finally, many districts and schools have not systematically cultivated teaching practice nor provided the structural supports that promote using those research-based reading practices that have been found to enhance reading comprehension (that is, helping students learn strategies such as summarizing, generating questions, and using semantic and graphic organizers). And while new statewide standards lean heavily on literacy requirements in asking students to analyze and explain content material, they don't generally reflect the specific literacy skills students must have to deal with grade-level content material, nor does traditional classroom practice provide the supports or

concrete demonstrations students need to expand linguistic and semantic concepts and develop skills in applying comprehension strategies.

There are several reasons behind this lack of literacy instruction, but one thing is abundantly clear: such instruction necessitates having well-prepared teachers who have adequate knowledge of language and reading psychology and can manage reading programs based on assessment. Teachers need extensive training and guidance to identify which skills to emphasize and how to teach them to specific children. Yet recent studies and surveys of teacher knowledge about reading development and difficulties show that many teachers are not prepared to teach reading. And despite the importance and complexity of reading, universities and licensing programs have seriously underestimated the knowledge and training teachers need. A single course is often all that is required. The persistent chasm between research and practice has dire consequences for students at all levels.

As a literacy report from The Education Alliance at Brown University states, "Despite what we know, there is a large breach between research and practice—and a marked reluctance on the part of many middle and high schools to focus on literacy support at the district, school, or even departmental level. And, therefore, despite the urgency, there is limited understanding of how to bring these effective literacy strategies to life in the content-area classroom in ways that will make a positive difference for students."²⁶

Role of States

States have a significant role to play in making improving student literacy a priority for all students at all grade levels. States have been called upon to focus on early literacy in the landmark No Child Left Behind Act. Yet, despite considerable investment, some eight million students in grades 4 through 12 read below the NAEP basic standards for their grade level.³³ At the same time, these national figures obscure the extraordinary variability in the number of students needing help across and within states.

For example (using state data from the 2003 NAEP 8th-grade reading scores), in the highest-performing states, close to 40 percent or more of all students

The High School Completion Crisis

In recent years, researchers have discovered that the dropout problem is exponentially worse than previously thought. About 1.3 million students nationwide drop out of school between 8th and 12th grades. According to a joint study by The Civil Rights Project at Harvard University and the Urban Institute, only 68% of 9th-grade students complete high school on time with a regular diploma. Graduation rates for diverse student populations are even lower. African American, Latino, and Native American Indians graduate at rates of 50%, 53%, and 51%, respectively. For minority males, the rates drop below 50%, and in large minority urban districts these figures dip below 40%.

This issue has remained somewhat masked because of varying definitions of "dropout" and difficulties in recordkeeping at the school level. A number of reports have documented substantial disparities in the state-reported graduation rates and those calculated externally by independent researchers. The Education Trust released a 2005 report that raised the real concern that the lack of accurate state reports on graduation rates seriously impairs state reform efforts. Although states are required to report statewide graduate rate data to the U.S. Department of Education, three states reported no graduation rate data and another seven did not disaggregate graduation data by students' race, ethnicity, or socioeconomic status. Moreover, for the states that reported, the graduation rates appeared considerably higher than estimates based on external, independent analyses. These studies consistently report alarming statistics—that nationally one-third of all high school students don't graduate on time, with significantly lower rates for students of colors.

For example, Christopher Swanson of the Urban Institute created an index called the Cumulative Promotion Index (CPI)³⁸ using enrollment and

diploma count data from the U.S. Department of Education. Comparison of the state reported graduation rate and the Urban Institute's CPI yielded wide disparities for many states—some as much as a 33-percentage point difference. Moreover, when the CPI is calculated for students of color, the discrepancy between state reported graduation rates and those for minority students is even greater.

There has been increasing attention to the need to standardize how graduation rates are calculated and to ensure accurate reports for subgroup populations. States will need integrated data systems to calculate a cohort graduation rate—one that tracks the progress of a defined group of students from the first day they enter high school to the day they receive a regular high school diploma.

Recently, however, researchers at Johns Hopkins University have taken a no-nonsense approach to this problem, and their results are stunning. Simply put, the Johns Hopkins researchers went to the U.S. Department of Education's Common Core of Data for enrollment numbers for every high school in the country with at least 300 students. Then they compared the number of students enrolled as freshmen (or as 10th-graders in high school with a 10–12 grade configuration) with the number still enrolled as seniors to gauge a school's "promoting power." Nearly one in five high schools across the country (about 2,000) has such a weak promoting power that the senior class is 60% or less the size of the freshman (or 10th-grade) class. And, nearly two-thirds of high schools that are at least 90% minority have senior classes that are less than 60% the size of the freshman class.

Where do all these students go? Many simply end up on the streets, unemployed or in a life of intermittent, low-paying employment. And far too many will end up in prison, costing taxpayers much more than the extra support these young people would need to stay in school and succeed.

perform in the proficient or above categories. In the lowest performing states, the percentage of students scoring proficient or above is barely half that. To put it another way, in the lowest performing states, between 70 and 80 percent of all students scored in the basic or below basic categories.

However, the differences within states are even more alarming. Even if a state performs well on national and international assessments, one will find at least a 35-percentage point difference between the percent of white 8th-graders and the percent of 8th-graders in the state's largest minority group scoring at the basic level. ³⁴ In Wisconsin, for instance—one of the states with a score above the national average—while 17 percent of white students scored below basic, fully 60 percent of African American students scored below basic, and only 8 percent scored at proficient or above. Next door in Minnesota, another of the higher scoring states, again 17 percent of white students scored below basic, while nearly 50 percent of African American students scored at that level.

At the district level, Balfanz, McPartland, and Shaw from the Center for Social Organization of Schools, Johns Hopkins University, report that striking differences can be found on achievement levels obtained by students in high and low poverty districts on tests of international comparisons, such as the Trends in International Mathematics and Science Study (TIMSS).35 While numerous reports point to the overall sagging performance of older U.S. students in comparison to other developed countries, the results have been found to be highly variable depending on the poverty level of the participating school districts. Low-poverty districts (5 percent of students qualify for free lunch) perform comparably to top performing countries in the world, whereas high-poverty districts (70 percent qualify for free lunch) consistently ranked alongside the lower performing countries. The authors contend that states with a high degree of residential segregation and concentrated poverty can expect wide differences between districts regarding the percentage of high school students needing extra help in reading.

These data point out the complexity of the adolescent literacy problem. The figures overall are disconcerting enough, but the truly disastrous outcomes for portions of the student population by race, ethnicity, and income level reverberates through our national educational system. And even more worrisome is that the figures reported for grade 12 performance do not reflect the low achievement of those students who have already left the system. (See textbox on The High School Completion Crisis on page 15.)

The Need for State Policies

There is widespread recognition of the significant role states must play in making improved student literacy a priority for all students across all grades. Yet the authors of the RAND report cited earlier concluded that "simply mandating standards and assessments is not going to guarantee success" and that policymakers, schools, and teachers need to step up and accept the "orphaned responsibility of teaching students to read to learn."

The Study Group's findings indicate that only a very few states have begun to think systematically about how state policies and practice should support a new approach to the education of adolescents. Rather, improvements have more commonly been made at the margins, with scattered sites served by a disparate collection of programs—while most secondary schools remain impervious to significant change. As noted earlier, it has been easier to focus attention on the early grades and hope that success in the primary years will translate to resolving the problems in middle and high schools.

Policymakers across the nation have reached a consensus that a major goal of all schools at all grade levels must be improving student literacy. In order to raise the graduation rate and close achievement gaps, instruction and school organization needs to be redesigned to incorporate advanced literacy skills into all subject areas. State policymakers need to plan a comprehensive approach for providing strategic and schoolwide interventions to advance literacy and commit to ensuring that all students have access to the teachers, resources, and supports they need.

In summary, if there are just three messages readers take away from this report, the Study Group hopes they would be these:

 The problem of low levels of literacy among our nation's adolescents is enormous—and getting worse because the stakes are climbing higher;

- The goals of improving adolescent literacy and achieving success in standards-based reform are inextricably intertwined; and
- Low levels of adolescent literacy is not a problem that can be solved in isolation with some extra tutoring or supplementary programs for those unable to read well—it will take a concerted statewide policy and program effort that reaches deep into districts and the instructional practices of teachers across the curriculum.

Today, a look across the country reveals many differences in how much and how effectively states have seriously addressed raising literacy levels for all students. Only a handful of states have begun serious efforts to use the rich knowledge base that exists on advancing literacy skills for older readers. The chapters that follow and the "Policymaker's Literacy Checklist" on page 56 are intended to help guide more states down the important road of ensuring that students of all ages have the support they need to become accomplished readers.

Governors Address Adolescent Literacy

The National Governors Association (NGA) Center for Best Practices, in its 2005 report, *Reading to Achieve: A Governor's Guide to Adolescent Literacy*, recommends five strategies state leaders can use to improve adolescent literacy achievement. These include:

- Build support for a state focus on adolescent literacy, including developing a state literacy report
 card, designating a state office for adolescent literacy, and establishing an adolescent literacy
 advisory panel.
- Raise literacy expectations across grades and curricula, including strengthening literacy expectations across grade levels and content areas and aligning them with curricula, assessment, and professional development activities.
- Encourage and support school and district literacy plans by providing guidance and resources to localities and requiring at a minimum that struggling readers be identified and given help.
- Build educators' capacity to provide adolescent literacy instruction through, for example, strengthening teacher licensure and preparation requirements, offering specialized endorsements in adolescent literacy for content area teachers, or providing schoolwide professional development in literacy instruction.
- Measure progress in adolescent literacy at the school, district, and state levels, including developing better data sources and tools in order to access longitudinal student literacy performance information.

Adapted from NGA Center for Best Practices, *Reading to Achieve: A Governor's Guide to Adolescent Literacy* (Washington, DC: National Governors Association, 2005). Available online at www.nga.org/Files/pdf/0510G0VGUIDELITERACY.PDF.

Chapter 2. Literacy Research and Its Implications for State Policy

his chapter provides a review of the current research on the major factors involved in adolescent literacy—research, it should be noted, that is very widely accepted—and points to ways this knowledge should help shape effective education policies. Before launching into the specifics of the research, however, the Study Group would like to emphasize several overarching themes that emerge from the research that are particularly important to policymakers.

The first theme, and a primary premise of this report, is that *literacy is the linchpin of standards-based reform:* indeed, there is broad consensus among researchers that the explicit instruction of literacy skills in the context of content-area learning supports student achievement not only in reading and writing, but across the curriculum. The good news for policymakers is that the conclusions regarding what works to advance adolescent literacy reinforce our broad knowledge of school reform and effective practice. Successful state and district literacy initiatives start with the fundamentals of those essential components that have been consistently linked with high student achievement. These include:

- Extensive use of local and state standards to design curriculum and instruction;
- Increased instructional time that is targeted to academic core subjects;
- Investment in quality teaching through ongoing quality professional development;
- Comprehensive systems to monitor the performance of individual students and to intervene to help struggling students before they fall far behind;

- State and district accountability systems to hold adults responsible;
- Parent involvement in helping students meet standards; and
- Use of formative assessments as a frequent part of teaching and learning to help guide instruction.

The second theme is that despite the positive impact standards-based reform has had by shifting education from a process to an outcomes-based system, and despite decades of research that has produced convergent findings on how students learn and the type of explicit instruction that accelerates learning through active engagement, what has remained unchanged in too many middle and high schools and classrooms is the nature of teaching itself. This is particularly true in terms of helping students read better. Reading experts like Julie Meltzer note that despite all that we know from the research on adolescent literacy, there is a large breach between research and practice, with limited evidence of widespread adoption of effective practices.⁴² Thus, even though there has been sustained improvement in the quality of reading instruction in the early grades, traditional middle and high school instruction stands in marked contrast to what we know constitutes effective instruction for adolescent learners.⁴³

This leads directly to the third overarching theme: Research is clear on the importance of connecting reading and writing across the curriculum. Indeed, comprehension instruction that promotes strategic behaviors to encourage active and purposeful reading and writing (something that most struggling readers have trouble with)⁴⁴ should not only be taught explicitly, it should

be incorporated into content-area teaching, beginning in the early grades and continuing through high school. This is especially important for low-achieving students.⁴⁵

We now know that when students and teachers increase the frequency of their informative writing assessments, student scores increase not only on state and district reading and writing assessments, but also in mathematics, science, and social studies. 46 But while content areas present numerous opportunities for students to demonstrate their understanding of essential concepts being taught in content areas, it still gets short shrift in the classroom. 47 According to NAEP, the average student spends about 30 minutes a week on writing without the benefit of most well-established practices such as prewriting, peer editing, immediate feedback, and revision. 48

Policymakers should keep these themes in mind as they consider how to deal with the adolescent literacy emergency. States, districts, and schools can transform their way of delivering educational programs, focusing particularly on providing teachers with the necessary skills and supports to implement research-based strategies shown to improve literacy development and maximize content learning. But to do this, professional staff at all levels would need to act on the core belief that all children can learn. They would need to know how to differentiate instruction and use diagnostic assessments to respond to individual needs. In order to support teachers in providing differentiated instruction to diverse learners, schools would have to provide quality on-site training and supports to incorporate literacy strategies into everyday teaching and learning.

Accomplishing all of this will not be easy. But states can no longer afford to neglect taking to scale those practices that are well documented and that have demonstrated effects over time. We are still losing far too many students before graduation, and truly successful schools and districts remain "islands of excellence."

The first place for policymakers to start is in learning what works and then designing the overall system to ensure that the knowledge about effective practice is applied to all content areas for all students. Specifically, in the following sections, we will review the research on

"Research shows . . . students who receive intensive, focused literacy instruction and tutoring will graduate from high school and attend college in significantly greater numbers than those not receiving such attention. Despite these findings, few middle or high schools have a comprehensive approach to teaching literacy across the curriculum."

M. L. Kamil, Adolescents and Literacy: Reading for the 21st Century

the five major factors that impact advanced literacy skills and the ability of adolescents to understand and learn from what they read. These include: speed and accuracy when reading text, vocabulary, background knowledge, comprehension, and motivation.⁴⁹

1. Word Identification and Fluency

By the time students reach 4th grade, they should have developed the ability to apply the alphabetic principle, that is, the ability to manipulate the sounds of oral language and phonics and to correlate speech sounds with parts of words. Research shows, however, that about 10 percent of students enter middle and high school with deficits in their ability to decode print that will impair their fluency and comprehension. While studies show that such practices as direct instruction in word analysis and recognition coupled with extensive opportunities to practice identification of words in context can improve decoding accuracy, reading experts acknowledge that preventing these types of problems before they occur is preferable.⁵⁰

The importance of intervening early before children fall behind, using ongoing formative assessment to identify students' needs and instructional approaches, and providing differentiated, explicit instruction is clear. Reading experts estimate that 95 percent of young children will learn to read given sound scientifi-

Adolescent Literacy Research Network

The following projects are funded by the Office of Vocational and Adult Education (OVAE):

Social and Cultural Influences on Adolescent Development

Elizabeth Moje, University of Michigan

Using multiple data sources (extant and new data) and mixed methodologies, this project will address hypotheses that link expectancy values, motivation, engagement, and literacy achievement across different social and cultural groups.

Supporting Teachers to Close Adolescent Literacy Gaps

James McPartland, Johns Hopkins University

Using experimental methods in large longitudinal sample, this project will estimate cumulative impact of a four-year high school intensive literacy program that varies levels of teacher support for students who begin far below grade level.

Adolescent Reading Programs: Behavioral and Neural Effects

Hollis Scarborough, Haskins Labs

Using experimental methods, this project will examine the effectiveness of three approaches to reading instruction for striving adolescent readers with differing skill profiles. Pre- and post-intervention fMRI measures of cortical activation during

reading will be related to learner characteristics and instructional outcomes.

Cognitive and Neural Processes in Reading Comprehension

Laurie Cutting, Kennedy-Krieger Institute—Johns Hopkins University

Using behavioral and neuroimaging methodologies, this study will examine the cognitive and neural processes associated with normal and impaired reading comprehension in 10 to 14-year-olds. It will focus on understanding the contributions of other processes involved in reading comprehension beyond single-word reading.

Adolescent Literacy: Classification, Mechanism, Outcome

Bennet Shaywitz, Yale University

This project will extend previous work in classification, neurobiological, and longitudinal data to characterize subtypes of reading disability, and functional and structural brain imaging integrated with response to intervention to characterize brain-behavior relationships in adolescent striving readers.

This information and full abstracts can be found online at www.ed.gov/about/offices/list/ovae/pi/hs/adollit_pg3.html.

cally based instruction and that the large number of students who are not doing so by grade 3 are essentially "curriculum casualties." Excellent instruction is the best intervention for all children. Yet, without explicitly designed instruction to accelerate skill acquisition, gaps in children's vocabulary, language, and reading development widen over time. Studies show that children proficient in reading at the end of 1st grade see twice as many words of running text as those struggling to read. As a result, students continue to lose ground in decoding, automaticity, fluency, and vocabulary growth, resulting in as much

as a four-year gap in reading performance by high school.

In the upper grades, students must be able to process longer, multisyllable words and read accurately and quickly. Reading fluency, in fact, distinguishes skilled from less-skilled readers throughout adolescence.⁵³ Through extensive and repeated processing of text, students develop the capacity for rapidly, accurately, and automatically recognizing an increasingly large store of words, which results in fluent reading. Fluency of word identification is not sufficient for

comprehension. Yet, it is an important prerequisite for it. If children read slowly and laboriously, their comprehension of texts will likely be limited. In a national study of 4th-graders, the National Assessment of Educational Progress (NAEP) found that 44 percent of students lack reading fluency, even with grade-level stories. ⁵⁴ Understanding, interpreting, and responding to texts requires a substantial amount of cognitive resources. If these resources are expended in the identification of words, that is, in decoding, the understanding, interpretation, and critical response to text will suffer.

There are specific methods to improve students' automaticity so that readers can process text with minimal errors. Repeated readings, assessing word accuracy and reading rates, and providing models through paired reading or reading aloud can improve decoding, reading rates, expressive reading, and comprehension of passages that the reader has not seen. ⁵⁵ Providing extended time for reading with feedback and guidance across the curriculum has been well documented and conforms to the extensive literature on academic learning time. ⁵⁶

2. Vocabulary

The finding that vocabulary is strongly related to general reading achievement has long been acknowledged. It is clear that oral language abilities vocabulary, listening comprehension, and ability to organize verbal responses—are intimately related to reading and writing ability and key to students' ability to read for understanding.⁵⁷ There is growing consensus that children's vocabularies need to grow at a rate of about 2,500 to 3,000 words a year during the elementary grades and some analyses suggest that the figure may be even higher.⁵⁸ Yet, enormous variations exist in the number of words children encounter through written and spoken language, contributing to large differences in children's vocabularies and comprehension abilities. Hart and Risely documented large differences in children's familiarity with unusual words, standard pronunciation, and complex syntax before school entry. They found that children from low-income families were exposed to one-third to one-half the words that high-income students encountered.⁵⁹ Another study identified large differences in amounts of daily

reading among children that varied from 8 to 4.7 million words per year.⁶⁰

Joseph K. Torgesen, the Director of the Florida Center Reading Reseasrch, acknowledges that even though the impact of preventive programs is powerful, children continue to read below level on state assessments because it is so much more difficult to "close the gap" in broad knowledge and verbal skills than it is in word reading skills.⁶¹ He contends that this challenge must be met by integrating literacy support throughout content learning and infusing specific strategies to broaden vocabulary and concepts across domains. A recent evaluation of the Alabama Reading Initiative likewise speaks to the pressing need to provide minority and low-income students' vocabulary and language development throughout the curriculum, beginning early and continuing into middle and high school.⁶²

There is also broad consensus that there is benefit to be derived from directly teaching word meanings in context. For example, there is evidence regarding the positive effects of teaching important vocabulary from texts prior to student reading of those texts. Research also suggests that instruction that uses a combination of approaches (e.g., use of context plus definitions, repetition, multimedia presentations) results in better vocabulary learning, as do approaches such as "semantic mapping"—word play that helps students understand meaning based on prior knowledge.⁶³

The massive amounts of vocabulary that children need to learn and that most do learn has led many researchers to conclude that most vocabulary must be acquired incidentally through wide, frequent reading. The importance of wide reading and extensive opportunities to actively process new word meanings should inform teaching, programs, and curriculum design in all content areas. It requires a shift from the pervasive mode of passive teaching (lecture, worksheets) to one that provides students with high-quality dialogue that actively engages students in expanding word knowledge.

Yet, students in high-poverty areas generally report a lack of educational rigor in their schools. Young people talk about teachers who often do not know the subjects they are teaching, counselors who consistently underesThe standards in history call for students to learn the practices of historical analysis, including the use of primary documents. Contemporary language arts standards call for students, at all ages, to read authentic literature across genres (e.g., novels, memoirs, interviews) and to write in various genres. All of these opportunities provide potentially powerful contexts in which students can learn to interpret text and can learn how to learn from text.

C. Snow, Reading for Understanding: Toward a RAND Program in Reading Comprehension

timate students' potential and place them in lower-level courses, and a curriculum and set of expectations so low that they bore the students right out the school doors.

3. Reading Comprehension

The large number of students who perform poorly on state and national reading assessments lack higher-level comprehension skills such as making inferences, explaining the main idea, identifying the author's style and purpose, and making connections between the ideas in the text and his or her own background knowledge.⁶⁴ Students without strategic reading skills will not thrive in this era of rigorous standards and high-stakes accountability. Across subject domains, standards call for advanced literacy skills that should drive classroom practice in fundamental ways that maximizes content learning. Policies must reflect the aim of not just teaching to the standards, but of teaching students with different learning needs so they may eventually reach grade level standards.

Reading and writing abilities are facilitated when readers use strategies that require the active engagement in processing texts, which at upper levels are more conceptually demanding, and often address topics that are unfamiliar. Under these circumstances, even able readers can benefit from explicit instruction and effective instructional support in the use of reading strategies. Unfortunately, studies show that engaging curricula that ask students to think, discuss, and write their ideas are implemented haphazardly and too often inequitably. The Education Trust found, for example, that Latino and African American 12th-graders are almost twice as likely as their white peers to have classes that ask them to complete daily ditto worksheets. 66

The research reveals that comprehension strategies, when used intensively and purposefully, support adolescent literacy development in powerful ways. They have a significant impact when combined with problem-solving approaches to discipline-based reading and when used in context by students. Importantly, the field of English as a second language (ESL) has long supported content-based instruction that integrates content and language as an effective strategy for improving the academic achievement of English language learners.⁶⁷ These varied strategies provide ways to actively engage learners who show a diverse range of backgrounds, experiences, and literacy levels. It provides the means for learners to overtly process information and connect new learning with prior concepts and experiences.

There is widespread agreement that becoming a strategic reader is a developmental process; it occurs over time as students encounter increasingly difficult texts and new situations. These strategies, individually, are not as important as a "strategic approach" whereby students respond differently to different topics, texts, genres, and tasks. Strategies are not easy to acquire; students typically require good explicit instruction over considerable time in order to gain control of a strategic approach.⁶⁸

The hallmark of truly effective strategy instruction is the explanation, modeling, and guiding of this strategic approach during authentic reading experiences. Most recently, research has demonstrated that if studentinitiated literature discussion is added to this instructional approach—and teachers support strategy use when needed—then student performance is facilitated even more. Strategic reading development is enhanced

Teaching Reading Comprehension Strategies

Comprehension Monitoring: Good readers monitor their own comprehension —deciding whether or not they understand the text they are reading. Selfmonitoring is not an automatic process, but requires students to be taught to realize when they do not understand and to learn how to resolve reading problems as they arise by restating what was read or looking back through the text. Having students actively learn to monitor their comprehension helps students to take responsibility for their own learning and supports content-area learning.

Cooperative Learning: Students work in small groups on a defined comprehension task. Cooperative learning serves as a social organization for the classroom as well as an instructional tool whereby students can work together to arrive at a solution to a learning problem. One study found that grouping students to work together on checking their understanding of difficult concepts improved math and science achievement, particularly for low achievers.

Graphic and Semantic Organizers: Spatial representations of text help students visualize the relationships among important structural elements of the text. Graphic organizers, semantic maps, and concept maps may be constructed before, during, or after reading and can have the added benefit of facilitating recall and improving writing summaries.

Story Structure Questioning: Story structure refers to how a story is organized by identifying common components such as setting, initiating events, internal reactions, and outcomes. Analyzing stories in terms of their components can facilitate comprehension and help the reader gain deeper understanding to construct more coherent recall of the narrative.

Questioning and Answering with Feedback and Correction: This is the most common form of comprehension assessment; but it can also enhance understanding when students receive instruction in how to answer questions, i.e., locating information or reading to answer questions given beforehand.

Questions can help students to draw upon existing

background knowledge to make connections with text content to improve reading comprehension.

Question Generation: Generating questions is a more active strategy than answering questions and requires students to process text in forming questions as well as increasing their awareness of how well they understand the text. Meta-analyses on question generation show there is strong evidence for improving reading comprehension.

Summarization: To summarize, the reader must focus on the main ideas in the text, while simultaneously excluding extraneous information. Teaching students to summarize is a highly effective technique that helps students process text closely and make judgments about the information's relative importance. Not only does it improve comprehension, but it enhances students' ability to compose written summaries. Students must pay close attention to what they are reading and reread to prepare the summary.

Multiple Strategies: Skilled readers often use more than one strategy. In multiple strategy instruction, students are taught how to adapt the strategies and use them flexibly. One of the most well-known examples is reciprocal teaching that utilizes multiple strategies (question generation, summarization, vocabulary). Reciprocal teaching produces consistent effects and incorporates teacher modeling; guided reading; direct strategy instruction; and turntaking on question generation and answering.

It should be noted that school effectiveness research cites these same strategies as powerful classroom instructional methods that have been shown to be highly effective in improving student achievement across content areas. For example, Robert Marzano identifies nine categories of instructional strategies that affect student achievement and reports the effect size for each. These include cooperative learning (effect size = .73, a 27-percentile gain); nonlinguistic representations (effect size = .75, a 27-percentile gain); and summarizing (effect size = 1.0, a 34-percentile gain).

when teachers support their students during challenging reading tasks. In particular, the active discussion of text seems to promote more reader "engagement," which in turn promotes use of strategic approaches and enhances appreciation for reading. Since students' motivation appears to rest, at least in part, on their sense of efficacy—their belief that they are capable—the relationship between strategic reading instruction and motivation is clearly reciprocal.⁶⁹

Comprehension strategies should be taught explicitly through reading and writing activities across the curriculum, beginning in the early grades and continuing through high school, using a variety of texts dealing with different disciplines.⁷⁸ This instruction should include such things as teaching readers to set a purpose, activate prior knowledge, develop key concept vocabulary, make predictions, monitor their reading, pose questions about their reading, summarize, create graphic organizers, and so forth. This instruction should also include opportunities to discuss and write about the texts they are reading and the strategies they are using. This instruction in comprehension strategies should include teacher modeling of how to construct the meaning of a selection, how to overcome obstacles to understanding, and how to evaluate the information in a text against what he or she already knows about the topic addressed by the text.

The importance of connecting reading and writing in applying strategies to content learning cannot be overemphasized. Students' ability to write well in such a way that reflects mastery of subject matter is becoming increasingly important. Writing is essential to how well students perform beyond high school, and it is now included as a major component of many high school exit exams, state assessments, and college entrance exams. The NAEP writing assessments have indicated that few adolescents can write effective pieces with sufficient details to support main points and that a significant number of entering freshmen will need to take remedial writing courses once in college. Students benefit from reviewing papers that reflect the expected standards and profit from specific feedback through conferences, peer reviews, use of rubrics, and portfolio assessments.79

Unfortunately, the supports provided to students in grades 4-12 in applying comprehension strategies,

learning vocabulary, and building fluency are sporadic at best. Durkin's studies showed that teachers spend little time teaching comprehension: only 20 minutes of comprehension instruction was observed in 4,469 minutes of reading instruction. So Schools rarely design coursework and curricula that incorporate strategic instruction to build fluency, vocabulary, and comprehension. Rather, teachers tend to water down the curriculum and demand less reading and writing when faced with students who experience difficulties reading. They depend on lectures to convey key ideas and concepts rather than placing demands on students to interpret and elaborate on material through analyses of content material.

In her presentation to the Study Group, Peggy McCardle of the National Institute of Child Health and Human Development stressed the need for greater emphasis in teacher education programs on the teaching of reading comprehension, a point also made by the National Reading Panel. Teachers must be able to identify what should be taught and then use a variety of techniques to teach it. Moreover, they must manage multiple elements to provide an effective program of instruction in classroom settings. The importance of high-quality teachers in improving adolescent literacy is discussed in Chapter 4.83

4. Motivation and Engagement

Throughout the upper grades, motivation and engagement play a pivotal role in determining whether students benefit from content learning. Research shows that engagement is strongly related to reading achievement and as such has been found to be a more potent variable in performance than other learner background characteristics such as age or economic status. A national study for example, found that engaged readers from low-income backgrounds outperformed less engaged readers from more affluent environments.⁸⁴

Engaging readers is paramount and can serve to overcome obstacles to achievement. Unfortunately, studies show that motivation for reading decreases as children move up in grade level. Some contend that this is due to a loss of task-mastery orientation and self confidence as older students look inward and realize that they are less capable than others. A second

Kentucky's Writing Assessment Program

In Kentucky, writing is part of the curriculum at all grade levels. Students in grades 4, 7, and 12 are required to complete writing assessment portfolios in order to help gauge individual progress and identify instructional needs, provide information about areas of curricular strength and weakness, and evaluate the quality of teaching.

Philosophical Guidelines of the Writing Portfolio

Kentucky's Writing Development Teacher's Handbook states that the goals of a writing portfolio assessment are to provide students with the skills, knowledge, and confidence necessary to become independent thinkers and writers; promote each student's ability to communicate to a variety of audiences for a variety of purposes in a variety of forms; document student performance on various kinds of writing that have been developed over time; integrate performance assessment with classroom instruction; and provide information upon which to base ongoing development of a curriculum that is responsive to student needs.

Kentucky also provides guidance to its teachers on how to integrate writing across the content areas. Teachers must include three categories of writing into their classrooms: writing to learn, writing to demonstrate learning, and writing for real audiences for real purposes.

Writing to Learn:

• Is intended to promote the student's understanding of content and ability to think; to apply concepts, skills, and principles; to enhance reading comprehension; to make connections; to raise and address questions; and to identify and discuss problems. Writing to learn is used to promote learning and also may be used to assess learning; however, assessment is not the primary purpose of the writing.

- Indicates how well students understand what has been taught, how well they can think and apply concepts, and how well they can communicate their understanding of subject matter relevant to the study area and their lives.
- Usually is a brief, single-draft writing, is not completed in a "real-world" form, and is not intended for an "authentic" readership.

Writing to Demonstrate Learning to the Teacher:

- Is a response to a school exercise, question, prompt, or teacher assignment.
- Demonstrates to the teacher that the student has completed assigned work.
- Is intended to indicate how well the student has learned what has been taught; in short, it assesses learning.
- Is usually a single-draft writing, is not completed in a "real-world" form, and is not intended for an "authentic" readership.

Writing for Authentic Purposes and Audiences:

- Is written with a specific, authentic purpose, with awareness of authentic readers, in realworld forms.
- Indicates how well students communicate ideas about their learning, experience, and inquiry.
- Reveals student ownership: purposes, ideas, methods of support, use of learning and experiences, and choices about readers and forms.
- Usually is taken through a full writing process.
- Is the only kind of writing that is appropriate for Kentucky's Writing Portfolio.

Taken from: Kentucky Writing Development Teacher's Handbook, available online at www.education.ky.gov/NR/rdonlyres/e4ff4nvjwbnerqrfwud67k6rcwumbryzxismbwqatb62hjvnmtmt4xshep6xsgunqc35uanrvn6dzrix3454gt2qayf/WritingTeachersHandbook2003rev.doc and Guidelines for the Generation of Student Work for Writing Portfolios, Kentucky Department of Education, www.education.ky.gov.

explanation attributes the decline in older readers' interest in reading textbook material to the passive instruction that is characteristic of many middle and high school classes. Studies provide evidence that changes in students' motivation following entry into middle school reflect changes in classroom conditions. In these cases, the students moved from self-contained, responsive classrooms that fostered a sense of belonging and honored students' voices to teacher-centered classes that afforded few opportunities for expression and for input into learning goals. Se

When Lounsbury and Clark conducted a nationwide study of 162 middle schools, they found a "dominance of passive learning" rather than the active learning widely advocated for adolescents. Most 8th-graders "have resigned themselves to the fact that classes are boring." Although students must be engaged in learning to retain and apply it, the neediest students frequently received the least engaging kind of instruction and curriculum.⁸⁷

Alvermann emphasizes that educators must refrain from relying on an outdated notion that they can "fix" learners; rather, schools should be in the business of "fixing" or "remediating" the instructional conditions in which students learn. ⁸⁸ Among other changes, this will require refashioning curricular and instructional conditions to incorporate multiple forms of media, acknowledging that the up and coming "Net Generation," some 20 million strong, engages in multiple computer-based literacy practices, such as email and instant messaging, video games, CDs, and the Internet.

Students' engagement is increased by not only having diverse texts and multimedia resources, but by building in student choices. It is important to provide students with opportunities to select materials they read, topics they study, and options to work with others. Karen Pittman, executive director of the Forum for Youth Investment, spoke to the Study Group about the research on student motivation and pointed to findings that students are inspired to read and write by teachers who foster a sense of belonging and respect and who provide specific and useful feedback in a supportive way.

One way to augment student engagement is to use the range of comprehension strategies outlined in the

previous section that afford readers a highly responsive, interactive context for practicing reading and writing skills. Studies show that strategy instruction can increase self-efficacy and a greater use of comprehension strategies. Teaching strategic literacy skills augments the readers' sense of efficacy while at the same time relating subject matter to the readers' background knowledge, experiences, and interests.

Too often, schools substitute inferior activities for actual reading and writing even when large blocks of time are devoted to the language arts. In contrast, at the La Cima Middle School in Tucson, teacher teams developed and used high-interest activities and assessments to help prepare students to succeed on the state writing exam. In four months, La Cima, with a 42 percent free and reduced-lunch population, tied the most affluent school district in Arizona on the state writing exam. ⁹¹

In their extensive review of how instruction influences students' reading engagement and academic achievement, Guthrie and Wigfield suggest that if academic literacy instruction is to be effective, issues of self-efficacy and engagement are central. ⁹² To promote engagement, research points to instruction that promotes:

- Developing goal setting to establish a learning goal orientation that emphasizes using strategies effectively and linking new knowledge to previous experiences;
- Making real-world connections to reading and allowing students to have meaningful choices in what, when, and how to read;
- Self-monitoring for breaks in comprehension and clarifying new vocabulary and concepts;
- Providing interesting texts that are familiar, vivid, important, and relevant and supplementing textbooks with trade books, multimedia, technology-literacy, journals, Internet, and hands-on experiences;
- Assuring social collaboration for learning; and
- Ensuring alignment and cohesion in selection of instructional goals and processes.

As can be seen from this discussion, reading is complex, multifaceted, and developmental. Students are diverse in their abilities, preparation, early reading instruction, oral knowledge and abilities, vocabulary, and world knowledge. They are likewise diverse in their abilities to manage their learning behaviors and their motivation to apply themselves to reading. The analysis of differences in students' skill sets should inform the type and intensity of strategic reading instruction. Some students will need much more personalized, intensive instruction (e.g., time, teacher-pupil ratio, tutoring) in accord with their assessed needs.

In order to tailor instruction effectively, multiple indicators including curriculum-based assessments and diagnostic measures (e.g., fluency checks, individual reading inventories) should be used to undertake a more thorough analysis of reading difficulties. State assessments cannot provide the detailed information needed to understand complex reading performance, nor can they provide information quickly enough to inform daily instruction. States need to develop policies that help districts, schools, and teachers receive the support and training to assess what students can do and customize instruction accordingly. Teachers must have the knowledge, support, and authority to use the assessments well and to see the assessments as helpful to their instruction. Policies that support classroom assessments and the professional development necessary to use them effectively would be useful at all grade levels.93

Summary

There's no single thing that's going to work, no magic bullet to meet the needs of all students. Yet, the research base on adolescent literacy holds great promise if states take action to put into practice the extensive compendium of practices that have been found to be effective. Transforming middle and high school education to ensure that all students have the requisite literacy skills will require attending closely to what we know about:

- The importance of student engagement and motivation in literacy development;
- Integrating specific literacy strategies throughout the content areas to maximize learning;
- The interconnectedness of reading, writing, speaking, listening, and thinking;
- Using data to identify student needs and adjusting instruction accordingly; and
- Implementing research-based literacy strategies for teaching and learning.

In order to raise the graduation rate and close achievement gaps, instruction and school organization need to be redesigned to incorporate the research on adolescent literacy. State policymakers need to plan a comprehensive approach for providing strategic and schoolwide interventions to advance literacy and commit to ensuring that all students have access to the teachers, resources, and supports they need. What is required are coherent, statewide systems that address: 1) the alignment of content standards, curricula, and assessments; 2) the use of data to identify student needs and monitor the efficacy of instruction; 3) the use of research-based literacy support strategies in all content areas; 4) quality professional development and supports; and 5) the design of organizational structures and leadership capacities to sustain and enact these elements strategically.

Chapter 3 examines how state policies and guidance should systematically support a new approach to the education of adolescents. Policies must address the importance of ensuring support, sustainability, and focus through a state framework, district and school literacy plans, and building the capacity of teachers and leaders to ensure support and sustainability of literacy initiatives. Chapter 4 deals with the issue of teaching quality and key recommendations for providing the preparation, training, and supports to teachers so they can identify what must be taught and know how to teach it.

Chapter 3. State Framework for Adolescent Literacy

hat must states do to move middle and high schools to higher reading achievement—a formidable goal that has eluded our schools for more than three decades?94 While standards-based reform has defined the outcomes for adolescent learners, state policies have yet to systematically address the structures and instructional practices that permeate content area coursework.95 Elmore describes the way education has worked through much of the 20th century as a model of "loose coupling"; that is, the decisions regarding teaching and student learning reside within classrooms and outside the purview of the larger system.⁹⁶ This model is no longer sufficient if the goal is to bring all students to high levels of achievement. Ultimately, state boards of education must craft a comprehensive state literacy plan that exercises the policy levers over which they have authority, going to scale with the policies and practices that, in short, jettisons the old system in favor of a new vision of teaching and learning for all students. What is required is nothing less than a new paradigm, one based on joint problem solving, collaborative practice, and collective accountability that engages students in purposeful reading and writing in the service of subject area learning.

In short, states must take a broad systems approach to ensuring students have the literacy skills they need to meet high standards by strategically attending to: 1) alignment of content standards, curricula, and assessments; 2) development of a high-quality teacher workforce that understands the importance of literacy instruction and how to do it; 3) use of data to identify student needs and monitor the efficacy of instruction; 4) development of district literacy plans that use research-based literacy

support strategies in all content areas; and 5) design of organizational structures and leadership capacities to sustain and enact these elements strategically. All of these elements should be addressed in a state's literacy plan.

The plan must target improving literacy skills by teaching them within the context of challenging content instruction, rather than apart from standards-based instruction of core academic subjects. A state literacy plan incorporates those elements considered essential in the design of the state's larger standards-based reforms efforts. Similar to K-3 early reading initiatives, the benefits accrued from schoolwide initiatives in the upper grades are likely to produce stronger outcomes than applying strategies piecemeal. Schools must support literacy in all classrooms—whether in mathematics, social studies, or language arts—and in so doing, teachers need to know their students and how to instruct and apply key strategies to foster subject matter learning. ⁹⁷

This chapter outlines these critical considerations in detail in order to provide state boards with a roadmap to addressing this urgent issue. Only a few states, such as Alabama, Florida, and Rhode Island, have implemented statewide literacy initiatives to directly tackle the persistent problem of low literacy levels among older students (see Appendices A and B). Like the recently funded federal initiative, Striving Readers (see textbox on opposite), these state initiatives have many common elements, such as research-based comprehension strategies, ongoing assessment, data analysis, and schoolwide interventions that include targeted instruction for struggling readers. A 2003 evaluation of the Alabama Reading Initiative (ARI) reported that "the

ARI is about more than reading—it's become a highly effective movement for whole school revitalization."98

Any state plan to improve adolescent literacy must be considered within the state's overall accountability system. The Study Group noted early on that states' capacity has been stretched thin and that additional programs with particular staffing, resource, and funding requirements must fit with the larger system. The good news is that adolescent literacy goes to the heart of what school improvement is all about: fundamentally trans-

forming curriculum and instruction and applying the important principles of research-based practice towards the goal of all students achieving high standards.

The bad news is that accomplishing this won't be easy. It will require strong state leadership to enlist the multiple constituencies in framing a vision and setting the public agenda. The urgency and scope of this problem demands finding common ground among the reading experts, administrators, and practitioners who will implement state policies, and the key players who

Striving Readers

Beginning August 2005, the U.S. Department of Education began accepting grant applications for the Striving Readers program, a new \$25 million discretionary grant program created to improve the literacy skills of adolescent students who read below grade level. During this first year, the department expects to award grants ranging from \$1 million to \$5 million for a five-year period. President Bush has asked Congress to appropriate \$100 million for the program for 2007.

Striving Readers will support the implementation and evaluation of research-based reading interventions for struggling middle and high school readers in Title I eligible schools that have significant percentages or numbers of students reading below grade level. The goals of the Striving Readers program are to:

- Enhance the overall level of reading achievement in middle and high schools through improvements to the quality of literacy instruction across the curriculum;
- Improve the literacy skills of struggling adolescent readers; and
- Help build a strong, scientific research base around specific strategies that improve adolescent literacy skills.

Striving Readers programs will include each of three key components: 1) a school level strategy designed to increase reading achievement for students by improving the quality of literacy instruction across the curriculum (including needs assessment, professional development, and measuring student performance); 2) targeted intensive intervention for struggling readers, defined as students who read at least two years below grade level (includes assessments to identify struggling readers, a supplementary literacy intervention, professional development, and a process for monitoring student progress); and 3) a rigorous experimental evaluation by an independent evaluator of the targeted intervention for struggling adolescent readers as well as a rigorous evaluation of the program designed to improve literacy instruction across the curriculum and the school.

Striving Readers is targeted toward serving middleand high school-aged students (grades 6-12) who are reading below grade level. Eligible applicants include local educational agencies with one or more schools that are eligible to receive Title I funds and partnerships that include local districts and other agencies such as state education agencies, intermediate service agencies, public or private institutions of higher education, and public or private organizations with expertise in adolescent literacy or rigorous evaluation.

Taken from: Striving Readers, CFDA Number: 84.371A; Program Type: Discretionary/Competitive Grants, Office of Elementary and Secondary Education, online at www.ed.gov/programs/strivingreaders/index.html.

can deliver the political and social capital. In addition to state and local boards of education, planning must include governors, legislatures, business organizations, professional associations, universities, and most importantly, the profession, particularly teachers. People support what helps them and what they help create—and they resist what they don't understand or value. States must work closely with their teachers and administrators to identify the needs of struggling readers and to identify solutions that are viable for districts and schools.

So, how do states go about transforming the day-to-day practice of our middle and high schools? It begins with the fundamentals of what we know about school effectiveness and good instruction and then goes a step beyond...to continuously monitor, course correct, and infuse our growing knowledge base about teaching students to read and write well. Following are the steps states need to take in implementing a literacy plan.

STEP #1: Set state literacy goals and standards, ensuring alignment with curricula and assessments, and raising literacy expectations across the curriculum for all students in all grades.

What we want students to do by graduation must inform what goes on at all grade levels. Hence, it is essential to develop state standards that reflect developmental literacy skills and to design curricula and instruction grounded in the research about effective practice. While the majority of states now have standards that meet our common core criteria, policymakers must ensure that proficiency standards are sufficiently rigorous—something called into question by the significant gap that exists in some states between how many students are meeting state reading standards versus how many of those same students are reaching proficiency on NAEP. In addition, most states continue to lag behind in developing curricula to accompany standards.

STEPS FOR STATES

STEP #1: Set state literacy goals and standards, ensuring alignment with curricula and assessments, and raising literacy expectations across the curriculum for all students in all grades.

STEP #2: Ensure that teachers have the preparation and professional development to provide effective, content-based literacy instruction.

STEP#3: Strategically use data to identify student needs, design cohesive policies, and evaluate quality of implementation and impact.

STEP #4: Require the development of district and school literacy plans that infuse research-based literacy support strategies in all content areas.

STEP #5: Provide districts and schools with funding, supports, and resources.

STEP #6: Provide state guidance and oversight to ensure strong implementation of comprehensive quality literacy programs.

The state's goals, standards, accountability system, and assessments must be aligned both in state policy and in the state-to-district-to-school-to-classroom connections. There must be a unity of purpose at all levels. Just as important, standards must be accompanied by a high-quality continuous improvement system that: 1) utilizes rigorous, publicly transparent summative and formative evaluations that are well aligned with the state's curriculum frameworks; and 2) systematically ensures that all students have the opportunity to learn what the standards require. 99

This means that state and district policies must support practices that not only align instruction to particular grade level standards, but that are planned in regard to individual skills and strategies. Policies should support such practices by providing teachers with the curriculum frameworks that clearly articulate both grade level expectations and a developmental perspective on teaching and learning in specific disciplines. 100 "The aim is not simply to teach the standards, it is to teach the students." 101

To ensure clear alignment, states must attend to the whole system of supports and resources provided to districts and schools that will chart the course for what actually happens in classrooms on a day-to-day basis. Policies should provide a blueprint for generating local capacity to develop and sustain effective, comprehensive programs to advance students' literacy skills at all levels. This speaks to the importance of articulating a developmental sequence for reading beginning early in preschool and elementary school and designing curricula across and between grade levels and feeder patterns. Policies must be grounded in the most up-to-date and best evidence on effective instruction and hold districts, universities, and schools accountable for selecting and implementing practices that will improve teaching performance and student achievement.

STEP #2: Ensure that teachers have the preparation and professional development to provide effective, content-based literacy instruction.

Teachers must have considerable knowledge to use research-based literacy strategies in content-area instruction. States have only recently begun to redefine the requirements for secondary school teachers concerning knowledge of reading strategy instruction. Although revised standards may reflect sophisticated literacy skills inherent in mastering content standard, states typically need to do much more to ensure that content teachers know about the textual demands of their subjects and have the ongoing supports to build literacy skills appropriate to the requirements of the discipline.

States must address comprehensive policies related to preparation program approval, teacher certification, and professional development to ensure that teachers have the training and support to maximize student learning. Chapter 4 examines the critical issues of preparing, retaining, and supporting high-quality teachers, particularly in relation to adolescent literacy.

STEP #3: Strategically use data to identify student needs, design cohesive policies, and evaluate quality of implementation and impact.

The story of adolescent literacy begins with data good data based on multiple indicators that can answer a range of essential questions for different purposes. In the Carnegie report, Reading Next, 102 Biancarosa and Snow identified summative and formative evaluation, along with professional development, as the foundational elements of an effective adolescent literacy program. (Reading Next identifies 15 elements overall—see textbox on page 32.) States typically collect summative data based on state assessments and high school exit exams, which can be used to evaluate overall district and school reading achievement and to compare relative performance by different units of analysis such as school, district, or subgroup (race and ethnicity, language, gender, disability, and income level). States need to use a number of data sources on literacy performance given the variability in reading performance outcomes across assessments. For example, according to RAND, data from NAEP testing tend to show considerably wider gaps across student subgroups than do many state assessments. 103

The importance of analyzing data to design effective strategies and policies for advancing student literacy cannot be overstated. This information is instrumental in identifying state and local needs for literacy initiatives, exemplars in producing high reading achievement, and areas of high need. It also serves to get buyin from various stakeholders and to create a sense of

Reading Next

The Alliance for Excellent Education produced a report that outlines 15 key elements of effective adolescent literacy programs divided into two sections: instructional improvements and infrastructure improvement. All of these elements, while considered as a distinct entity, were treated as synergistically related. So, for example, instructional improvements such as direct, explicit comprehension instruction could not succeed independent of key infrastructure improvements such as extended time for literacy, professional development, and a comprehensive, coordinated literacy program.

The elements are:

Instructional Improvements

- 1. Direct, explicit comprehension instruction. Instruction in reading comprehension strategies as part of content-area instruction that provides modeling, explanation, and guided practice.
- 2. Effective instructional principles embedded in content. Content-area teachers provide content-specific instruction and practice in reading and writing tasks specific to their discipline.
- 3. Motivation and self-directed learning. Instruction fosters engagements and self-regulated learning to support flexible, independent learning.
- 4. Text-based collaborative learning. Students are guided in interacting with peers around text material to promote content-area learning.
- 5. Strategic tutoring. Instruction is individualized for students who need more intense reading and writing interventions.
- 6. Diverse texts. Students have access to texts that vary in reading level, content covered, styles, and topics.
- 7. Intensive writing. Instruction links reading with writing, using the latter as both an instructional tool and way to assess comprehension and content learning.

- 8. A technology component. Technology provides alternate diagnostic and instructional tools and affords students opportunities to develop reading and writing skills using multimedia and electronic forms.
- Ongoing formative assessment of students. Instruction should be informed through ongoing assessment of students.

Infrastructure Improvements

- 10. Extended time for literacy. Literacy instruction should extend beyond a single language arts period and be integrated in subject area coursework.
- 11. Professional development. Teachers and leaders participate in systemic, ongoing professional development experiences to improve content-based reading and writing instruction.
- 12. Ongoing summative assessment of students and programs. Systems to track student and program performance over the long-term should be established for implementation of continuous improvement.
- 13. Teacher teams. Schools' structures provide support for teachers collaborating in interdisciplinary teams to plan instruction and professional development.
- 14. Leadership. District and school administrators commit to redesigning structures and implementing schoolwide interventions to support literacy instruction.
- 15. A comprehensive and coordinated literacy program. A literacy program incorporates in a strategic and coherent fashion all of the identified components to support a continuum of supports and strategies to address the literacy needs of all students.

Taken from: Gina Biancarosa and Catherine Snow, Reading Next: A Vision for Action and Research in Middle and High School Literacy (Washington, DC: Alliance for Excellent Education, 2004). Available online at www.all4ed.org.

urgency for finding real solutions to advancing literacy levels in content-area instruction.

Finally, it serves to evaluate programs and policies and can indicate the need for changes in the degree of oversight, for professional development for teachers and leaders, and for increases in resource allocation. Increasingly, states have access to data systems that provide a fine-grain analysis of individual students' reading achievement over time, yielding important information on growth rates as well as item analyses that indicate the skill sets tested by individual test items (and therefore assumed absent if the student misses the item).

Yet in order for teachers to provide appropriate, timely instruction for individual students, diagnostic and formative measures are necessary. Unlike summative measures that follow extended learning periods (e.g., the academic year), ongoing formative assessment are taken frequently, even daily, to identify students' individual needs and to design instruction so that students can reach learning goals. Timeliness and close alignment with curricula characterize these measures. In contrast to summative measures, these assessments are sensitive to changes in students reading levels and teaching practices and can test assumptions as to why a student is struggling to read.

An important policy lever for states to apply is requiring the use of multiple indicators of reading ability, since no state assessment can provide timely, detailed information to inform daily instruction appropriate to the students' needs. Policies that support classroom assessments as well as the professional development and support teachers need to administer them effectively are vital. States need to provide: 1) clear guidance to districts and schools on psychometrically sound assessment instruments for multiple purposes—to evaluate reading achievement, diagnose students' literacy needs, and assess the impact of instruction; 104 and 2) appropriate training and supports for teachers to use these instruments to differentiate instruction.¹⁰⁵ (See textbox on Rhode Island's Reading Initiative, page 34.)

Finally, states need to periodically evaluate the implementation and impact of policies at the district, school, and classroom levels. Data should be collected on critical indicators such as literacy levels, state assess-

ments, graduation exams, dropout rates, and graduation rates. States should communicate the results to all stakeholders and use the information to guide a continuous improvement process—one that targets supports and resources to expand capacity and accelerate the development of students' literacy skills.

STEP #4: Require the development of district and school literacy plans that infuse research-based literacy support strategies in all content areas.

Redesigning standard practice in middle and high schools is no easy task. It requires exercising external policy levers to ensure that districts focus on equipping and supporting schools to infuse research-based instructional practices as part of a schoolwide focus. It embodies planned system-wide elements—which have been shown to be effective in studies of high performing districts—including: creating a climate of urgency regarding improving reading achievement; fostering a culture of shared accountability for student learning; designing the central office as a support and service organization for schools, providing a high level of resources devoted to professional development on research-based practice, and equipping leaders to exercise data-driven instructional leadership. 106

State policies should address building district capacity to help teachers and leaders work collaboratively to pursue viable solutions to advance the literacy levels of adolescent learners. It begins with designing *coherent district and school literacy plans* that can provide teachers and school leaders with the tools, resources, and training to provide literacy instruction within content-area teaching. Districts and schools should design comprehensive programs and supports based on detailed information on students' needs. State policies should also develop accountability and oversight mechanisms to ensure that programs are implemented effectively and result in improving students' reading skills and content learning.

Elements of district and school plans should include the following:

a. Good Assessment

States should provide guidance on sound assessment procedures to answer specific questions about the

Rhode Island High School Literacy Initiative

The Rhode Island Board of Regents for Elementary and Secondary Education extended its K-5 literacy initiative to middle and high schools in 2003 following statewide high school summits involving a broad range of stakeholders convened to consider the current state of affairs and future directions for the state's high schools. The summit deliberations led to the identification of systemic problems in underachievement in high schools— many students were reading below grade level, making access to high school curriculum difficult. The state observed a falloff in state assessment results for students as they progressed from grade 4 through grade 10 and noted wide variation in the level of coursework within schools (due to tracking) and across schools because of disparities in how well schools prepared students for more advanced learning and the world of work.

After the 2000 summit, the board of regents created a subcommittee for high schools and convened forums with high school principals, superintendents, union leaders, and other constituencies in order to carefully deliberate on how to respond to the problem of underachievement in high schools. These efforts culminated in regulations adopted by the regents in January 2003 that specifically address three priority areas: literacy, graduation by proficiency, and personalization—with literacy as the first priority—that are binding on all schools and districts. The literacy requirements stipulate that each school district in Rhode Island shall report the reading levels of all of its students who fail to attain proficiency on the state assessment subtests; identify all students in grades 5, 9, and 11 who did not attain proficiency the previous spring on the English language arts assessment; and diagnostically assess (using approved state diagnostic assessments) each of these students and report their reading levels to the state department of education each year. In addition, districts must complete an interim self-assessment that describes the mechanisms in place to identify and support students in need of literacy support.

School improvement plans and district strategic plans throughout Rhode Island's K-12 system must describe the methods by which students who are reading below grade level will attain at least grade-level abilities. Each

middle and high school must have specific programs in place to provide support to students below proficiency in literacy. The programs must ensure articulation between schools and provide features that include:

- Schoolwide emphasis on literacy across the curriculum for all students;
- Targeted programming for students identified as more than one year below proficiency through the use of "ramp-up" or other specific interventions; and
- Intensive programming through Personal Literacy Plans (PLPs) for students who are more than two years below proficiency, administered by a reading specialist.

Every two years, districts are required to evaluate the effectiveness of their literacy program based on student performance.

To support the literacy initiative goal of ensuring all students reach grade-level performance, a state literacy advisory panel was formed to advise on implementing the literacy initiative and providing quality literacy resources to districts and schools. These regulations were crafted to ensure that reading interventions are undertaken when there's evidence of a literacy problem. The state reserves authority to authorize the use of federal and state funds for these purposes and to intervene in a district or school as warranted to ensure that students, at all grade levels, are having their literacy needs effectively addressed. Concomitantly, Rhode Island came out with a policy on high school restructuring that would complement the intent of these measures in augmenting students' literacy instruction.

Source: Regulations of the Board of Regents for Elementary and Secondary Education Regarding Public High Schools and Ensuring Literacy for Students Entering High School, passed January 9, 2003. Available online at www.ridoe.net/HighSchoolReform/hsregulations.htm.

The Rhode Island Department of Education's *Guidelines* for the Development of Personal Literacy Plans is available online at www.ritap.org/ritap/content/personal literacy plans.pdf.

reading skills of each student, as well as students' progress in meeting grade-level expectations. Plans should identify a cohesive assessment system that includes both summative and formative measures that serve various purposes—to diagnose reading performance, problem solve, inform instruction, intervene and monitor progress, and evaluate reading interventions and programs. States and districts need to access data systems that provide educators with usable information to adjust school structures and instruction in accord with students' needs.

b. Tiered, Strategic Schoolwide Interventions

Districts and schools need to design tiered, strategic, schoolwide interventions that provide literacy supports and infuse practices to augment students' achievement in content areas. There should be explicit guidance on how to differentiate instruction for adolescent learners based on sound assessment and application of research-based practices. At the same time, districts and schools need sufficient flexibility to tailor reading instruction within disciplines and adapt structures and schedules to accommodate a diversity of student reading and achievement levels. These tiered interventions allow for adjustment of two key variables that account for the greatest portion of variance in student achievement: the amount of instruction (time) and the content of instruction.¹⁰⁷

The broadest schoolwide interventions enlist content area teachers to use research-validated reading strategies and instructional routines that are specifically tailored for curriculum areas and serve to advance all students' mastery of content standards. Such practices emphasize pre-reading activities, during-reading strategies, and graphic organizers to guide students in accessing background knowledge and creating meaning during the reading process. Strategy instruction should provide students with feedback on performance and encourage students to take an active role in his or her own learning. For students who require more support, teachers provide more explicit instruction in identified strategies whereby they explain and model the use of a strategy and require students to use it within their content assignments.¹⁰⁸

In a national study of middle and high schools serving mostly low-income students of color, Langer

found that schools that implemented systematic literacy instruction surpassed the district's average reading performance. These schools implemented literacy programs that developed integrated skills instruction through coherent, rigorous units of instruction; gave students several opportunities to learn and apply critical concepts; integrated strategies and self-monitoring necessary for both reading and writing; and aligned instruction with high-stakes assessment.

c. Organizational Structures to Sustain and Enact these Elements Strategically

Sufficient flexibility must be afforded in state and district policies to allow schools to increase time for literacy instruction given the need to meet graduation credits and cover extensive material across content areas. Districts and schools should consider a range of alternatives to provide increased learning time and specialized staffing and supports in accord with students' needs. Options for districts and schools include:

- Instituting strategy instruction for effective reading and writing across curriculum, not just in language arts or English classes. (See textbox on the Talent Development High School on page 37.)
- Establishing freshman academies in which students receive about six weeks extra instruction before they enter 9th grade.
- Providing the flexibility to institute two to four hours of literacy-connected learning daily in place of the standard 30-45 minutes of reading and writing per day and collaborate with the major departments to provide literacy instruction in support of their specific discipline. For example, social studies teachers may select use of graphic and semantic organizers to review text structures and collaborative learning to help students summarize material, connect key concepts, and generate questions.
- Providing students who have greater literacy needs with more intensive intervention and supports beyond what can be provided in regular classes.

- Designing reading activities accessible beyond the school day and year and coordinating efforts within the community and between the school and home.
- District and school plans should recognize that the same basic elements of effective instruction work for both literacy and content instruction (see textbox at right).

d. Committed Leadership

School leadership is critical to sustaining coordinated instructional programs to advance literacy throughout the curriculum. There is mounting evidence that leadership is second only to teaching in its impact on student achievement. Leaders set directions, develop staff, create and sustain elements that build school capacity, structure time, and ensure support and resources for teachers. To infuse research-based practices into subject-area courses, teachers will need ongoing expert support to integrate meaningful reading and writing opportunities within their specific disciplines. The district plays a pivotal role in supporting principals as instructional leaders by providing authority, training, and support for school leaders to:

- Commit to reading as a schoolwide priority;
- Articulate the mission and expectations to advance literacy through school improvement planning;
- Provide summative and formative feedback to teachers;
- Establish vehicles for shared decision-making models such as literacy teams and provide opportunities for common planning time;
- Ensure high-quality professional development and opportunities for common planning;
- Allocate resources and secure schoolwide resources for literacy instruction;
- Monitor gains in reading and writing to provide targeted help for those not making progress; and
- Communicate with the community and parents.

In general, researchers have found that instruction characterized as responsive, systematic, and intensive benefits students regardless of whether a student is learning subject matter content or acquiring a strategy to facilitate the learning of content. Teachers form instructional decisions in response to students' unique learning characteristics that shape the immediate instructional interaction and the long-term planning.

Whether a student lacks fluency or the background information to understand what's being taught, responsive education includes:

- Continuously monitoring students learning;
- Adjusting instruction to meet students' needs; and
- Providing elaborated feedback.

Despite the lip service given to instructional leadership, few principals are prepared to lead schoolwide reading interventions, particularly in middle and high schools. 114 The 2004 evaluation of the Alabama Reading Initiative found that principals tend to overestimate the quality of reading instruction teachers provide. The evaluators recommended that central offices along with regional literacy coaches work with principals to raise their expectations for what constitutes good instruction. 115

Shanahan noted that based on his experience in the Chicago public school system, leadership in literacy could only be cultivated at the district level, recognizing that few principals had the background to seriously implement a sound literacy initiative. Likewise, few teachers had the requisite knowledge to help the principal configure a strong schoolwide literacy program. He reported that out of Chicago's 75 high schools, only about 15 teachers hold a state certificate or endorsement in reading. Chicago took steps to build school capacity by forming literacy teams composed of the principal, lead teacher from each core academic area, a reading teacher, and other support professionals. The district provided training to teams and required them to design plans to meet the reading needs of its students and the literacy teaching needs of its teachers. 116

The Talent Development Literacy Program for High School Students

The Talent Development (TD) model was launched in 1994 by the Center for Research on the Education of Students Placed At Risk at Johns Hopkins University. Located now in 50 large high schools in major school districts across the country, the TD high school provides a comprehensive research-based instructional program aimed at gradually closing the literacy gaps of students in high-poverty schools. It evolved over the past decade from a focus on increased personalization for students to one that targets improving their fluency, comprehension, and writing skills using a highly specialized sequence of activities.

The shift resulted from teachers' reports that their students were struggling with reading textbooks and had difficulty communicating in writing about what they had read. The TD program adopted alternate approaches to help students develop their comprehension skills and vocabulary development. The TD project staff worked closely to engage adolescents in reading and writing activities while at the same time aligning literacy activities to state and district standards. The researchers involved with the TD project noted that it was important to work with local districts to ensure that curriculum standards are being met and that students are being well prepared for high-stakes tests.

The TD high schools implemented a 4 by 4 block schedule with two 18-week terms of four extended-period courses—about 90 minutes daily. The emphasis in the first term served to accelerate reading and writing skills to narrow gaps; the second served to cover the district-level curricula for reading selections and writing goals.

Teachers follow a sequence of four different activities using extensive guides and materials to support content instruction. The sequence includes 20 minutes of teacher modeling, in which the teacher presents specific reading comprehension and metacognitive strategies; 20 minutes of a teacher-directed interactive mini-lesson on specific comprehension skills and strategies; 30 minutes of cooperative learning activities, in which students participate in group discussions of high-interest, low-reading level novels with peers; and finally 20 minutes of student choice independent reading.

Professional Development and Supports

TD literacy programs use multilevel systems to support teachers in implementing the sequence of activities that

includes workshops followed by ongoing technical assistance from expert in-class peer coaches. The workshops provide intensive orientation on each instructional approach as well as training on how to continuously assess literacy skills, how to teach writing, and how to engage and motivate students. Teachers receive in-class coaching throughout the year by expert peer coaches who visit a teacher's classroom at least once per week. The coaches are well-versed in the TD literacy components and can provide support for teaching through modeling, co-teaching, providing feedback, and recommending materials and resources. The TD program has established local supportive networks to bring together all the TD teachers and in-class coaches working in a district to form a collegial network.

Evaluations of Talent Development High Schools

Studies that compare learning gains of students participating in the TD literacy programs with students in matched control schools consistently favor students in the TD schools. Students make significantly greater achievements gains on various standardized reading tests and local state exams. Clearly, in order to close achievement gaps, programs need to achieve accelerated growth rates with students who enter high school three to four years behind. In fact, students would have to gain nearly two years for every single year in high school to graduate in four years on grade level and be ready for college. Johns Hopkins researchers have shown that teachers with strong implementation of the TD literacy program increase student growth by a factor of two for the time used for instruction.

The TD program intends to refine elements as part of a continual improvement process, including evaluating its impact under different implementation conditions; building local capacity to support content teachers in reinforcing and supplementing literacy skills needed in their courses; and expanding resources to scale up successful practices in additional districts.

Taken from: James McPartland, Robert Balfanz, and Alta Shaw, "The Talent Development Literacy Program for Poorly Prepared High School Students." In Dorothy S. Strickland and Donna E. Alvermann (Eds.), *Bridging the Literacy Achievement Gap Grades 4–12* (New York, NY: Teachers College Press, 2004).

In general, researchers have identified the following organizational features that are linked with schools successful in advancing literacy outcomes:

- Administrators make literacy improvement one of their top priorities and show resolve in making tough decisions to shift resources to those areas that directly affect literacy outcomes;
- Teachers, regardless of their role and area of specialization, see themselves as having responsibility for improving the literacy performance of all students in their classes;
- Instruction is coordinated across teachers, classes, and grade levels, which results in a critical mass of instruction focusing on literacy improvements;
- There is heavy reliance on the use of researchvalidated instructional practices and programs that are appropriate for students' needs.

Ancess studied small schools in New York serving largely low-income African American and Latino students that provided personalized, responsive relationships among students, staff, and parents. The author found that these schools produced strong gains in reading and cited a number of factors in the significant improvement: teachers worked collaboratively to plan instruction; they clarified the requirements of literacy tasks; and they extended reading to authentic situations beyond the classroom. Other researchers report that high expectations and supportive relationships are common elements among teachers who are effective with minority students. The students of the students are supported to the students of the students are common elements.

e. Interdisciplinary Literacy Teams

District and school plans should promote coordinated instruction as well as planning through interdisciplinary literacy teams. Literacy teams need to include the principal, reading specialist and related personnel, and representatives from all departments. This affords consistency of instruction across subject areas and a sense of collective responsibility and efficacy for developing students' advanced literacy skills. It serves as a mechanism for identifying individual student needs, designing coordinated supports across discrete

subjects, and providing teachers help in applying research-based strategies to their discipline. 120

Given appropriate planning time, data, and external guidance, these teams serve an important leadership function in guiding schoolwide literacy programs. They have an important role in designing effective delivery systems to ensure that the school's entire instructional staff has access to the supports staff members need to help all students meet the standards through improved content literacy. With external supports from central office staff and specialists, literacy teams analyze student data to identify and craft instructional interventions. They also help design professional development to ensure that every teacher has the necessary knowledge and skills to enhance students' ability to access and comprehend the text they encounter in middle and high school courses. Districts can support the effectiveness of literacy teams by providing the time, training, resources, and external supports needed to drive school-based literacy initiatives. Districts also play an important role in coordinating reading programs across schools and facilitating coordination across feeder schools.

STEP #5: Provide districts and schools with funding, supports, and resources.

a. Funding

Schoolwide literacy initiatives require sufficient funds to provide schools and teachers with the necessary resources and supports to differentiate instruction for students across abilities and grades. There are numerous implications for resource policies on staffing, time, instructional organization, assessments, curriculum, textbooks and materials, and professional development. It is largely impossible for schools to implement schoolwide literacy interventions without the funding and resources to go beyond day-to-day operations.

Moreover, states must target additional funds and resources to high-poverty districts and schools where large numbers of students struggle with foundational literacy. Because large numbers of minority and low-income students perform below basic on state and national reading assessments, politicians and the public must be willing to step up to the plate in this area if they are serious about the goal of high levels of perfor-

How to Know a Good Adolescent Literacy Program When You See One: Quality Criteria to Consider

Policymakers, educators, parents, and other concerned stakeholders need to make informed decisions about literacy programs for struggling readers. No one program will solve the problem of low literacy levels that are prevalent among large numbers of middle and high school students. Yet, while more research needs to be done, there is widespread agreement about the key components of effective literacy intervention programs. It is critical that those in positions to make decisions about designing and implementing programs consider the following:

- Programs should be appropriate for both the reading level and the age level of the students involved.
- Programs should be flexible enough to allow for students' different learning styles, abilities, backgrounds, and interests.
- It is unlikely that any single program will address all the literacy needs of a school; schools are complex institutions composed of many different types of students who require different types of instruction.

In order to assess any literacy program, the following questions should be addressed:

- 1. For what age group is the program designed?
- 2. For what reading level is the program designed?
- 3. Is there independent research about the program; if so, what does it say about the program's effectiveness?
- 4. Has the program been demonstrated to be effective with the age group(s) and reading level(s) of the students in question?
- 5. What sort of support (such as training) does the program offer the teacher?
- 6. What is the cost, both direct and indirect, of the program?
- 7. To what extent does the program require changes in the structure of the school or district?

Other considerations include how the program addresses the key reading elements outlined in the research—motivation, fluency, vocabulary, comprehension, phonics and phonemic awareness, writing, and assessment.

Examples of such considerations include evaluating whether the program includes:

Motivation

- Explicit rationale that compels students to use reading to gain knowledge—the ultimate goal of any literacy program should be for students to use reading as a strategy for learning
- A cooperative learning environment designed for students to discuss readings

Fluency

- Uses repeated readings, in which students read and reread passages
- Includes guided readings accompanied by feedback to correct errors

Vocabulary

- Strategies to learn new words through frequent contact with the same words (repetition), verbal and written use of learned vocabulary words (active engagement), and learning vocabulary through direct instruction and read-aloud sessions
- · Computer technology to build vocabulary skills

Comprehension

- Before, during, and after reading activities designed to access what the student knows about a particular topic
- Teaching components that enable students to evaluate a text based on its structure and discern the relative importance of parts of the text and to make connections between different portions of the text
- Teacher modeling that shows and teaches students effective strategies
- Opportunities for students to generate and answer questions that encourage higher-order thinking about reading passages

Phonics and Phonemic Awareness

- Direct instruction using explicit instruction plans
- Frequent practice of words in the context of their meaning and an emphasis on word recognition

Writing

- Writing about what the student reads and providing an audience for students' writing
- Environment in which writing is viewed as a five-stage process that requires outlining, drafting, revising, rewriting, and publishing

Assessment

- Professional development to allow teachers to become skilled in determining and correcting the reading needs of students
- Make assessment a regular extension of instruction
- Monitor student performance on a regular basis and include components to diagnose students' initial ability and also to assess how students are progressing

Taken from: Alliance for Excellent Education, How to Know a Good Adolescent Literacy Program When You See One: Quality Criteria to Consider. Issue Brief (Washington, DC: Alliance for Excellent Education, May 2004). Full brief is available online at www.teacher.scholastic.com/products/read180/pdfs/CriteriaforAdolescentLiteracyPrograms.pdf.

mance for all students. Increasingly, finance equity and the lawsuits on the part of poorer school districts claiming that they do not receive their fair share of state funding have dominated discourse in state capitols and courtrooms. The issue of adequacy—that is, whether districts have the funding needed to provide an adequate education to every student—has emerged front and center as states have called for districts and schools to ensure that students meet certain standards.¹²¹

Biddle and Berliner examined the differences in average annual expenditures per student for states and for districts and found that while sharp disparities existed among states, the differences within some states were even greater. School funding serves as a critical factor in accentuating initial differences attributable to a student's economic status: estimates suggest that the national average across states was \$1,020 less for each student in a high-poverty district.

But it should also be noted that issues around "adequacy" are not always just about how much money, but how the money is used and distributed. States should carefully examine how money for education is currently being spent. While billions have been devoted to early literacy, primarily through federal Reading First grants, the federal government has only now authorized a new discretionary grant program, Striving Readers, to support the implementation and evaluation of reading interventions for struggling middle and high school readers. This first round of funding amounts to only \$24 million, far below allotments for early literacy.

Only a handful of states, such as Florida and Alabama, have committed substantial allotments to support middle and high school literacy programs. The Florida legislature funded its first-ever reading allocation as part of the 2005-06 Florida Educational Finance Program (FEFP), a move to make funding for reading permanent. The FEFP allotments for the 2005-2006 school year total \$89 million, which is \$43 million more than last year's allocation for state reading funds. Similarly, Alabama boosted the 2004 funding for its state literacy initiative from \$12.5 million in 2004 to \$40 million in 2005. (See appendices A and B for details on Florida and Alabama literacy initiatives.)

State leadership along these lines is vital to provide impetus and funding for those supports necessary to implement district and school literacy plans. Adequate funding must be inextricably linked with statewide strategies to increase system and student performance. In addition, states need to carefully allocate resources that support the state's strategic goals and target additional resources to the neediest districts and schools in order to ensure that what must get done is funded. Key considerations should include identifying, allocating, and managing resources that are clearly dedicated to the achievement of reading mastery for all students within the school. These include elements discussed in the following sections.

b. Instructional Materials

States should collaborate with practitioners, publishers, researchers, and district central administrators to identify the range of instructional materials that must be in place for schools to strengthen students' literacy skills in content area instruction. Teachers need detailed curriculum guides to incorporate those teaching tools and strategies that would help all students better analyze, synthesize, and integrate the information found in printed course material. Most importantly, teachers need access to research-based reading materials that promote wide reading to enhance vocabulary acquisition and reading comprehension. Text and companion materials should instruct students in strategies that enhance their understanding of the materials they read and relate new concepts and vocabulary to the reader's background knowledge.

Most importantly, given the wide range of reading and writing abilities of middle and high school students, an array of diverse texts and supplemental materials should be available in sufficient quantity to allow teachers to differentiate instruction. These materials should include:

- Choices for self-selected reading that can accommodate diverse student achievement levels and interests;
- Content-based texts and other materials at varying reading levels that provide multiple sources of information;

The Role and Qualifications of the Reading Coach

Reading coaches are rapidly proliferating across the country as one response to the widespread problem of reading achievement. While potentially a powerful intervention, it is one that can only be fulfilled if states and districts ensure that coaches have sufficient knowledge and range of skills to perform adequately. In 2004, the International Reading Association (IRA) issued a position paper calling for individuals designated as reading or literacy coaches to be appropriately prepared and have the requisite knowledge for the positions they hold.

Increasingly, the role of reading specialists and coaches has shifted away from direct teaching toward leadership and professional development. The IRA holds that those individuals who provide such leadership should meet *Standards for Reading Professionals, Revised 2003* (available online at www.reading.org/resources/issues/reports/professional_standards.html). The roles of such reading professionals include designing, monitoring, and assessing reading achievement progress; providing professional development and coaching for teachers; and supervising and evaluating staff.

Because of immediate need to fill positions of reading professionals who focus primarily on coaching and provide ongoing support for classroom teachers within school buildings, the Association acknowledges that school districts may select candidates who do not meet the standards for reading specialist (and in some states, reading specialist certification is not available). Candidates should demonstrate the following minimum qualifications, however, with the proviso that candidates should participate in reading specialist degree programs so that within three years they can meet the Association's standards for reading professionals.

The standards specify that reading specialists:

- Are excellent teachers of reading, preferably at the levels at which they are coaching;
- Have in-depth knowledge of reading processes, acquisition, assessment, and instruction;
- Have expertise in working with teachers to improve practices; and
- Have the experience or preparation that enables them to model, observe, and provide feedback about instruction for classroom teachers.

Teachers in general should have completed several years of outstanding teaching, substantial graduate level coursework in reading, and coursework related to presentation, facilitation, and adult learning.

This latitude is afforded because of the importance placed upon providing coaches who can provide ongoing consistent support for the implementa-

tion and instructional components. The underlying assumption is that increasing the expertise of reading professionals who are available to work with classroom teachers would allow teachers to improve their reading instruction and student achievement through on-site activities that provide a range of professional development options—from informal, such as conversations or developing curriculum and materials—to formal, such as modeling lessons, observing classrooms and providing feedback, coteaching, and analyzing videotape lessons.

Nevertheless, the importance of applying standards for reading professionals is paramount in ensuring quality teaching. Substantial evidence points to the enormous variability in the effectiveness of reading coaches because of individual differences in background and training. Even for those who meet minimum requirements, reading coaches should be involved in ongoing professional development and supervised by certified reading specialists. It's critical for states to define clearly the role and expectations of reading coaches for the coaches themselves, administrators, and teachers.

The Association notes, "It is the responsibility of every stakeholder to do whatever he or she can to ensure that reading instruction is sound and effective." The position paper outlines a number of recommendations designed to ensure that high-quality professionals serve in this capacity, including the following:

- Continue to fund reading interventions that focus on professional development of classroom teachers;
- Use state professional development funds to develop strong reading coaching intervention;
- Insist that reading coaches have in-depth knowledge of reading instruction and the skills necessary for effective reading coaching;
- Insist that state and district reading coaching interventions are carefully conceptualized; also, provide adequate supervision of an infrastructure to support the interventions, and insist that the infrastructure is in place before beginning an intervention; and
- Provide principals with adequate training for understanding their relationships with the reading coaches.

The International Reading Association has recently released its specific standards for literacy coaches (see box on page 43).

Taken from: International Reading Association. The Role and Qualifications of the Reading Coach in the United States: A Position Statement of the International Reading Association. Adopted by the Board of Directors, May 2004. Available online at www.reading.org/downloads/positions/ps1065_reading_coach.pdf.

- Multiple ways of measuring proficiency at mastering content;
- Multimedia, computers, and other forms of modern technologies;
- Content-based texts and other materials at varying reading levels; and
- Curricula and lesson plan banks (by content and by grade level) that incorporate text comprehension and other instructional strategies.

States that hold this authority should leverage textbook adoption policies by specifying processes that ensure textbooks and other materials are research based. Developers of textbooks and instructional materials should be encouraged to improve their products by attaining a higher standard of accuracy, currency, depth, clarity, and relevance. ¹²⁵

c. Literacy Coaches

Middle and high school teachers in core content areas will need ongoing guidance and support to integrate content literacy instruction. Effective programs will require continuing, site-based staff development—for teachers, administrators, and key district-level personnel. States, districts, and schools are currently tapping cadres of literacy coaches to support content teachers across the curriculum to help them implement and utilize strategies designed to improve their students' ability to read, write, and succeed in subject matter courses. 127

There is evidence that literacy coaches can be an effective and critical component of beginning reading instruction; however, there is not yet such conclusive evidence about the effectiveness of literacy coaches as a component of a comprehensive adolescent literacy program. Moreover, state standards for qualifications are largely absent.

The Alabama Reading Initiative (ARI) has used literacy coaches extensively and includes the goal of placing a literacy coach in each of the participating middle and high schools. Alabama organizes workshops for teachers who wish to become literacy coaches in collaboration with universities. ¹²⁸ Even so,

evaluations of ARI indicate the need for setting standards that teachers must meet to be coaches and ensuring that colleges and universities make sure programs are consistent with the standards. ¹²⁹ Evaluations also indicate that the level of access is insufficient for low-performing schools and recommend at least two visits a month to ensure that faculty has sufficient training in reading assessments and small-group instruction.

Clearly, access to well-trained reading specialists and consultants who can work intensively with content area teachers is critical to the success of middle and high school literacy programs. The International Reading Association (IRA) issued the following position statement calling for uniform roles and qualifications for literacy coaches:

At present, there is little consistency in the training, backgrounds, and skills required for such positions, and there is little consistency in the general competence of coaches.... The Association applauds the expansion of reading expertise available to students and teachers at the school building level. However, individuals designated as reading coaches, or literacy coaches, must be appropriately prepared and have the knowledge and skills necessary to be effective in the positions they hold.¹³⁰

Building on this recommendation, the IRA, in collaboration with the National Council of Teachers of English, National Council of Teachers of Mathematics, National Science Teachers Association, and National Council for the Social Studies, has now released standards for middle and high school coaches. (See box on page 43.)

STEP #6: Provide state guidance and oversight to ensure strong implementation of comprehensive quality literacy programs.

States need to craft detailed guidance on the key specifications for district and school-based literacy plans. To ensure the quality of programs, there should be well-defined expectations for what elements districts and schools need to address in order to support quality reading instruction. Rhode Island, for example, requires schools and districts to report to the state the reading level of all students

Standards for Middle and High School Literacy Coaches

The International Reading Association's *Standards for Middle and High School Literacy Coaches* was developed in association with teacher groups representing English, science, mathematics, and social studies teachers and with support from Carnegie Corporation of New York.

The report notes that it takes two to three years for most literacy coaches to develop the full complement of coaching skills—and that expanding this role to the middle and high school grades adds another dimension, as secondary coaches must assume the additional responsibility of working with colleagues across content areas.

Accordingly, the standards, or "key competencies," are organized into two parts—leadership standards and content area literacy standards. The leadership standards apply to literacy coaches without regard to the content area in which they are assisting teachers. The content area literacy standards apply to the demands literacy coaches face when assisting in a specific content area.

The four key competencies, which are each divided into a number of elements (and, for Standard 4, into content areas), are as follows:

Leadership Standards

STANDARD 1: SKILLFUL COLLABORATORS Content area literacy coaches are skilled collaborators who function effectively in middle school and/or high school settings.

STANDARD 2: SKILLFUL JOB-EMBEDDED COACHES

Content area literacy coaches are skilled instructional coaches for secondary teachers in the core content areas of English language arts, mathematics, science, and social studies.

STANDARD 3: SKILLFUL EVALUATORS OF LITERACY NEEDS

Content area literacy coaches are skilled evaluators of literacy needs within various subject areas and are able to collaborate with secondary school leadership teams and teachers to interpret and use assessment data to inform instruction.

Content Area Standard

STANDARD 4: SKILLFUL INSTRUCTIONAL STRATEGISTS

Content area literacy coaches are accomplished middle and high school teachers who are skilled in developing and implementing instructional strategies to improve academic literacy in the specific content area.

Adapted from International Reading Association, *Standards for Middle and High School Literacy Coaches* (Newark, DE: Author, 2006). The full document is available online at www.reading.org/downloads/resources/597coaching_standards.pdf.

who fail to attain proficiency on state reading assessments; submit to the state school improvement plans and district strategic plans that outline the mechanisms by which students who are reading below grade level will attain at least grade-level abilities; and conduct periodic district evaluations based on student performance of the effectiveness of their literacy program.

Governor Jeb Bush's Just Read, Florida! initiative requires all districts to submit a K-12 Comprehensive Research-Based Reading Plan that outlines how

districts and schools will monitor reading instruction and provide assurances about the fidelity of implementing the multiple strands of the reading program specifications. Plans must specify how each district and school will address such components as:

- Participation of principals and reading coaches in state-sponsored professional development on reading;
- Identifying the data that will be collected to achieve ongoing progress monitoring of schools;

Buckhorn High School

Buckhorn High School in New Mark, Alabama has a racially and economically diverse population of about 100—about 30 percent of students are minority; about 20 percent receive free or reduced price lunches. The school has gained national attention for meeting the needs of students who read below grade level—in 2004, every Buckhorn senior passed the Alabama High School Graduation Exam; in 2005, only one student missed the mark.

Seven years ago that was not the case. Because of persistently low reading performance throughout the 1990s on state assessments, the high school became part of the Alabama Reading Initiative (ARI) in 1999, during which time only one other high school was participating. The school administered reading level assessments to all their incoming 9th-grade students and found that 40 percent of incoming freshmen were reading on the 6th-grade level or below. While the stark data was sobering, Buckhorn, led by principal Tommy Ledbetter, committed to transforming the traditional focus on what teachers teach to one that is driven by what students learn.

The principal and faculty participated in the ARI's intensive summer training, where they learned to incorporate reading instruction into their subject areas and to design ways to help students whose reading difficulties impede content learning. With strong school leadership and commitment, the school culture shifted to one that valued using individual student data, diagnosing problems, searching collectively for solutions, and applying strategies in a targeted way.

Buckhorn implemented a strong intervention program whereby teachers across the curriculum accepted responsibility for working on reading skills in content areas. Instruction became much more explicit as the faculty became adept at data analysis to identify who needed help, in what areas, and using what strategies and supports. Staff collaborated to develop individualized plans based on individual performance data on reading and writing assessments and the state graduation exams. The use of student data was a major element of ARI at Buckhorn. During the first few weeks of school, individual assessments were administered to evaluate each student's reading ability and the specific difficulties of struggling readers.

The school was organized for success by harnessing the collective expertise of the faculty, principal, curriculum leaders, and specialists. A literacy leadership team that included the principal, curriculum leader,

all department heads, and specialty areas spearheaded the schools' cross-curricula cooperation to:

- Develop a professional learning community to coordinate schoolwide literacy instruction and support ongoing professional development;
- Use shared decision-making for identifying which comprehension strategies to incorporate based on its discipline;
- Analyze assessment data to guide instruction and develop intensive intervention strategies;
- Assess strategies implementation through action research;
- Design a creative, combined curriculum that would support literacy development and content learning across disciplines;
- Focus on extending writing opportunities across subject areas: and
- Identify and highlight best practices with all faculty.

Careful attention was given to providing teachers with training, mentoring, and ongoing supports to help teachers enlarge their toolbox of teaching strategies and become more adept at individualizing instruction to meet students' needs. The high school tapped master teachers to model and coach and enlisted district support in the form of reading specialists and coaches.

The principal afforded the support and encouragement, as well as the materials, time, and resources to sustain an instructional focus on literacy improvement. The high school schedule was organized to provide reading and language essential courses in a daily 90-minute block for intensive accelerated instruction as part of a multitiered schoolwide intervention. Students who needed more specialized attention received help from an ARI-trained reading specialist.

Taken from: "Buckhorn High School: An Unrelenting Attitude Toward Student Success," published in the Summer/Fall 2005 issue of Working Toward Excellence, a newsletter of the Alabama Best Practices Center, online at www.bestpracticescenter.org; Alliance for Excellent Education, Case Study: Buckhorn High School (Washington, DC: Alliance for Excellent Education, July 2005).

- Providing methods for providing classroom supports and intensifying interventions as needed;
- Implementation of assessment-driven reading professional development;
- Formation of reading leadership teams, the purpose of which is to create capacity of reading knowledge within school buildings;
- Providing extended blocks of time for reading instruction and for weekly professional development opportunities;
- Linking performance evaluations of principals, coaches, and teachers to student achievement in reading;
- Providing a comprehensive set of reading text materials and creating print-rich school environments; and
- Enforcing the reading coach model described by the Just Read, Florida! office.

Florida tied the submission of the district plan with receipt of its allotted categorical reading funds through the Florida Educational Finance Program—the districts' funding source for the balance of their operational revenues that is not generated by property taxes. In order for districts to receive their reading categorical dollars, their plan must be approved by the Just Read, Florida! office. Districts must describe their oversight and monitoring role for school-based programs and report to the state office on a quarterly basis. 132

Schools in Alabama participate in the state's reading initiative on a voluntary basis. (ARI has expanded from 16 schools in 1998 to 535 in 2004; 25 percent of those schools served students in grades 7-12.) The state provides ongoing support through regional coaches and extensive training to help schools implement literacy interventions. Schools must apply to participate and are selected on their perceived "commitment" and "readiness," which schools demonstrate by having 85 percent of their faculty, including the principal, attend the summer training session. The state requires schools to commit to the goal of 100

percent literacy and asks them to develop action plans outlining how they intend to:

- Provide coordinated instruction in the five essential components of instruction that is explicit and systematic;
- Assure a protected block of time (90 minutes) and use flexible and varied groupings that emphasize small group instruction;
- Provide effective, research-based interventions for struggling readers;
- Measure grade-appropriate content in the five essential components of reading instruction;
- Administer screening, progress monitoring, outcome assessments, and diagnostic testing as needed;
- Use assessment data regularly to guide reading instruction and professional development;
- Support and monitor implementation of reading instruction, assessment expectations, and professional development; and
- Work collaboratively with the leadership team to design literacy instruction in content areas and for struggling readers.

Alabama has focused on strengthening the relationship with district central office as the more direct source of support, professional development, and local mandates that can ensure fidelity to the outlined programmatic features. The state coordinates with district personnel responsible for curriculum and instruction (e.g., special education, federal programs, assessment) to ensure quality implementation of the schoolwide literacy programs. Through the state agency and regional coaches, individual ARI schools receive differentiated supports in the form of on-site visits with principals and literacy teams, joint planning with schools using progress monitoring data to focus on struggling readers, opportunities for school staff to visit demonstration sites, and follow-up meetings to target staff development needs. Reading coaches supported through state funding are required to participate in monthly trainings.

Chapter 4. Teaching for Literacy

n the previous chapter, Step #2 of the state's literacy plan focused on teaching. Yet the Study Group believed that teaching is so important—indeed, that quality teaching is the sine qua non of developing reading and writing proficiency—that the issues surrounding teachers and literacy should be addressed in a separate chapter.

Experts maintain that good instruction is the most powerful means of promoting the development of proficient comprehenders and preventing reading comprehension problems through explicit instruction of literacy skills across the curriculum. 134 Referring to the critical role of the teacher in advancing adolescent literacy, Catherine Snow writes, "A good teacher makes use of practices that employ his or her knowledge about the complex and fluid interrelationships among readers, texts, purposeful activities, and contexts to advance students' thoughtful, competent, and motivated reading."135 Peggy McCardle from the National Institute of Child Health and Human Development spoke to the Study Group about the role of effective teachers in assessing the critical components of skilled reading and providing targeted instruction to enhance proficiency where needed. She also noted the disparities in teacher quality for low-income and minority students, who are far more likely to have less effective teachers even though these students often need more intensive reading and writing instruction to maximize content learning.

The import of quality teaching to improve adolescent literacy reinforces the growing body of research over the last decade that has made clear that the quality of teachers has a tremendous impact on student achievement. 136 Fallon notes that "recent research provides overwhelming evidence to support a robust assertion that, even allowing for the effects of non-school variables, the dominant factor in determining student achievement growth is the quality of the teacher." 137 In fact, analyses of student achievement data in some of the well-known value-added studies in Tennessee and Dallas show that the proportion of variance in student achievement gain accounted for by teacher quality is 20 times greater than from any other variable, including class size and socioeconomic status. 138

The research also showed that when good teaching followed ineffective teaching, though student achievement increased, the gains are not as much as if the teaching had been consistently good. In other words, good teaching by itself cannot completely make up for the negative impact of earlier ineffective teaching. 139 Given the dire urgency to improve older students' literacy development, we can no longer afford a system that fails to provide every teacher with the necessary knowledge and skills to enhance students' reading comprehension. Teachers must be able to facilitate their students' content literacy because, as the previous chapters have made clear, students' ability to use reading and writing to learn subject matter is essential to meeting content standards.

Yet we have also seen that, in spite of all we know about the major factors that impact literacy development (word identification, fluency, vocabulary, background knowledge, comprehension, and motivation), there is a disconcerting breach between research and practice. There is also limited evidence of widespread adoption of research-based practices into content area instruction. While researchers concur

that a teacher's expertise makes a huge difference in teaching comprehension in middle and high schools, few teachers receive adequate preservice preparation or ongoing professional development focused on reading comprehension.¹⁴⁰ Dr. Louisa Moats, a nationally recognized expert in the field of reading, stressed to the Study Group the urgency of dramatically improving preparation and ongoing development for middle and high school teachers, citing that preservice preparation in reading is "non-existent, contradicts evidence-based practices, or is insufficient for implementation." At the same time, middle and high school teachers will need ongoing training and supports to incorporate teaching tools and strategies that will facilitate students' abilities to analyze, synthesize, and integrate the information found in printed course material.141

This chapter covers three of the areas critical to effective teaching for adolescent literacy: the state role in ensuring an effective teacher workforce; support and professional development for teachers already in the classroom; and reducing teacher turnover, especially in schools with high numbers of young people who are struggling to read.

1. The State Role in Teacher Development

States play a pivotal role in designing an overall system to ensure that teachers have the knowledge and skills to support literacy instruction in all content areas for all students. And, although hiring and placing teachers is a district and school responsibility, ensuring a sufficient supply of high-quality teachers is fundamentally an issue of state policy that requires a coherent system of teacher recruitment, development, support, and data-driven improvement. There are many levers available to states to design an effective state system for developing high-quality teachers, including:

- Rigorous teacher standards;
- Rigorous teacher preparation program approval standards (linked to teacher standards);
- An induction program for new teachers;
- Ensuring high-quality professional development for teachers; and

• Working conditions that link teacher policy with the school improvement system.

A full exploration of the policies and plans behind these critically important elements is beyond the scope of this report. However, they have been addressed in several recent NASBE reports, including *The Numbers Game II: Bringing High-Quality Teachers to All Schools* and *From Sanctions to Solutions: Meeting the Needs of Low-Performing Schools*, and the Study Group directs readers to these works (available through NASBE's website at www.nasbe.org).

What is critical here, however, is that policymakers address the need for all teachers to understand the foundations of reading and writing instruction as part of their state's teacher development system. The place to begin is with teacher standards. These standards contain the state board's vision of what teachers need to know and be able to do. They also become a yardstick by which all licensure requirements are measured and by which states can guide their regulatory function.

Unfortunately, to date, meaningful professional standards for what teachers need to know and be able to do to advance students' literacy skills are absent, except in a handful of states.¹⁴² The Study Group believes it is imperative that states design standards to ensure teachers have the requisite knowledge and skills to improve content literacy instruction with a view that reading is a complex undertaking, "grounded in decisions that are contingent on students' needs and instructional goals, and reciprocal, that is, continually shaped and reshaped, by students' responses to learning events."143 Without such clear, challenging teacher standards and ways to measure effectiveness according to those standards, states may find it impossible to align programs and policies in ways that provide a pool of teachers with the skills and knowledge districts need.

Fortunately, there is general consensus surrounding the kinds of skills that should be embodied in the standards, and the Study Group heard from a number of national experts who highlighted the key skill sets that define what effective teachers need to be able to do to advance adolescent literacy.¹⁴⁴ These include:

- Assessing the critical components of skilled reading (e.g., vocabulary, fluency, comprehension) and providing targeted instruction to enhance proficiency in content area reading;
- Explicitly linking reading and writing instruction with content instruction;
- Creating connections within and across lessons, reinforcing vocabulary and conceptual development across multiple texts and contexts;
- Providing explicit instruction in vocabulary and in the application of reading comprehension strategies;
- Emphasizing deep conceptual understanding through reading instruction;
- Continuously and systematically engaging students in whole class and small group discussions of challenging content and literature; and
- Integrating both progress monitoring and test preparation into their instructional routines on a frequent basis.

At the same time, teacher standards need to be aligned with standards for students because every standard implies a particular notion of teaching and learning. For example, if students are being asked to synthesize social studies material, then teacher standards should expect educators to teach students to distinguish major points from details in their subject matter texts and to teach students ways in which historians approach, read, analyze, and respond to history text.

Preparation programs should provide candidates with a rigorous, research-based curriculum and opportunities to practice a range of predefined skills and knowledge—and licensing authorities must be prepared to assess that knowledge. The standards should address preparing teachers for infusing research-based reading strategies in content domains. States need to work closely with universities, districts, administrators, teachers, and reading experts in adopting standards on literacy instruction to properly devise the standards that describe what each teacher should possess in order to help students reach the state's expectations for proficiency in reading and writing in the content areas.

The standards should define the expectations for:

- Colleges of education in terms of coursework, classroom experience requirements, and performance and knowledge requirements among their graduates;
- Graduates of teacher training programs in terms of both their knowledge and performance;
- All teachers in terms of their professional development, skills, and knowledge development across their careers; and
- Professional development providers defined in terms of student and teacher outcomes.

Both traditional and alternative teacher education programs should be closely evaluated and granted accreditation only if their programs ensure that candidates master the core set of knowledge and skills. This means that the entire teacher development cycle needs to be infused with opportunities to: 1) evaluate teacher knowledge and skills in relation to teaching standards for adolescent literacy; 2) support teachers as they hone their practice; and 3) help teachers relate their own practices to improvements in student achievement.¹⁴⁵

Finally, setting high standards for students and for teachers obligates the state to provide the structures and supports that students and teachers need to meet the standards. Doing so requires states to think differently about the ways in which resources are allocated, since individual districts will require different kinds of support in order to meet standards, as will individual teachers.

2. School-Based Supports and Professional Development

Teachers will require consistent, high-quality, and ongoing supports in order to integrate literacy support throughout content learning and to infuse specific strategies to broaden vocabulary and concepts across disciplines. In particular, states and districts should sponsor high-quality induction programs to help beginning teachers gain the necessary expertise in supporting literacy skills. But in order to imple-

Endorsements for Teaching Reading

A number of states have expanded or revised endorsements for secondary teachers, reading coaches, and reading specialists that emphasize the need to ensure that reading professionals have substantive knowledge of scientifically based reading research as the foundation of comprehensive instruction. Increasingly, states have adopted language that emanates from the convergent findings on what reading research tells us about the essential reading components and effective instruction for improving reading performance.

For example, **Florida's** Reading Endorsement Competencies for Reading Specialists specify that reading specialists must have the following:

- Substantive knowledge of language structure and function and cognition for each of the five major components of the reading process;
- Understanding of the principles of scientifically based reading research as the foundation of comprehensive instruction that synchronizes and scaffolds each of the major components of the reading process toward student mastery;
- Competencies in assessing reading to guide instruction and decisionmaking for reading progress of struggling readers;
- Broad knowledge of students to prescribe, differentiate instruction, and utilize appropriate strategies and materials based upon scientifically based reading research; and
- Knowledge of effective research-based methodology to prevent reading difficulties and promote reading progress of struggling readers.

Moreover, states have added language that reflects the changing role of specialists from not only providing direct instruction to students but to the increasing role of professionals as coach, mentor, and staff developer. Such endorsements require specialists to have competencies in designing comprehensive schoolwide interventions in collaboration with teachers and administrators and in working with content area teachers to integrate scientifically based reading instruction into subject area coursework. **Alabama**, for example, specifies that reading specialists need to know how to:

- I) Implement schoolwide practices that substantially accelerate the learning of struggling readers by:
 - Promoting highly specialized reading instruction that is explicit, intensive, accelerated, and provides ample practice;
 - Coordinating across instructional settings the instruction to struggling readers;

- Arranging for organizational features needed to increase the achievement of struggling readers, such as time with skilled teachers, reduced teacher/pupil ratio, and flexible grouping; and
- Monitoring student progress that informs teaching and motivates learners
- 2) Facilitate professional development that results in improved student reading achievement by:
 - Structuring professional activities that are research-based, ongoing, coordinated, and responsive to student needs revealed by data;
- Modeling research-based instructional procedures in each of the five major components of the reading process (phonemic awareness, phonics, fluency, vocabulary, and comprehension) and their application to content area learning;
- Organizing instructional materials to enhance a system of ongoing learning;
- Working closely with teachers to model reading and writing instruction, provide feedback to improve instruction, and resolve problems.
- 3) Cultivate a community of learners that values collaborative problem solving by:
 - Assisting administrators in organizing literacy leadership teams that review assessment data and develop literacy plans for schools;
 - Providing an essential link among teachers on a grade level or within departments to coordinate literacy instruction and interventions for struggling readers; and
 - Securing commitment of all adults to implement a schoolwide researchbased, comprehensive reading plan that features systematic collection, analysis, and use of student performance data.

Finally, states are recognizing the need to improve the preparation of all secondary teachers in incorporating research-based reading instruction across content areas. In 1998, **Maryland** passed regulatory amendments to increase the amount of reading coursework current and prospective teachers must have. The regulations require all regular and secondary teachers to complete six semester hours of coursework in cognitive development, reading assessment, reading in the content areas, and the application of theories and practices in daily classroom instruction. They require preparation programs to provide secondary teachers two courses that cover the teaching of reading in the secondary content areas, including the assessment of student cognitive strategies in reading, incorporating reading skills through student-centered instruction, and instructional strategies for increasing students' intrinsic and extrinsic motivation for reading.

ment tiered, schoolwide reading interventions, all teachers need access to expert guidance to evaluate students' needs and configure instruction accordingly through the use of trained mentors, expert or master teachers, reading specialists, and literacy coaches. While every teacher is not a teacher of reading per se, teachers need to know that there are school supports in place to identify and help those students whose basic skills necessitate more intense instruction. Schools should create and sustain focused professional learning communities, schedule common planning time and collaborate in teams to assess student work and address students' reading and writing performance. In many schools literacy teams afford educators systematic opportunities to provide a range of supports such as developing curriculum and materials with colleagues, assisting with collecting and analyzing student performance data, coordinating coursework and interventions for students, and leading study groups or professional development.

Districts and schools should afford differentiated staffing models so that: 1) students can receive the degree of reading support appropriate to their level of need; and 2) teachers have access to ongoing support to implement various programs and practices in content area instruction. High-quality, experienced teachers can serve as mentors and instructional leaders to help to provide peer coaching without leaving the classroom. More intensive interventions should be delivered by well-qualified teachers who coordinate and reinforce what's happening in the intervention sessions with the content area classes. States should create policies that extend teacher education beyond traditional university teacher preparation programs and facilitate a variety of high-quality ways in which teachers and teacher candidates can develop the knowledge and skills in the area of literacy required to bring students to high standards.

One oft-cited type of teaching consultant is the literacy coach. Literacy coaches work with teachers in schools, but they are not supervisors or evaluators. Rather, they support teachers in their daily work through activities that range from informal conversations to participating in or conducting workshops to modeling instruction and team teaching. While evaluations of literacy coach

programs at the elementary school level have generally been positive, the same research base does not yet exist at the middle and high school levels. It does appear that the training for the coaches themselves is critical and that coaches are more or less successful depending on their expertise and experience.¹⁴⁶ For more information on literacy coaches and standards for coaches, see the earlier discussion in Chapter 3, page 41.

3. Ongoing Professional Development

Professional development is critical to helping teachers infuse comprehension and other literacy strategies and activities into content area courses and to make sure teachers have the skills and knowledge they need to respond to new requirements for students and new knowledge in teaching and learning. But high-quality professional development does not come easily; on the contrary, effective professional development needs to be carefully crafted to include several or all of these critical elements:¹⁴⁷

- It is rigorous, ongoing, school-based, and embedded in teacher work;
- It has as its primary goal improving student learning and is evaluated according to this goal;
- It includes training, practice, feedback, opportunities for reflection and group inquiry, and coaching or other follow-up procedures;
- It is collaborative and provides opportunities for teachers to interact with peers;
- It encourages school-based and teacher initiatives;
- It is rooted in the knowledge bases for teaching, subject matter, and student needs;
- It is an important part of the normal school day;
- It recognizes teachers as professional adult learners and is often teacher designed and directed;
- It provides adequate time and follow-up support; and
- It is accessible and inclusive and helps teachers meet the needs of students who learn differently.

Research also shows that the quality and the duration of professional development are important determinants in the ability of the program to improve teaching practice and student achievement.¹⁴⁹ But state policies usually do not address these two critical issues.¹⁵⁰

It is essential that teachers receive high-quality professional development that provides extensive work in advancing literacy in the content areas, builds educators' capacity to use data and research to inform instructional

practice, and guides professional learning priorities and needs. States must fund districts to provide current teachers with professional development that teaches and incorporates general text comprehension strategies as well as specific strategies with which students can access particular content areas.

States and districts need to differentiate professional development for leaders and teachers depending on the intensity of interventions and literacy instruction that

Overview of Language Essentials for Teachers of Reading and Spelling (LETRS)

Dr. Louisa Moats, author of numerous publications on reading instruction, has emphasized the urgent need to revamp preparation and professional development so teachers will have the knowledge and skills to support literacy skills of older students. The research-based, comprehensive instructional programs called for by Congress are necessary tools to reach the goal, but are not sufficient without continuous, long-term professional development for teachers. Teaching reading is a complex discipline that requires content and procedural knowledge beyond the use of a program manual.

Towards that end, Dr. Moats developed a series of professional development modules to provide teachers, reading coaches, reading specialists, and administrators with the knowledge and skills critical to implementing research-based reading instruction. LETRS modules are designed to teach teachers the content outlined in such consensus documents on reading instruction. They are designed in accord with professional development methods successful with diverse groups of teachers who work with students in regular and special education classrooms.

The 12 stand-alone modules of LETRS address each component of reading instruction—phoneme awareness, phonics, decoding, spelling and word study, oral language development, vocabulary, reading fluency, comprehension, and writing—and

the foundational concepts that link these components. The characteristics and the needs of second language learners (ELL), dialect speakers, and students with other learning differences are addressed throughout the modules. The format of instruction allows for deep learning and reflection beyond the brief "once over" treatment the topics are typically given. Of note, Module 10 on advanced decoding will pertain to those teachers of middle and high school classes whose students lack basic reading skills; Module 11 ("The Writing Road to Reading Comprehension") shows teachers how to teach students to paraphrase main ideas, use graphic organizers, take notes, and write summaries and can be taught by all content area teachers; and the assessment module (Module 12) is most relevant for those members of a school team who must design a screening and progress-monitoring approach for the whole school.

Each module can be taught by experienced staff developers in one day, although follow-up reading, study, review, and classroom application is strongly recommended. A number of commercially available reading curricula provide appropriate classroom content for the teaching of structured language. The LETRS program is not intended to replace these reading basal programs, but to make their implementation more effective and to help teachers overcome any gaps in their instructional materials.

A description of the specific components of the 12 LETRS modules is available online at www.letrs.com.

will be provided. They must ensure that all educators have ongoing coaching, supports, and resources to integrate literacy instruction through the curriculum tailored to needs of adolescent learners. And what's equally critical is to train principals along with teachers in the components of a schoolwide literacy program and how to recognize effective instruction.

The reality is that most professional development programs do not incorporate the elements described in this section. Generally, professional development activities are not curriculum-based and they have few follow-up activities to help teachers use newly learned practices in their classrooms. In addition, teachers rarely lead professional development sessions and professional development activities are virtually never evaluated on how effectively they change teacher practice or improve student outcomes. Moreover, links between the content of professional development programs and teachers' needs are weak, as are links between one professional development activity and the next, between professional development and supervision, and between teachers' work assignments and the professional development courses they take. 151

Finally, the content and method of delivery of most professional development rarely takes into account that some of the most effective professional development occurs in school-based discussions among colleagues of actual student work rather than via externally delivered programs. In order to meet their commitment to provide every student with the tools he or she needs to meet high standards, states must begin to ensure the quality and quantity of professional development available to their teachers in improving adolescent literacy. Federal programs to support early reading (and now adolescent reading) through the Striving Readers discretionary grants recognize the need for states to dedicate sufficient funds for quality professional development. But beyond providing resources for professional development, states should consider ways of ensuring the quality of professional development programs, such as creating program evaluation criteria to ensure it has the intended impact on effective teaching practices. For example, the annual evaluations of the Alabama Reading Initiative consistently point to the need to augment professional development opportunities, particularly for schools that continue to struggle with improving literacy proficiency. Florida invests heavily in professional

development as well and ensures that both teachers and administrators receive intensive training and support to meet the goals of its statewide Just Read! initiative.

4. Reducing Retention by Linking School Improvement Efforts, Teacher Supports, and Working Conditions

The 2003 report by the National Commission on Teaching and America's Future (NCTAF) documents the crisis in attracting and retaining high-quality teachers, owing largely to inadequate preparation and an institutional culture and conditions that obviate solid support for effective teaching. At present, less than 60 percent of newly licensed teachers are hired, and of those, 33 percent leave their position after three years. 152 One thing the data make clear is that recruiting more and more new teachers into classrooms does not solve a key reason for the teacher shortage: attrition. Another key finding is the high correlation between low-performing schools and teacher turnover, especially in poorer urban areas. A study of New York State teacher workforce data over 15 years found, for example, that teachers who begin their careers in New York City "are far more likely to leave the New York public school system than are teachers from other areas," and that these teachers "are generally higher-quality teachers than those who remain."153

High turnover has a number of negative consequences beyond the obvious logistical problems of making sure there is a teacher in every classroom. Not only does turnover mean that public resources are often squandered on teacher candidates who contribute very little time to schools, but it means that schools and districts are forced to expend enormous energies developing new teachers who are likely to leave after only a few years. This is a significant concern because high-quality educational change rests in large part on the quality of teachers in our schools, and teacher effectiveness grows over time.

Turnover is also particularly important in terms of adolescent literacy. Low-performing schools and schools with high turnover often have academic programs that are neither challenging nor engaging for students who need explicit, intensive literacy instruction to succeed in subject area courses. This makes intensive professional development and support in literacy instruction vital

Teacher Retention

According to many recent reports, teacher retention has become a national crisis that undermines teaching quality. During the 1990s the annual number of new graduates in education actually increased by more than 50 percent, but during the same time period teacher turnover increased even faster. In 1999-2000, for example, 232,000 new teachers were hired, but in just one year, the schools lost more than 287,000 teachers. The cost in terms of student achievement and school district finances is astronomical. A recent analysis in Texas estimated that the cost of turnover statewide approaches \$329 million annually.

Key to reversing turnover trends is building and sustaining theprofessional teaching communities that are also needed to support education reforms. The National Commission on Teaching and America's Future (NCTAF) has outlined a three-part strategy for supporting a high-quality teaching profession by: 1) organizing every school for teaching and learning success; 2) insisting on quality teacher preparation, program accreditation and licensure; and 3) developing and sustaining professionally rewarding career paths for teachers from mentored induction through accomplished teaching.

To meet these goals, the Commission has outlined six dimensions of quality teacher preparation programs:

1. Careful recruitment and selection of teacher candidates. Design selection criteria that increase the success rate of preparation programs in preparing well-qualified teachers.

- 2. Strong academic preparation for teaching. Ensure that candidates develop a clear understanding of state and district standards of learning as well as an understanding of how people learn.
- 3. Strong clinical practice to develop effective teaching skills. The lack of classroom experience is a primary factor in the high levels of attrition.
- 4. Entry-level support in residencies and mentored induction. Teachers need continued supports, particularly during their initial years, to lay the foundation for effective teaching.
- 5. Modern learning technologies. Teachers must be prepared to use the latest technologies to diagnose reading and related difficulties, track and analyze student progress, and promote student engagement.
- 6. Assessment of teacher preparation effectiveness. States should institute policies to hold preparation programs accountable for the performance of their teacher candidates. Such evaluations should encourage institutions and the profession to continually reflect on how to improve practice in the classroom.

Taken from *No Dream Denied: A Pledge to America's Children*, published by NCTAF in 2003, and from a presentation by NCTAF Executive Director Thomas G. Carroll to the Study Group, spring 2005.

to turning these schools around. But when significant numbers of the teachers leave, the schools almost have to start over with their training year after year.

Fortunately, there are actions policymakers and schools can take to staunch the flood of teachers who either leave low-performing schools for better jobs at other schools or who leave the profession altogether. For example, the NCTAF report cited above documents the link between teacher retention and factors such as quality preparation, induction, and mentoring and recommends:

 Preparing and hiring teachers who know how to teach as members of a professional community;

- Helping teachers and leaders create a culture of success in schools; and
- Providing rewarding careers based on differentiated staffing from induction to accomplished teaching.

To put it another way, better preparation, better support and training, and a better learning environment and school culture will yield more effective and successful teachers who will be more likely to stay on the job. When teachers feel supported and have more opportunity for collaboration, more say in important educational decisions, more engaged students, and

greater flexibility in how they teach, and when they feel less isolated from their peers and more included as members of learning communities, they tend to be more committed to their jobs and more effective. Data from the Schools and Staffing Survey indicate that where favorable working conditions exist, such as collegial relationships among teachers and administrators, parent and community support, relatively low class sizes, and high levels of teacher responsibility for education decision-making, teachers report feeling better about their work and being more successful with students.¹⁵⁵

For the Study Group, the message is clear: just as ensuring that all students are good readers is the key to meeting academic standards, what policymakers and administrators need to do to improve schools is part and parcel of what needs to be done to retain teachers. To accomplish this, states need to see that their policies for preparing and retaining high-quality teachers are also essential to building a school culture that fosters instructional excellence. Teachers will need the development and support to explicitly link reading and writing instruction with content area learning and with students' cultural backgrounds and interests. They need extensive training and guidance to identify which skills to emphasize and how to teach them to specific learners. They need high-quality curriculum and instructional supports to engage students in actively processing text material. Schools that focus on teaching and learning build collaborative environments to support teachers' practice in fostering literacy throughout the curriculum.

States also need to ensure that preparation programs supply teacher candidates with the knowledge and skills they need to provide good instruction to the significant number of young adults who struggle to read. States working with districts should craft coherent guidance to support and evaluate new teachers to ensure they can apply their knowledge effectively and develop their skills in fostering content literacy. Policies should address the need to establish purposeful learning communities whereby teachers can work in teams to solve problems. It will mean scheduling common planning time to develop curriculum and instruction; using teaming and looping structures; cultivating collaborative professional development communities; and expanding educators' skills in using data and research to inform instructional practice.

Such learning communities will not flourish, however, without a fundamental shift in how middle and high schools operate: they are departmentalized, with each department focusing on its core content rather than differentiated reading and writing strategies to engage and support learners. Breaking with these traditions will require strong district and school leaders who are committed to the teaching and learning dynamic advocated in this report. To accomplish, this states must:

- Enact policy to support the retention of school and district leaders and teachers who will sustain the shared reform strategies;
- Provide structures and support to foster distributed leadership and communities of practice among educators; and
- Enact policies for the recruitment, preparation, and development of leaders in education.

Without such collaborative school cultures and supports, teachers leave the profession at high rates during their first five years on the job.

In conclusion, when it comes to providing teachers with the working environment they want, policymakers are in a very fortunate position. This is because the working conditions that produce teacher job satisfaction and improve teacher retention are frequently the same conditions that are strongly linked to improvements in student achievement. They should capitalize on resources and instructional supports to maximally engage students in content mastery using peer support including: opportunities to use native language in addition to English; access to computers and other learning tools; and use of instructional accommodations, tutorial services, and after-school and summer programs aligned with standards and school curricula.

The philosophical and empirical evidence in support of this assertion is simply too overwhelming to be ignored any longer. ¹⁵⁶ Efforts at building effective schools and efforts at building stable, high-quality teaching forces to provide schoolwide literacy supports are inextricably linked, and the effectiveness of both efforts can be enhanced when this link is explicitly acknowledged in policies and programs.

Carnegie Corporation's Advancing Literacy Program

Advancing Literacy, a relatively new subprogram of the Education Division of Carnegie Corporation of New York, was developed after an extensive review that included consultations with the nation's leading practitioners and researchers. The Corporation learned that the teaching of reading in kindergarten through the third grade is well supported with research, practice, and policy, but that the knowledge base for how to teach reading for grades beyond this point is very thin. The educational community, Carnegie notes, faces a difficult challenge since what is expected in academic achievement for middle and high school students has significantly increased, yet the way in which students are taught to read, comprehend, and write about subject matter has not kept pace with the demands of schooling.

Over the next three-to-five years, Carnegie Corporation's Education Division will work to advance literacy by affecting policy, practice, and research. Tactics for accomplishing this goal include:

- Establishing a Carnegie Advisory Council on Advancing Literacy, which will examine both research and reading policies and make recommendations for further implementation strategies.
- Stimulating demand from the public for better literacy practices in grades 4 through 12.
- Creating incentives for schools of education and school districts to add professional development programs
 that would teach teachers how to integrate comprehension strategies within the content domains.
- Supporting research in how best to teach adolescents, including English-language learners, the skills of reading, comprehension, reasoning, and writing.
- Identifying effective practices for teaching adolescent literacy and disseminating them widely.

Adolescent Literacy Preservice Initiative

As part of the Advancing Literacy program, Carnegie has begun a new Adolescent Literacy Preservice Initiative (ALPI). Through ALPI, the foundation is inviting a select number of teacher preparation programs to develop innovative instructional materials, build up a cadre of adolescent literacy researchers, and enrich existing secondary school literacy programs. Some of the issues the initiative will be addressing include:

- How can schools of education develop and sustain adolescent literacy courses to help support an increasing number of struggling comprehenders in secondary schools?
- What kind of preparation will teachers need in order to lead and participate in middle and high school "literacy teams" which are now common in secondary schools? and
- How can schools of education help build a cadre of adolescent literacy researchers to better define the field in future years?

Current ALPI projects include Michigan State University's efforts to help preservice teachers gain skills for teaching adolescent literacy in content areas, particularly in math and science; the University of Connecticut's research into online reading and writing practices that use web technologies for learning and instruction; and the University of Michigan's work on designing courses for teachers on how to embed literacy in math and history content areas.

For more information, go online to www.carnegie.org.

The State Policymakers' Literacy Checklist

The Study Group has but one fundamental, albeit formidable, recommendation, which is this: the Study Group recommends—indeed, strongly urges—every state to develop and vigorously implement a statewide literacy plan to ensure that all students can read proficiently. Such plans must be comprehensive, multifaceted, and at the same time reside within the framework of the state's vision for standards-based education. The key questions for policymakers presented below are intended to be a guide both before and during a state's efforts to improve the literacy levels of all students.

One note of caution in beginning this self-assessment: There are a lot of questions—and we don't presume that the list is all-inclusive. No one should fool themselves that the task ahead isn't enormous. In hearing from school districts and states that have seriously addressed adolescent literacy, the Study Group was very impressed with how many different but coordinated steps and actions had to be taken. But this in itself makes it all the more important for states to know what needs to be done and to accurately track their progress in accomplishing objectives. The Study Group has laid out its own list of fundamental questions below.

Preliminary Groundwork

- 1. Are state policymakers well-grounded in issues related to adolescent literacy, including what is at stake, the research base in literacy instruction, and the roles that must be played by the state, districts, principals, teachers, and higher education?
- 2. Does the state have a strategic plan to build public support and create partnerships with policymakers, business, universities, community leaders, and practitioners to design and implement a statewide literacy initiative?
- 3. Does the state systematically use data from multiple indicators to identify the status of adolescent literacy within the state and to pinpoint performance gaps, as well as districts and schools exemplary in advancing student's literacy levels?
- 4. Does the state have an infrastructure that provides districts and schools with reliable, transparent, and timely data to identify students' needs and monitor the efficacy of instruction?

Establishing a State Framework for Adolescent Literacy

- 1. Has the state designed a comprehensive literacy plan to provide research-based reading and writing instruction throughout the curriculum beginning in the early grades and continuing through high school?
- 2. Does the state require districts and schools to provide adolescent learners strategic, schoolwide literacy instruction in service of standards-based content learning?
- 3. Does the state require districts and schools to design tiered interventions to provide differentiated levels of research-based literacy instruction for struggling readers?
- 4. Does the state set literacy goals and standards, ensuring alignment with curricula and assessments and raising literacy expectations across the curriculum for all students in all grades?
- 5. Does the state ensure that teachers have the preparation and professional development to provide effective, content-based literacy instruction?

- 6. Does the state require districts and schools to develop coherent literacy plans based on detailed information of students' needs and designed towards infusing research-based literacy instruction in all content areas?
- 7. Does the state provide districts and schools with the funding, supports, and resources necessary to support the implementation of tiered, strategic schoolwide reading interventions?
- 8. Does the state ensure that districts and schools have the flexibility and incentives to design organizational structures and schedules to differentiate literacy instruction in accord with individual students' needs?
- 9. Does the state plan ensure that all students have access to highly trained teachers, resources, and organizational supports to advance literacy throughout the curriculum?
- 10. Does the state define a key role for districts in implementing schoolwide literacy initiatives as pivotal to school improvement which incorporates such elements as school leadership, embedded professional development, collaborative instruction, diverse instructional resources, and access to performance data?
- 11. Does the state ensure that schools have the range of instructional materials, multimedia materials, diverse texts, and resources needed to improve students' literacy skills?
- **12.** Does the state have rigorous standards for reading specialists and literacy coaches?
- 13. Does the state provide sufficient guidance and oversight to ensure strong implementation of comprehensive literacy programs?

Ensuring that All Teachers Have the Necessary Preparation and Supports to Provide Literary Instruction

- 1. Does the state ensure that the teacher development system provides extensive training for elementary teachers to teach reading and that all middle and high school teachers have the knowledge and skills to support literacy instruction in all content areas for all students?
- 2. Does the state have core requirements and standards for teachers, preparation programs, and professional development that are aligned with student literacy standards and licensing requirements?
- 3. Does the state provide funding and/or incentives to ensure that districts and schools provide continuous, embedded professional development and schoolbased supports and resources to integrate text comprehension strategies and writing instruction across the curriculum for all teachers and administrators?
- 4. Do the state's policies outline the elements of high-quality professional development that provides educators with rigorous, research-based curriculum and opportunities to practice specific literacy instruction skills?
- 5. Do the state's school improvement policies target the need to retain teachers by providing structural and instructional supports for teachers through induction programs, teaming and distributed leadership, and differentiated staffing (reading specialists, literacy coaches)?
- 6. Do the state's policies address the need to recruit, prepare, and develop leaders in education who can provide teachers with the organizational and instructional supports to implement schoolwide literacy initiatives?

Appendix A. Just Read, Florida!

In 2001, by executive order, Florida Governor Jeb Bush instructed the executive and legislative branches to "make adequate provision for the education of all children" by providing a more comprehensive and coordinated effort aimed at helping every student become a successful, independent reader. The concern arose from analyses of state assessment data (FCAT) that showed that while 4th-grade scores including minority groups climbed steadily from 1999 to 2005, only five in 10 middle school students read at or above grade level, and fewer than two in 10 of high school students read at or above grade level. In response, the Florida Department of Education, in consultation with the Florida Board of Education, launched Just Read, Florida!, a K-12 comprehensive reading program with the goal of having all children reading on grade level or higher by 2012.

The initiative addresses multiple components, including: statewide standards for reading programs based on the latest research; improving teacher preparation and professional development to ensure exemplary reading instruction at all levels; establishing reading course requirements for middle and high school students who are below grade level; identifying reading intervention strategies for struggling readers; leveraging technology to improve reading proficiency; and integrating online professional development with existing and traditional training. The basic premises for this initiative are:

- All but a very small number of children can be taught to be successful readers;
- Prevention of reading problems is far more cost effective and efficient than remediation; and
- Reading failure can be prevented by relying on the extensive scientific research base in reading.

The state developed a set of specifications for local reading programs in coordination with numerous stakeholders, including the state board of education, successful reading teachers, the Florida Reading Association, school administrators, superintendents, parents, legislators, business and community leaders, and university researchers. Extending the formula used

for Reading First into the upper grades was identified as the essential solution to improving the literacy rates of Florida's older students. It is based on the following:

- Incorporating the five essential components of reading—phonemic awareness, phonics, fluency, vocabulary development, and comprehension that reflect the findings of the National Reading Panel and the National Institute of Child Health and Human Development;
- Systematically applying three types of assessment: screening, diagnosis, and progress monitoring;
- Focusing on initial instruction; and
- Providing immediate intensive intervention.

The reading program must support high quality reading instruction so that all students can meet the Sunshine State Standards. The Florida Legislature funded the K-12 comprehensive research-based reading plan at \$89 million in the 2005-06 budget, \$43 million more than the previous year's allocation, with the intent of making these funds part of the Florida Educational Finance Program (FEFP).

The Reading Program Specifications serves as a blueprint for local school districts, which must provide a detailed plan of specific reading interventions informed by research, resources, and instructional practices. Teachers must know how to implement the major reading components and conduct instructional assessments. The plan must be comprehensive with the caveat that no one commercial program can provide for the reading and writing needs of all of the students in a school. The Just Read, Florida! statewide initiative incorporates the Reading First grants that provide coaches, professional development, and resources for grades K-3 into a comprehensive plan for addressing elementary, middle, and high school literacy.

District reading plans must include plans for addressing literacy goals within all grades at all school levels and outline main components across school levels. Florida tied the submission of the district plan with

receipt of its allotted categorical reading funds through the Florida Educational Finance Program (FEFP)—the districts' funding source for the balance of their operational revenues that is not generated by property taxes. In order for each district to receive their reading categorical dollars, their plan had to be approved by the Just Read, Florida! office. Districts must describe their oversight and monitoring role for school-based programs and report to the state office on a quarterly basis.

District plans must ensure that 90 minutes is dedicated to reading instruction daily, reading is integrated into all subject areas, and assessment is connected to instruction. The primary components at the middle and high school level include providing reading intervention for all students scoring at the lowest two levels on the Florida Comprehensive Assessment Test reading assessment, integrating strategy instruction and writing in all classes, and providing before school, after school, and summer interventions. The Reading Program Specifications require that districts ensure that each of four strands is locally present in schools if in fact the promise of student learning gains is to be realized. The four strands are:

Specification 1: Professional Development

Professional development must address the body of knowledge grounded in scientifically based reading research and aligned with the National Staff Development Council Standards. The primary purpose is to differentiate professional development based on the needs of teachers and students and should be frequent, continuous, and provided to everyone who impacts student learning. Effective staff development embodies follow-up support that expands educators' knowledge of the latest research on reading and the delivery of high-quality reading instruction. See the National Staff Development Council Standards, online at www.nsdc.org/standards/index.cfm, and Florida's Professional Development System Evaluation Protocol, online at www.firn.edu/doe/profdev/ pdf/pdsprotocol.pdf.

In addition, the Florida Department of Education, under the direction of Gov. Jeb Bush, initiated a state board rule (6A-4.0292) that established the criteria for a reading endorsement. The endorsement requires 300 inservice hours or the equivalent number of college courses, to ensure that all reading teachers in the state

are grounded in scientifically based reading research. Each district submitted a reading endorsement to Just Read, Florida!, describing in detail the professional development that would be provided to teachers in order for them to earn the reading endorsement. The NCLB "highly qualified" deadline is July 1, 2006, at which time any reading class must be taught by a highly qualified teacher of reading. There are approximately 10,000 teachers pursuing the Florida reading endorsement.

Specification 2: Administrative Practices in Support of Reading

An effective reading program depends heavily on the knowledge base and effective practices of school and district administrators in supporting implementation of quality reading instruction. It requires administrators to articulate literacy as a schoolwide priority; lead school improvement that focuses on reading improvement; establish a shared governance mechanism to build local capacity in reading; provide summative and formative feedback to teachers; and ensure schoolwide resources for reading. Administrators must preserve and provide funding and time to afford teachers and students ample opportunities to increase proficiency in reading and writing skills.

Specification 3: High-Quality Reading Instruction and Assessment

High-quality reading instruction is a cohesive system that encompasses iterative cycles of assessment and instruction. It must be comprehensive in scope, including the major reading components, and provide explicit and systematic instruction as part of students' daily experience. Instructional planning is guided by a set of tangible assessment measures that index the degree of student learning in each component. Reading instruction must maximize use of instructional time to ensure extended opportunities for practice as well as provide intensive strategies for students unable to make sufficient progress in reading.

In order to make efficient use of time, attention must be given on instructional strategies to motivate and actively engage students in reading and writing activities. Instruction must be differentiated in ways appropriate to meeting students' needs through flexible grouping; extensive practice and opportunities for skillbuilding activities; frequent monitoring of progress; scaffolded instruction to accommodate learning levels; and availability of a broad assortment of diverse texts in classrooms and media centers.

Specification 4: Reading Text Materials and Resources

Effective reading programs must include a comprehensive set of instructional materials to maintain a print-rich environment and afford ample opportunities for reading throughout the school day. Both instructional and diverse supplemental texts and resources must be available that match the reading level and interests of individual students. Contentarea learning provides alternate texts and multimedia to enhance engagement and accommodate different reading levels. Instructional materials provide ample opportunities for students to read independently, in pairs, and in small groups and to read for a variety of purposes. Technology should be accessible to all students and enhance learning and serve as a tool for real-world applications.

Oversight:

District leadership must serve schools based on student needs and devise a plan that specifically delineates multiple components of an effective reading instruction program. Districts are required to describe how district level administrators will implement assessment driven reading professional development and monitor reading instruction both at the district and school level. Districts must report on evidence that supports the validity of professional development providers, showing that the provider is effective for teachers and for the grade level they teach. The plan should describe how content area teachers will incorporate reading into subject areas (e.g., programs such as Strategic Instruction Model (SIM), content enhancement routines, guided instruction) and how additional supports will be provided (e.g., tutoring programs, cross-age tutoring, mentoring programs).

Districts must submit individual plans for elementary, middle, and high schools and delineate specifics regarding:

- Participation of school administrators and reading coaches in professional development in state training;
- 2. Ongoing progress monitoring of in-class reading instruction;
- Ensuring uninterrupted reading blocks (including charters);
- 4. Forming reading leadership teams;
- Collection and analysis of assessment data to determine additional intervention and support;
- Ensuring effective role of coaches in demonstrating lessons using scientifically based reading materials and providing inservice on classroom set ups for reading;
- 7. Linking performance evaluations and student achievement in reading;
- 8. Assessment/curriculum tree for determining intensity of interventions in terms of time and class size based on most reliable and valid data;
- 9. Research-based instructional materials (core, supplemental, intervention, programs, and to build motivation); and
- Options for teaming and collaboration through data study teams and grade-level meetings to discuss students' reading and writing performance.

Taken from: Presentation by Evan Lefsky, Reading Specialist, 6-12, Florida Department of Education, "Just Read, Florida! 2005-06 K-12 Comprehensive Research-Based Reading Plan"; *Reading Program Specifications*, online at www.justreadflorida.com/docs/reading_program.pdf; and *Reading Resources* at www.justreadflorida.com/educators.asp.

Appendix B. Alabama Reading Initiative

In 1996, the Alabama State Board of Education passed a resolution to appoint a reading panel to develop the Alabama Reading Initiative (ARI). The Panel—comprised of 25 people from classrooms, colleges and universities, business and industry, and grassroots support groups—reviewed reading research and developed a plan targeting literacy on three fronts: 1) ensuring that kindergarten and 1st-grade students learn to read quickly and effectively; 2) expanding reading power and comprehension levels in grades 2-12; and 3) providing struggling readers in grades K-12 with intensive, effective intervention to accelerate learning.

Begun in 1998, Alabama launched the initiative to achieve grade-level reading for every Alabama student in grades K-12. ARI is largely a teacher training effort that begins with the state department of education conducting a 10-day summer session to train educators to identify students who struggle with reading and to help these students read at grade level. Since its inception, Alabama has trained hundreds of principals and over 20,000 teachers. The state partners with colleges of teacher education in this effort to build teachers' and leaders' capacities to provide effective literacy instruction. Higher education faculty members serve as mentors to schools and host summer ARI academies throughout the state during which teachers and administrators receive applied training in researchbased reading and writing instruction and take part in practical demonstration lessons.

An important component of ARI includes supporting leadership teams and teachers by providing on-site access to literacy coaches who must have in-depth knowledge of literacy and writing processes as well as experience as teachers. ARI funds cadres of coaches using a "trainer of trainers" model to ensure that regional, building, and principal coaches receive monthly training to hone skills in data application, applying research on strategic literacy instruction in content areas, facilitating effective teaching, and assessing students' literacy skills. Principal coaches meet with school leaders and central office administrators on-site to review effective practices for reaching school literacy goals. Professional development focuses on how

to enhance instructional leadership by sharpening administrative skills in data analysis, conducting classroom walkthroughs, and providing teachers useful feedback in meeting individual students' needs.

ARI has expanded from 16 schools in 1998 to 535 schools in 2005; 25 percent of those schools served students in grades 7-12. Schools must apply to participate and are selected on their perceived "commitment" and "readiness," which schools demonstrate by having 85 percent of their faculty, including the principal, attend the summer training session. The state requires schools to commit to the goal of 100 percent literacy, extensive training, and ongoing evaluation. They are asked to serve as models of effective reading practices for visiting schools and develop action plans outlining steps to meet ARI expectations. (See textbox on page 62.)

Funding:

Funding has increased each year since its inception in 1998-99 when ARI was first funded at \$1.5 million for 16 schools. For the 2004-05 fiscal year, funding was increased by \$27.5 million over the previous year for a total allotment of \$40 million in support of 535 schools. The funds are used to support school and summer programs for the lowest-performing ARI schools, as well as state administrative costs for development, monitoring, and evaluation.

Oversight:

Alabama has focused on strengthening the relationship with district central offices as the more direct source of support, professional development, and local mandates that can ensure fidelity to the outlined programmatic features. The state coordinates with district personnel responsible for curriculum and instruction (e.g., special education, federal programs, assessment) to ensure quality implementation of the schoolwide literacy programs. Through the state agency and regional coaches, individual ARI schools receive differentiated supports in the form of on-site visits with principals and literacy teams, joint planning with schools using

Alabama Reading Initiative Expectations

Expectations for Effective Instruction and Assessment

- Integrate teacher-directed instruction in comprehension strategies that increases the student's ability to gain meaning from text and to engage in thoughtful interaction with printed materials;
- Use varied and abundant authentic printed materials;
- Hold daily discussions that include literal, interpretive, and evaluative responses to printed materials that require students to defend their understandings;
- Include a motivational component that provides opportunities for choice in selecting printed materials, social interaction about materials read, and incentives resulting in large amounts of student reading;
- Expand vocabulary through large amounts of reading and explicit instruction;
- Implement a connected reading and writing program;
- Assure a protected block of time (90 minutes) and use of flexible and varied groupings that emphasize small group instruction;
- Establish organizational patterns and accelerated, highly specialized instruction to provide

- struggling readers with extensive practice in reading and writing;
- Measure grade-appropriate content in the five essential components of reading instruction;
- Administer screening, progress monitoring, outcome assessments, and diagnostics as needed; and
- Use assessment data regularly to guide reading instruction and professional development.

Expectations for Effective Leadership

- Support and monitor implementation of reading instruction, assessment expectations, and professional development;
- Work collaboratively with the leadership team to design literacy instruction in content areas and for struggling readers;
- Continue developing expertise in scientifically based reading research;
- Work with leadership teams in designing organizational structures to provide extended time for literacy;
- Collaborate with leadership teams to celebrate successes and overcome change barriers; and
- Work with the central office and leadership from the state department of education on quality implementation of ARI.

progress monitoring data to focus on struggling readers, opportunities for school staff to visit demonstration sites, and follow-up meetings to target staff development needs. Reading coaches supported through state funding are required to participate in monthly trainings.

Evaluation:

The Alabama Reading Initiative has been evaluated annually using a broad array of indices to assess its

implementation and impact. Data sources include the Stanford 9 and 10, the Dynamic Indicators of Basic Early Literacy Skills (DIBBELS), surveys, school visits, and focus groups. The 2004 evaluation showed that:

- 1) ARI schools showed greater gains than non-ARI schools for both minority and poverty students;
- 2) ARI schools increased the percentage of their students who have reached the proficient level by 4.5 percentage points—from 58.8 percent to 63.3 percent; and

3) ARI schools showed greater gains than non-ARI schools for both minority and poverty students.

The evaluation noted several key factors that contributed to higher achievement in participating schools, including:

- That the school has a full-time reading specialist who provides in-depth, hands-on reading instruction experience;
- That teachers integrate comprehension strategies for all students, not only in the language block or in language classes, but throughout the school day in content area coursework;
- That the principal is strongly committed to the reading initiative and knows how to provide educational leadership in the school; and
- That schools receive embedded staff professional development on an ongoing basis. The report notes that the practice of teachers and principals was significantly changed in ARI schools by increasing staff knowledge about data-driven instruction; how to use small group instruction; and how to tailor teaching to individual needs identified in diagnostic assessments.

The evaluation also recommended further refinements to ARI, such as:

 With the state now participating more fully in funding school-based reading coaches, Alabama

- should establish standards that teachers must meet to qualify as reading coaches and collaborate with colleges and universities to design programs consistent with these standards.
- ARI should establish strong requirements for participating schools that fail to meet benchmarks in school performance literacy goals that include: 1) adopting comprehensive reading programs, including research-based, structured intervention materials; 2) providing a 90-minute reading block with an extra 30 or even 60 minutes for struggling readers; and 3) receiving extra assistance from principal and regional reading coaches.
- The role of the central office should become more directive with schools who fail to meet literacy benchmarks by clearly delineating goals, specifying the use of state and federal funds in setting priorities on improved literacy, and selecting the school literacy coach and reading curriculum. The central office needs to provide support to help teachers buy into the cycle of assessment, small-group instruction, intervention, and further assessment to monitor progress.

Taken from: Edward Moscovitch, Evaluation of the Alabama Reading Initiative. Prepared for the Alabama State Department of Education (Cape Ann Economics, 2004). Available online at www.bestpracticescenter.org/publ/arippt/sld001.htm; personal communication with Cheryl J. Capps, Alabama Reading Initiative, Education Administrator.

Appendix C. Annotated Bibliography

Adolescent Literacy Resources: Linking Research and Practice (2001)

This book reviews relevant research on adolescent literacy from the past 20 years and links it to effective classroom practice to help educators focus their efforts. It includes an extensive bibliography, annotated research reviews, and examples of classroom practice, all within the context of a framework for implementing a schoolwide literacy initiative. It is available online at www.alliance.brown.edu/pubs/adlit/alr_lrp.pdf.

Alabama Reading Initiative

The Alabama Reading Initiative (ARI) is a statewide K-12 initiative managed by the Alabama Department of Education. The goal of ARI is to significantly improve reading instruction and ultimately achieve 100 percent literacy among public school students. The initiative's training for teachers helps instructors teach reading in proven and effective ways. For more information on ARI, see Appendix B on page 61, or visit www.alsde.edu/html/sections/section_detail.asp?section=50&footer=sections.

Alliance for Excellent Education

The Alliance is a national policy, research, and advocacy organization acting on behalf of at-risk, low-performing secondary school students. The Alliance's Adolescent Literacy Initiative website includes news articles, research reports, and other recent information on adolescent literacy. The Alliance can be found on the Web at www.all4ed.org.

Alliance Resources:

Reading Next: A Vision for Action and Research in Middle and High School Literacy, A Report to the Carnegie Corporation of New York (2004)

Reading Next is a cutting-edge report that combines the best research currently available with well-crafted strategies for turning that research into practice. Written by five of the nation's leading researchers, Reading Next charts an immediate route to improving adolescent literacy. The authors outline 15 key elements of an effective literacy intervention and call on public and private stakeholders to invest in the literacy of middle and high school students today while simultaneously building the knowledge base around adolescent literacy. For more information, see the textbox on page 32. The complete report is available online at www.all4ed.org/publications/ReadingNext/ReadingNext.pdf.

Adolescents and Literacy: Reading for the 21st Century (2003)

Examines the reliable, empirical research that exists on how to improve the literacy of children in grades 4 through 12. It brings together the key findings of the best available research on issues related to adolescent literacy. It also offers policymakers and the public a better understanding of the challenges and opportunities that confront the nation as it begins to work to improve the literacy levels of older children. The report demonstrates that we already know a great deal about reading comprehension and about effective methods for helping students of all ages become better readers. The report is available online at www.all4ed.org/publications/ AdolescentsAndLiteracy.pdf.

How to Know a Good Adolescent Literacy Program When You See One: Quality Criteria to Consider (2004)

This brief provides information to help policymakers, educators, parents, and others concerned with adolescent literacy make informed decisions about literacy programs for struggling readers and the programs' suitability for specific groups of students. The brief is designed to help decision-makers ask the right questions when assessing literacy programs for selection for federal, state, and local funding. It is available online at www.all4ed.org/publications/Criteria%20for%20Adolescent%20Literacy%20Programs.pdf.

The Literacy Coach: A Key to Improving Teaching and Learning in Secondary Schools (2003)

This resource helps to develop an understanding of what works in successful literacy programs as well as successful strategies for training effective literacy coaches. The report is available online at www.all4ed.org/publications/LiteracyCoach.pdf.

American Federation of Teachers (AFT)

The AFT was founded in 1916 to represent the economic, social, and professional interests of classroom teachers. It is an affiliated international union of the AFL-CIO. The AFT has more than 3,000 local affiliates nationwide, 43 state affiliates, and more than 1.3 million members. The AFT advocates sound, commonsense public education policies, including high academic and conduct standards for students and greater professionalism for teachers and school staff; excellence in public service through cooperative problem solving and workplace innovations; and high-quality healthcare provided by

qualified professionals. About 900 documents on reading can be found on its website at www.aft.org.

AFT Resources:

The AFT has an extensive list of reading resources, including 50 documents specifically on adolescent literacy, available at www.aft.org:8765/query.html?qt=adolescent+literacy&col=aft&charset=iso-8859-1&searchbtn.x=0&searchbtn.y=0.

Teaching Reading Is Rocket Science: What Expert Teachers of Reading Should Know and Be Able To Do (1999)

This book summarizes research findings about effective reading instruction and calls for improvements based on that research in teacher education programs. The report notes that research has provided the basis for a consensus among educators and scientists about what constitutes effective reading instruction. Researchers estimate that fully 95 percent of all children can be taught to read if the following teaching strategies are employed: systematic and explicit instruction in phonics, decoding, comprehension and literature appreciation; daily exposure to a variety of texts, both fiction and nonfiction, as well as incentives for children to read independently and with others; vocabulary instruction that emphasizes the relationships among words and among word structure, origin and meaning; instruction in comprehension that includes predicting outcomes, summarizing, clarifying, questioning and visualizing; and frequent opportunities to write. The report is available online at www.aft.org/pubs-reports/downloads/teachers/rocketsci.pdf.

Florida Center for Reading Research

Created by Governor Jeb Bush in 2002, the mission of the Florida Center for Reading Research is to serve as part of Florida's "Leadership Triangle" for the Just Read, Florida! initiative and to provide technical assistance and support to all districts and schools receiving a Reading First Award; to conduct applied research that will have an immediate impact on policy and practices related to literacy instruction and assessment in Florida; to disseminate information about research-based practices related to literacy instruction and assessment for children in preschool through 12th grade; and to conduct basic research on reading, reading growth, reading assessment, and reading instruction that will contribute to the scientific knowledge of reading. For more information, see Appendix A on page 58. Further information about the Center's reports, research, and assessment programs is available online at www.fcrr.org/.

International Reading Association

The IRA was founded in 1956 as a professional organization of those involved in teaching reading to learners of all ages. Over the years, IRA's focus has expanded to address

a broad range of issues in literacy education worldwide. The IRA can be found online at www.reading.org/.

IRA Resources:

Adolescent Literacy: A Position Statement for the Commission on Adolescent Learning of the International Reading Association (1999)

Literacy development is an ongoing process, and it requires just as much attention for adolescents as it does for beginning readers. This position statement outlines the Association's beliefs on what adolescent learners require, including: a wide variety of reading material that appeals to their interests; instruction that builds their skills and desire to read increasingly complex materials; assessment that reveals their strengths as well as their needs; expert teachers across the curriculum; reading specialists to assist those learners who experience difficulty; teachers who understand the complexities among individual adolescent readers; and homes and communities that support their learning. The report can be downloaded at www.reading.org/ downloads/positions/ps1036_adolescent.pdf.

The Role and Qualifications of the Reading Coach in the United States: A Position Statement of the International Reading Association (2004)

Reading coaches have great potential to provide professional development and to assist classroom teachers in delivering reading instruction. Realization of that potential requires that coaches have high levels of knowledge and skills. This position statement defines the role of the reading coach; describes what a reading coach should know and be able to do; and provides recommendations for policymakers, school administrators, reading specialists, reading coaches, and classroom teachers. The report can be downloaded at www.reading.org/downloads/positions/ps1065_reading_coach.pdf.

Standards for Middle and High School Literacy Coaches (2006)

Developed in association with organizations representing English, math, science, and social studies teachers, the standards include both general competencies for literacy coaches working in secondary schools and statements specific to content areas. The standards can be downloaded at www.reading.org/downloads/resources/597coaching_standards.pdf.

Kentucky's Writing Assessment Program

In Kentucky, writing is part of the curriculum at all grade levels. Students in grades 4, 7, and 12 are required to complete writing assessment portfolios in order to help gauge individual progress and identify instructional needs, provide information about areas of curricular strength and weakness, and evaluate the quality of teaching. Kentucky also provides guidance to its teachers on how to integrate

writing across the content areas. Teachers must include three categories of writing into their classrooms: writing to learn, writing to demonstrate learning, and writing for real audiences for real purposes. See the textbox on page 25 for more information.

LETRS: Language Essentials for Teachers of Reading and Spelling

Teaching reading is a complex discipline that requires content and procedural knowledge beyond the use of a program manual. To reach all learners, teachers must understand how students learn to read and write, the reasons why some children fail to learn, and the instructional strategies best supported by research. Teachers also need to understand the language structures they are teaching. LETRS modules are designed to teach teachers the content outlined in such consensus documents on reading instruction. They use professional development methods successful with diverse groups of teachers: regular classroom and special education, novice and expert, rural and urban. The 12 stand-alone modules of LETRS address each component of reading instruction—phoneme awareness; phonics, decoding, spelling, and word study; oral language development; vocabulary; reading fluency; comprehension; and writing—and the foundational concepts that link these components. Modules 10-12 are specifically addressed to the concerns and needs of middle and high school teachers. For more information about the modules, see the textbox on page 51, or go online to www.letrs.com.

Literacy Matters

Literacy Matters is a comprehensive, online professional development environment, focusing on "what matters most" in adolescent literacy development. The intended audiences are general and special education, content area, Title 1, and ELL teachers; specialists in grades 4-12; and parents. The website provides extensive information about research-based literacy practices, lesson plans, links to additional resources, and online student activities in order to strengthen literacy learning for all students, particularly those whose problems with reading and writing become barriers to successful learning. Literacy Matters can be found at www.literacymatters.org.

Meeting the Literacy Goals Set by NCLB: A Long Road Uphill (2004)

Carnegie Corporation of New York has launched an initiative focusing on improving the literacy skills of adolescents. In support of this initiative, Carnegie asked the RAND Corporation to examine adolescents' literacy achievement across the nation. The results of that examination provide a sobering portrait of where adolescents stand relative to state and national literacy goals. The report is available online at www.rand.org/publications/RB/RB9081/RAND_RB9081.pdf.

Losing Our Future: How Minority Youth Are Being Left Behind by the Graduation Rate Crisis (2004)

This report examines racial disparities in graduation rates at the state and local levels, and provides recommendations on how both the federal government and individual states can act to address the high dropout rates. The report is available online at www.urban.org/ UploadedPDF/410936_LosingOurFuture.pdf.

The National Assessment of Educational Progress (NAEP)

Often called "The Nation's Report Card," it is the only nationally representative, continuing assessment of what America's students know and can do in various subject areas, including reading. As a congressionally mandated project of the National Center for Education Statistics (NCES) within the U.S. Department of Education, NAEP provides a comprehensive measure of students' learning at critical junctures in their school experience. Online at www.nces.ed.gov/nationsreportcard/.

National Association of State Boards of Education (NASBE)

NASBE Resources:

From Sanctions to Solutions: Meeting the Needs of Low Performing Schools (2002)

From Sanctions to Solutions examines the evidence concerning what schools need to improve. It provides a compelling argument that state accountability systems cannot foster significant school improvement until they are designed to collect and analyze information about why schools fail and then develop specific, data-driven responses to the needs of low-performing schools. Topics covered include the key elements in transforming low-performing schools, moving state systems from a focus on accountability to a focus on improvement, building a coordinated state policy environment, increasing district capacity to assist low-performing schools, building community support for schools, the role of money to ensure equity and adequacy of resources, and the critical importance of data-driven decisionmaking. The report can be ordered from the NASBE bookstore at www.nasbe.org/merchant2/ merchant.mvc?Screen=SFNT&Store Code=N.

The Numbers Game II: Bringing High-Quality Teachers to All Schools (2003)

The Numbers Game II: Bringing High-Quality Teachers to All Schools builds on NASBE's widely praised document, The Numbers Game, which went beyond the rhetoric of a national teacher shortage to look at the real problems of teacher supply and demand. The new report focuses on what it takes to build a high-quality, stable teaching workforce for students everywhere. It discusses in depth our teacher development system for attracting, preparing, and

retaining the best educators and examines the links between reform efforts, working conditions, and schools' ability to find and keep good teachers. Also included are numerous policy and program recommendations for state and local leaders. The report can be ordered from the NASBE bookstore at www.nasbe.org/merchant2/merchant.mvc?Screen=SFNT&Store_Code=N.

Windows of Opportunity: State Strategies to Close Educational Gaps and Raise Achievement Levels for All Students (2004)

This report from NASBE's year-long study on closing the achievement gap focuses on how states and districts can move beyond isolated examples of success to foster higher levels of achievement across all groups of students in all schools, districts, and states. In addition to background material, the report covers the importance of building state systems to close achievement gaps; ensuring that all students have an opportunity to learn; and the power of good teachers and principals to close achievement gaps. The report also includes a "state self-assessment" on efforts to close educational gaps. Policymakers and education advocates can use this assessment to gauge a state's progress in taking the steps that are critical to improving the academic achievement of all students. The report can be ordered from the NASBE bookstore at www.nasbe.org/merchant2/ merchant.mvc?Screen=SFNT&Store_Code=N.

National Governors Association Resource:

Reading to Achieve: A Governor's Guide to Adolescent Literacy (2005)

Reading to Achieve recommends five strategies state leaders can use to improve adolescent literacy achievement, including: building support for a state focus on adolescent literacy; raising literacy expectations across grades and curricula; encouraging and supporting school and district literacy plans; building educators' capacity to provide adolescent literacy instruction; and measuring progress in adolescent literacy at the school, district, and state levels. Available online at www.nga.org/Files/pdf/0510GOVGUIDELITERACY.PDF.

National High School Alliance

The National High School Alliance is a partnership of over 40 leading organizations that share a vision for fostering high academic achievement, closing the achievement gap, and promoting civic and personal growth among all youth in our high schools and communities. To advance this vision, the HS Alliance mobilizes the resources, knowledge, and capacity of individuals and organizations to work collectively in shaping policy, practice, and research and to promote public awareness and engagement. As a forum for professional discourse

and collaborative effort, the National High School Alliance creates new space in which strategies for promoting change can emerge and be mobilized through partner networks. Since it was established in 2002, the HS Alliance has been housed at the Institute for Educational Leadership in Washington, DC.

HS Alliance Resources:

A Call to Action: Transforming High School for All Youth (2005)

A Call To Action provides leaders at the national, state, district, school, and community levels with a common framework for building public will, developing supportive policies, and actually implementing the practices needed to radically change the traditional, factory-model high school that tracks and sorts students. The report is the result of the National High School Alliance's work over the past two years to tap the expertise of its diverse partnership of 40+ national organizations to identify what it takes to produce high academic achievement, close the achievement gap, and promote civic and personal growth among all high-school-age youth. This report and other resources are available online at: www.hsalliance.org.

The HS Alliance also regularly produces reports, guides, and newsletters to keep leaders at all levels informed about policy and practice specific to issues of high school and youth.

National Institute for Literacy

The National Institute for Literacy's (NIFL) activities to strengthen literacy are authorized under the Adult Education and Family Literacy Act (AEFLA) in the Workforce Investment Act and the No Child Left Behind Act (NCLB). The AEFLA directs the Institute to provide national leadership regarding literacy, coordinate literacy services and policy, and serve as a national resource for adult education and literacy programs. The NCLB law directs the Institute to disseminate information on scientifically based reading research pertaining to children, youth, and adults as well as information about development and implementation of classroom reading programs based on the research. NIFL can be found on the Web at www.nifl.gov/.

NIFL Resources

Adolescent Literacy—Research Informing Practice: A Series of Workshops

Summary documents available at www.nifl.gov/partnershipforreading/adolescent/.

Using Research and Reason in Education: How Teachers Can Use Scientifically Based Research to Make Curricular and Instructional Decisions (2003) This publication serves as a primer on ways in which schools and teachers can provide evidence about the effectiveness of their instructional methods and become more skilled as independent evaluators of educational research. The document is available online at www.nifl.gov/partnershipforreading/publications/pdf/Stanovich_Color.pdf.

Report of the National Reading Panel: Teaching Children to Read (2000)

This 33-page scientific report summarizes the findings of the National Reading Panel, an independent panel formed by congress and led by the NICHD to evaluate evidence-based reading research in an effort to understand the best ways to teach reading. The National Reading Panel led to the *Partnership for Reading*, a collaborative effort by the National Institute for Literacy, the U.S. Department of Education, and the NICHD to bring the findings of evidence-based reading research to those with an interest in helping all people learn to read well. The report can be found online at www.nationalreadingpanel.org/Publications/subgroups.htm.

National Staff Development Council

The National Staff Development Council (NSDC) is the largest non-profit professional association committed to ensuring success for all students through staff development and school improvement. The Council views high-quality staff development programs as essential to creating schools in which all students and staff members are learners who continually improve their performance. The Council can be found on the Web at www.nsdc.org.

Partnership for Reading

The Partnership for Reading is a national reading research dissemination project authorized by the No Child Left Behind Act of 2001. The Partnership for Reading's mission is to make scientifically based reading research more accessible to educators, parents, policymakers, and other interested individuals. The National Institute for Literacy (NIFL) is responsible for carrying out this effort. It can be found on the Web at www.nifl.gov/partnershipforreading/.

Reading for Understanding: Toward an R&D Program in Reading Comprehension (2002)

The Department of Education's Office of Educational Research and Improvement (OERI) asked RAND to examine how OERI might improve the quality and relevance of the education research it funds. The RAND Reading Study Group was charged with developing a research agenda to address the most pressing issues in literacy and the teaching of reading. The report can be found on the Web at www.rand.org/publications/MR/MR1465/MR1465.pdf.

Rhode Island Reading Initiative

Following statewide high school summits, the Rhode Island Board of Regents launched a literacy initiative in 2003. The board then created a subcommittee for high schools and convened forums with high school principals, superintendents, and other constituencies in order to deliberate on how to respond to the problem of underachievement in high schools. These efforts led to the creation of a set of compulsory regulations that specifically address high school literacy. To support the literacy initiative goal of ensuring all students reach grade-level performance, a State Literacy Advisory Panel was formed to advise on implementing the literacy initiative and providing quality literacy resources to districts and schools. For more information on the regulations, see the textbox on page 34, or visit www.ridoe.net/ HighSchoolReform/hsregulations.htm.

Southwest Educational Development Laboratory (SEDL) Letter (June 2005)

This issue of SEDL's newsletter, entitled "Reaching Our Reading Goals," examines a variety of topics, including: how to improve instruction for adolescent readers and struggling readers; using literacy coaching as an approach for ongoing professional development; and how to motivate students to read. Several articles in the issue include information about the research base related to the topic being discussed. The newsletter is available on the Web at www.sedl.org/pubs/sedl-letter/v17n01/SEDLLetter_v17n01.pdf.

Strategic Instruction Model (SIM)

The Strategic Instruction Model, or SIM, developed by the University of Kansas' Center for Research on Learning, promotes effective teaching and learning of critical content in schools. The curriculum, designed to help low-achieving adolescents succeed in school, addresses teacher-focused interventions that help teachers present their content in "learner friendly" fashion, as well as student-focused interventions that provide skills and strategies students need to learn the content. SIM can be found on the Web at www.ku-crl.org/sim/index.html.

The Talent Development High School with Career Academies

The Talent Development High School Model is a comprehensive reform model for large high schools facing serious problems with student attendance, discipline, achievement scores, and dropout rates. It was initiated in 1994 through a partnership of the Johns Hopkins University Center for Research on the Education of Students Placed At Risk (CRESPAR) and Patterson High School in Baltimore and has now

expanded to high schools in 11 states across the country. The model consists of specific changes in school organization and management to establish a positive school climate; curricular and instructional innovations to prepare all students for high-level courses in math and English; parent and community involvement activities to encourage college awareness; and professional development systems to support the implementation of the recommended reforms. For more information, see the textbox on page 37, or visit www.csos.jhu.edu/tdhs/.

Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature and Its Implications for Reading Instruction (2000)

This scientific report summarizes the findings of the National Reading Panel, an independent panel formed by Congress and led by the National Institute of Child Health and Human Development (NICHD), to evaluate evidence-based reading research in an effort to understand the best ways to teach reading. The report can be found online at www.nichd.nih.gov/publications/nrp/smallbook.htm.

U.S. Department of Education Resources:

Adolescent Literacy Research Network

In response to the clear need for both basic and intervention research on the development of higher-level literacy and on reading and writing disabilities during adolescence, the National Institute of Child Health and Human Services (NICHD), the U.S. Department of Education's Office of Vocational and Adult Education (OVAE), and the Office of Special Education and Rehabilitative Services (OSERS) published a research solicitation in the fall of 2002 that encompasses all components of reading and included interventions in grades 4-12. As a result of this research solicitation, in the fall of 2003, the funding partners are supporting five multidisciplinary research projects that will be the basis of an Adolescent Literacy Research Network. This Network will be enlarged through additional investigator-initiated grant applications over the next two years. See the textbox on page 20 for descriptions of the projects funded under the Network. More information is available online at www.ed.gov/ about/offices/list/ovae/pi/hs/adollit.html.

Condition of Education 2005

This special analysis from the U.S. Department of Education's National Center for Educational Statistics reports the average characteristics of the 1999–2000 teacher workforce, new hires in that year, and 1999–

2000 teachers who were no longer teaching in the same school in 2000–01. It examines how new hires and teacher turnover tend to change the composition of the teacher workforce, as well as how years of experience, school control, and school poverty are related to the movement of teachers into other schools and out of teaching. The report is available online at www.nces.ed.gov/programs/coe/2005/analysis/index.asp.

Every Young American a Strong Reader

This issue paper, produced in conjunction with the U.S. Secretary of Education's High School Leadership Summit, presents the facts on adolescent literacy and provides example strategies and programs developed to improve literacy among high school students. The report is available online at www.ed.gov/about/offices/list/ovae/pi/hsinit/papers/reader.pdf.

Office of Vocational and Adult Education

The Office of Vocational and Adult Education (OVAE) seeks to fund work that will improve the quality and effectiveness of secondary education and support academic achievement of those students who traditionally have been held to lower expectations. Information on OVAE and its programs and resources can be found on the Web at www.ed.gov/about/offices/list/ovae/index.html.

Striving Readers Grant

Striving Readers is a new discretionary grant program through the U.S. Department of Education. The purpose of the Striving Readers program is to raise the reading achievement levels of middle and high school-aged students in Title I-eligible schools with significant numbers of students reading below grade level. The program supports new comprehensive reading initiatives or expansion of existing initiatives that improve the quality of literacy instruction across the curriculum, provide intensive literacy interventions to struggling adolescent readers, and help to build a strong, scientific research base for identifying and replicating strategies that improve adolescent literacy skills. For more information, see the textbox on page 29, or visit www.ed.gov/programs/strivingreaders/index.html.

Works in Progress: A Report on Middle and High School Improvement Programs (2005)

This report offers educators and policymakers brief reviews of critical issues facing middle and high schools, including literacy and reading, English language learners, violence and bullying, and transition. The report is available online at www.csrq.org/docs/ WorksInProgressReport_Web.pdf.

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