Adolescent Literacy
Addressing the Needs of Students in Grades 4–12

By Joan Sedita

Literacy skills in the 21st century are more essential than ever for success in education, work, citizenship, and our personal lives. However, far too many older students and adults do not have the necessary reading and writing skills to succeed in postsecondary education or the ever-increasing number of jobs that require strong literacy skills.

During the 1990s and through 2008, significant emphasis was placed on the use of research to determine how children learn to read and why some students struggle with reading. Early literacy achievement, however, is not necessarily a guarantee that literacy skills will continue to grow as students move beyond Grade 3. In *Reading Next*, it is noted that:

> Recent National Assessment of Educational Progress (NAEP) reading results indicate that efforts to improve K–3 literacy are paying off at the 4th-grade level, but these improvements do not necessarily translate into better achievement among adolescents… Comparing the most recent NAEP results for all three grade levels (i.e., 4, 8, and 12) to those from 1992, the percentage of students scoring proficient has significantly improved among 4th graders, but not among 8th and 12th graders. (Biancarosa & Snow, 2006, pp. 7–8)

Scores at the secondary level, where there has been relatively little investment, have remained flat since the 1970s (Heller & Greenleaf, 2007). The following observation from *Time to Act: An Agenda for Advancing Adolescent Literacy for College and Career Success* sums up the challenges faced after Grade 3:

> The truth is that good early literacy instruction does not inoculate students against struggle or failure later on. Beyond grade 3 adolescent learners in our schools must decipher more complex passages, synthesize information at a higher level, and learn to form independent conclusions based on evidence. They must also develop special skills and strategies for reading text in each of the differing content areas—meaning that a student who "naturally" does well in one area may struggle in another. (Carnegie Council on Advancing Adolescent Literacy, 2010, p. x)

A growing body of work is developing about how students in these grades learn to increase their reading and writing skills, why some struggle, and what effective instruction looks like.

WHAT IS ADOLESCENT LITERACY?

The term *adolescent* can be misleading—adolescent literacy is not limited to teenagers. This label is used to describe literacy skills for students in Grades 4–12. The axiom that through Grade 3, students are learning to read, but beginning in Grade 4 they shift to reading to learn (Chall, 1983), sums up why Grade 4 is a logical place to make the jump from early literacy to adolescent literacy. The publication of the widely cited reports *Reading Next* (Biancarosa & Snow, 2004) and *Writing Next* (Graham & Perin, 2007), which identified adolescent literacy as beginning in Grade 4, helped solidify this definition of *adolescent literacy*.

The National Reading Panel (2000) identified five components that are essential for learning to read successfully: phonemic awareness, phonics, fluency, vocabulary, and comprehension. There is an assumption that the basic components of reading that have to do with decoding and encoding the words on the page (i.e., phonemic awareness, phonics, and fluency) are in place for grade-level readers by Grade 4. While the components of reading that address making meaning (vocabulary and comprehension) must also be addressed in the early grades, the emphasis on these components becomes paramount in the upper grades.

This does not mean that students in intermediate grades do not need to continue to improve basic literacy skills. Students must increasingly raise their fluency rates, moving from an average benchmark rate at the end of Grade 4 of 123 words correct per minute (WCPM) to 151 WCPM at the end of Grade 8 (Hasbrouck & Tindel, 2005). Advanced phonics and word study skills must also be taught beyond Grade 3. For example, many students may not be developmentally ready to learn some advanced phonics concepts until at least Grade 4 (e.g., digraph *ch* as in *chorus, y*

as short *i* as in *system*, multisyllable words with prefixes and suffixes added to Latin or Greek roots) (Moats, 1995). These skills should be addressed during intermediate-grade reading instruction that is typically provided during an English-language arts (ELA) period. We also know that for many struggling adolescent readers, deficits in phonics and fluency skills contribute to poor comprehension (Moats, 2001), and these must be addressed through intervention.

Adolescent literacy encompasses the skills that must be taught to all students so they can meet increasingly challenging reading and writing demands as they move through the upper grades, as well as what needs to be done for those students who fall behind. In the model provided later in this chapter for literacy planning, a framework is presented that addresses literacy instruction at two levels:

- Instruction for all students embedded in all subject areas that focuses on vocabulary, comprehension, and content writing
- Supplemental and intervention instruction for struggling students delivered in an intervention setting that focuses on decoding, fluency, and language structure as well as vocabulary, comprehension, and content writing

A REVIEW OF MAJOR ADOLESCENT LITERACY REPORTS

A number of resources provide information about research to date regarding adolescent literacy. In 2002, the Carnegie Corporation of New York commissioned the RAND Corporation (a non-profit research and analysis institution) to convene a small group of scholars and policy analysts to discuss the relatively small research base that existed at the time on adolescent literacy. While there was a significant body of knowledge about effective literacy instruction in primary grades, adolescent literacy research had been comparatively ignored (Carnegie Council on Advancing Adolescent Literacy, 2010). Beginning in 2004, supported in part through funding from the Carnegie Corporation, a more substantial knowledge base for understanding adolescent literacy and what it takes to implement this knowledge in schools has accumulated. This section summarizes the findings from nine seminal reports and research meta-analyses that address adolescent literacy (see the list of reports in Table 1). The summary addresses instruction, assessment, professional development, and literacy planning and policy issues.

Table 1

List of Adolescent Literacy Reports

1. 2004: Reading Next: A Vision for Action and Research in Middle and High School Literacy (Biancarosa & Snow)

2. 2007: Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools (Graham & Perrin)

3. 2007: Literacy Instruction in the Content Areas: Getting to the Core of Middle and High School Improvement (Heller & Greenleaf)

4. 2007: Academic Literacy Instruction for Adolescents: A Guidance Document from the Center on Instruction (Torgesen, Houston, Rissman, Decker, Roberts, Vaughn, Wexler, Francis, Rivera, & Lesaux)

5. 2007: What Content-Area Teachers Should Know About Adolescent Literacy (National Institute for Literacy)

6. 2007: Interventions for Adolescent Struggling Readers: A Meta-Analysis with Implications for Practice (Scammacca, Roberts, Vaughn, Edmonds, Wexler, Reutebuch, & Torgesen)

7. 2007: Double the Work: Challenges and Solutions to Acquiring Language and Academic Literacy for Adolescent English Language Learners –A report to Carnegie Corporation of New York (Short & Fitzsimmons)

8. 2008: Improving Adolescent Literacy: Effective Classroom and Intervention Practices (Kamil, Borman, Dole, Kral, Salinger, & Torgesen)

9. 2010: Time to Act: An Agenda for Advancing Adolescent Literacy for College and Career Success (Carnegie Council on Advancing Literacy)

Instruction

The findings related to literacy instruction are organized into four categories: content literacy instruction for all students, interventions for struggling readers and writers, literacy motivation and engagement, and English language learners (ELLs).

<u>Content Literacy Instruction for All Students</u>

A major and consistent recommendation found in all of the reports is that content literacy skills, taught by content-area teachers, using subject-specific reading materials, and embedded in content-area instruction are essential for improving adolescent achievement.

Literacy Instruction in the Content Areas (Heller & Greenleaf, 2007) focused specifically on reading and writing instruction in the content areas, including math, science, English, and history. This report maintained that because content instruction comprises the heart of a secondary school curriculum, content literacy instruction must be the cornerstone of any movement to build high-quality secondary schools. While the report applauded efforts to provide support for adolescents who struggle with literacy, it reminded us of the equally important goal of addressing the achievement of the higher literacy levels all students will need in order to succeed in postsecondary training programs, college, and the growing number of jobs that require high-level literacy skills.

Heller and Greenleaf (2007) noted that very few American students, including many who test at grade level, develop sophisticated literacy skills. Reading and writing are more than just basic skills that students use to learn subject matter. Literacy is the very stuff from which the academic content areas are made, and students must learn how to read and write for specific kinds of content learning in order to make progress in learning those subjects.

In the report *Academic Literacy Instruction for Adolescents,* (Torgesen and colleagues (2007) made the same point and noted that in order to meet adolescent literacy goals all teachers must be involved, especially since most middle and high school student spend most of their time in content-area classes and must learn to read expository, informational, content-area texts with greater proficiency. The report said, "Although reading strategies might be taught explicitly in a designated reading support class, students are unlikely to generalize them broadly to content areas unless teachers also explicitly support and elaborate the strategies' use with content-area texts" (p. 12).

Beginning in the middle grades, reading in content areas becomes longer, more complex, and more full of content. It also becomes increasingly more varied in vocabulary, text structure, purpose, and style (Heller & Greenleaf, 2007). Every academic subject has different ways of using written materials to communicate information, which means being literate may mean different things in differing contexts and content areas. One of the main conclusions of *Literacy Instruction in the Content Areas* is that comprehension (including before, during, and after routines), word-level, and writing strategies are best taught in the content area classes using challenging, content-rich texts.

Reading Next (Biancarosa & Snow, 2004, p. 4) identifies 15 elements of successful programs designed to improve adolescent literacy achievement in middle and high schools. Six of these elements directly address content literacy instruction:

- *Direct, explicit comprehension instruction*—in the strategies and processes that proficient readers use to understand what they read, including summarizing, keeping track of one's own understanding, and a host of other practices
- *Effective instructional principles embedded in content*—language arts teachers using content-area texts and content-area teachers providing instruction and practice in reading and writing skills specific to their subject area
- *Extended time for literacy*—including 2–4 hours of literacy instruction and practice that takes place in language arts and content-area classes
- *Text-based collaborative learning*—involves students interacting with one another around a variety of texts
- *Diverse texts*—texts at a variety of difficulty levels and on a variety of topics
- *Intensive writing*—instruction connected to the kinds of writing tasks students will have to perform well in high school and beyond

In 2008, the Institute of Education Sciences (IES) published the practice guide *Improving Adolescent Literacy: Effective Classroom and Intervention Practices* (Kamil et al., 2008). The goal of the guide was to present specific and coherent evidence-based recommendations that educators can use to improve literacy levels among students in Grades 4–12. The report made five recommendations about improving practice, provided a review of the evidence supporting each recommendation, and offered suggestions for how to carry out the recommendation. Of the five recommendations, the first three directly addressed content literacy instruction:

1. *Provide explicit vocabulary instruction:* Teachers should provide students with explicit vocabulary instruction, both as part of reading and language arts classes and content classes such as science and social studies. By giving students explicit instruction in vocabulary, teachers help them learn the meaning of new words and strengthen their independent skills of constructing the meaning of text (p. 11). To carry out the recommendation, the report suggests that teachers dedicate a portion of the regular classroom lesson to explicit vocabulary instruction, use repeated exposure to new words in multiple oral and written contexts to allow sufficient practice sessions, and give sufficient opportunities to use new vocabulary in a variety of contexts through activities such as discussion, writing, and extended reading.

2. *Provide direct and explicit comprehension strategy instruction:* Teachers should provide adolescents with direct and explicit instruction in comprehension strategies to improve students' reading comprehension. Comprehension strategies are routines and procedures that readers use to help them make sense of texts. These strategies include, but are not limited to, summarizing, asking and answering questions, paraphrasing, and finding the main idea (p. 16). To carry out the recommendation, the report suggests that teachers select carefully the text to use when teaching a given strategy, show students how to apply the strategies to different texts, use direct and explicit instruction for how to use comprehension strategies, provide the appropriate amount of guided practice, and make sure students understand that the goal is to understand the content of the text.

3. *Provide opportunities for extended discussion of text meaning and interpretation:* Teachers should provide opportunities for students to engage in high-quality discussions of the meaning and interpretation of texts in various content areas. These discussions can occur in whole classroom groups or in small student groups under the general guidance of the teacher (p. 21). To carry out the recommendation, the report suggests that teachers carefully prepare for the discussion, ask follow-up questions that help provide continuity and extend the discussion, provide a task that students can follow when they discuss texts together in small groups, and develop and practice the use of a specific discussion protocol.

What Content-Area Teachers Should Know About Adolescent Literacy (National Institute of Literacy, 2007) also addressed vocabulary and comprehension instruction in the content classroom but added morphology as well*.* The report pointed out that difficulty with decoding may be the cause for why some students struggle to read. It noted that while it is important for content-area teachers to understand the role of decoding and fluency, they should not be expected to provide intervention instruction in these components. The report defined content reading components and suggested implications for content classroom instruction:

- *Morphology*—Morphology describes how words are formed from morphemes, the smallest units of meaning in a word (e.g., roots, suffixes, prefixes). Students who understand words at the morphemic level are better able to get the meaning of words and use their knowledge of morphological structure to recognize complex words. When students learn frequently used morphemes, this knowledge improves their spelling, decoding and vocabulary. Content-area teachers should focus on teaching base words, prefixes and suffixes, and compound words relevant to the new content-area vocabulary being introduced.

- *Vocabulary*—Vocabulary refers to words that are used in speech and print to communicate. Vocabulary knowledge is important to reading because the oral and written use of words promotes comprehension and communication. Good readers know a wide range of vocabulary. Preteaching new vocabulary facilitates reading comprehension by giving the students the meanings of the words before they encounter them. Content-area teachers should also use direct and explicit instruction to teach specific key content vocabulary and provide opportunities for students to make connections to related words and background knowledge.

- *Text Comprehension*—Comprehension is the process of extracting or constructing meaning from words once they have been identified. Comprehension varies depending on the text being read. Good readers are purposeful, strategic, and critical readers who understand the content presented in various types of texts. Content-area teachers should incorporate the following comprehension strategies into their content-area instruction: generate questions, answer questions, monitor comprehension, summarize text, use text structure, and use graphic and semantic organizers.

Three of the reports summarized in this chapter address writing skills. In addition to the three reading components noted previously, *What Content-Area Teachers Should Know About Adolescent Literacy* (National Institute of Literacy, 2007) provided recommendations for teaching writing in the content classroom. Writing is the ability to

compose text for various purposes and audiences and is a tool for communicating, learning, and expressing oneself to persuade others. Along with reading, writing improves one's capacity to learn. Good writers employ different strategies to write across various genres and disciplines. They are self-directed, goal-oriented, and employ self-regulation strategies to help them plan, organize and revise their writing. Content-area teachers should teach the steps of the writing process (planning, drafting, revising, editing). They should provide a supportive environment for writing, including making writing a regular part of content classroom activities, conveying the ways in which writing is useful in school and outside of school, and giving students opportunities to engage in extended writing.

Torgesen et al. (2007) also addressed the importance of including writing as part of literacy instruction for adolescents. There is a close connection between reading and writing across the curriculum, and writing can be used to improve reading comprehension. "Writing activities are often used as a way for students to express their understanding of what they read, and discussing these written products can be an important way for students to receive feedback on their responses to text" (2007, p. 16). The report recommended making close connections between reading and writing activities as one important vehicle for improving middle and high school literacy.

Writing Next (Graham & Perrin, 2007) focused exclusively on writing and summarized the results of a large-scale statistical review of research into the effects of specific types of writing instruction on adolescents' writing proficiency. The report identified the following 11 elements of writing instruction found to be effective for helping adolescent students learn to write well and to use writing as a tool for learning. All eleven elements represent instruction that can be embedded in content classroom instruction for all students:

1. *Writing strategies,* which involve teaching students strategies for planning, revising, and editing their compositions
2. *Summarizing*, which involves explicitly and systematically teaching students how to summarize texts
3. *Collaborative writing,* which uses instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions
4. *Specific product goals,* which assigns students specific, reachable goals for the writing they are to complete
5. *Word processing,* which uses computers and word processors as instructional supports for writing assignments
6. *Sentence combining,* which involves teaching students to construct more complex, sophisticated sentences
7. *Prewriting*, which engages students in activities designed to help them generate or organize ideas for their composition
8. *Inquiry activities,* which engage students in analyzing immediate, concrete data to help them develop ideas and content for a particular writing task
9. *Process writing approach,* which interweaves a number of writing instructional activities in a workshop environment that stresses extended writing opportunities, writing for authentic audiences, personalized instruction, and cycles of writing
10. *Study of models,* which provides students with opportunities to read, analyze, and emulate models of good writing
11. *Writing for content learning,* which uses writing as a tool for learning content material

Interventions for Struggling Readers and Writers

Many of the adolescent literacy reports and numerous district and statewide initiatives focus on providing more effective literacy instruction to the approximately 8 million students in America in Grades 4–12 who read far below grade level. Heller and Greenleaf (2007) concluded that it is possible to help students make significant gains in literacy and perhaps even catch up to their higher performing peers:

Schools can make a point of assessing students' reading skills when they enter school, in order to identify those who read below grade level and discern their specific learning needs. They can provide intensive support for low-level readers, helping them make rapid progress in reading fluency, basic comprehension, and other skills. They can make special efforts to motivate those students and engage them in reading and writing assignments that tap into their individual interests. And they can offer teachers high-quality professional development in various aspects of secondary literacy instruction. If state and federal policymakers follow through on current efforts and fund and support these strategies, the effects will be profound, giving millions of youngsters a real opportunity to build on the rudimentary mechanics of reading that were taught in primary school. (2007, p. 4)

Who should provide intervention instruction? *Reading Next* (Biancarosa & Snow, 2004) was one of the first reports to address the need for interventions beyond content classroom instruction and identified *strategic tutoring* as an

essential element of successful adolescent literacy programs. Some students, especially those who struggle with decoding and fluency skills, require intense, individualized instruction. *Reading Next* recommends the availability of strategic tutoring sessions during or after the school day to provide literacy intervention instruction as well as skills for how to learn their content information.

Torgesen et al. (2007) suggested that it is not reasonable to expect content-area teachers to teach basic reading skills to students who are reading significantly below grade level. Teaching word-analysis strategies to older students requires special knowledge and skills that are far removed from the training and interests of content-area teachers, and these students require more explicit, individualized, and intensive instruction, as well as extended practice to master new reading strategies or improve word level skills. The IES report (Kamil et al., 2008) supported this conclusion. Specifically, the last of its five recommendations was, "make available intensive and individualized interventions for struggling readers that can be provided by trained specialists" (p. 7). This does not mean that content-area teachers should not play a role in helping struggling readers and writers. A combination of word analysis and reading comprehension skills taught by a skilled reading teacher and reinforcement and elaboration of these skills by content-area teachers is the best way to improve adolescent literacy (Torgesen et al., 2007). Biancarosa and Snow pointed out that when content-area teachers have struggling readers in their classes, "instruction in general education classes should be differentiated to allow students access to important content" (2004, p. 18).

What have we learned about the kind of instruction older struggling readers need? Kamil et al. (2008) noted that failure to read at grade level may be caused by several factors, including deficiencies in decoding (including phonemic awareness, phonemic decoding, and other word analysis skills), fluency, vocabulary, background knowledge, and inefficient use of comprehension strategies.

The report *Interventions for Adolescent Struggling Readers* (Scammacca et al., 2007) specifically addressed the research on reading instruction for adolescent struggling readers and offered research-based guidance for intervening with these students. Based on a meta-analysis of the research, the authors offered the following implications for practice (p. 1):

- Adolescence is not too late to intervene. Interventions do benefit older students.
- Older students with reading difficulties benefit from interventions focused at both the word and the text level.
- Older students with reading difficulties benefit from improved knowledge of word meanings and concepts.
- Word-study interventions are appropriate for older students struggling at the word level.
- Teachers can provide interventions that are associated with positive effects.
- Teaching comprehension strategies to older students with reading difficulties is beneficial.
- Older readers' average gains in reading comprehension are somewhat smaller than those in other reading and reading-related areas studied.
- Older students with learning disabilities benefit from reading intervention when it is appropriately focused.

To learn more about instructional conditions that could close the reading gap for struggling readers, we will need studies that provide instruction over longer periods of time and assess outcomes with measures more like those schools use to monitor reading progress of all students.

The report *What Content-Area Teachers Should Know About Adolescent Literacy* (National Institute for Literacy, 2007) identified decoding and fluency as two basic reading components that are deficit areas for some struggling readers. It described each component, explained what good readers do and the challenges facing struggling readers, and presented implications for instruction.

Decoding, or *word identification*, refers to the ability to correctly decipher a particular word out of a group of letters. Two of the skills involved in decoding are phonemic awareness (understanding that spoken words are made up of individual sounds and the ability to identify and manipulate units of sound) and phonics (understanding the relationship between the letters in written words and their sounds when spoken).

What good readers do: Good readers have a conscious understanding of the individual sounds within spoken words and how they are manipulated to form words. With strong phonics skills they are able to use their knowledge of letters and their sounds to pronounce unknown words. They can rely on these skills to decode quickly unknown words that they encounter while reading.

Challenges for struggling readers: It is estimated that 10% of adolescents struggle with word identification skills. Some of these students may struggle with poor phonemic awareness skills, especially those students with dyslexia. Without sufficient awareness of the sounds in words, they are unable to develop phonics or fluency skills.

Students who struggle with phonics lack effective strategies for decoding unknown multisyllabic words. This results in poor vocabulary growth and weakened comprehension.

Implications for intervention instruction: Students with decoding difficulties need intensive practice and instructional time to develop their phonics skills. Instruction should be direct, explicit, and systematic. It should emphasize sound–letter correspondence, syllable patterns, and morphology. This instruction should be provided by intervention specialists who have been trained to deliver decoding skills.

Fluency is the ability to read text accurately and smoothly with little conscious attention to the mechanics of reading.

What good readers do: Fluent readers read text with appropriate speed, accuracy, proper intonation, and proper expression. Some researchers have found a relationship between fluency and text comprehension.

Challenges for struggling readers: Struggling readers read slowly and often stop to sound out words. They may reread sections of texts to identify words and try to gain comprehension.

Implications for intervention instruction: Practice is an essential component of improving fluency. The following promote frequent and regular practice: provide models of fluent reading by reading aloud to students, engage students in repeated oral reading of texts, and engage students in guided oral reading and partner reading.

Academic Literacy Instruction for Adolescents (Torgesen et al., 2007) and the IES report (Kamil et al., 2008) also identified decoding as a possible area for intervention but added comprehension and text structure as possible areas for intervention for struggling readers:

- *Decoding skills*—Inadequate ability to decode printed text accurately and fluently may be one reason for poor comprehension. Interventions focused at the word level result in both improved reading accuracy and reading comprehension (Torgesen et al., 2007).
- *Content literacy skills*—With the exception of instruction in decoding and fluency, the content of effective literacy instruction for struggling readers is very similar to that recommended for students at or above grade level (i.e., comprehension strategies, vocabulary knowledge, instruction tied to improving content-area knowledge, and assignments that are motivating and engaging) (Kamil et al., 2008).
- *Comprehension strategies*—Educators can use multiple approaches to help struggling readers become more active and strategic readers. Strategy instruction should be explicit and include modeling, guided practice, feedback, and scaffolding. Student collaboration in comprehension strategies has also been shown to be helpful (Torgesen et al., 2007).
- *Text structure*—Helping students organize the information through the use of graphic organizers and providing direct instruction on text structures and organizational patterns is helpful (Toregesen et al., 2007).

Finally, it has been suggested that a technology component should be part of instructional plans for adolescent students. Biancarosa and Snow pointed out that technology should be used as both an instructional tool and an instructional topic:

As a tool, technology can help teachers provide needed supports for struggling readers, including instructional reinforcement and opportunities for guided practice. For example, there are computer programs that help students improve decoding, spelling, fluency, and vocabulary and more programs are quickly being developed to address comprehension and writing. (2004, p. 19)

English Language Learners

Two of the major adolescent literacy reports specifically address literacy instruction for ELLs: *Academic Literacy Instruction for Adolescents* (Torgesen et al., 2007) and *Double the Work* (Short & Fitzsimmons, 2007). Torgesen et al. (2007) noted that literacy instruction for these students must consider the unique needs of this group and the individual differences among them. The variation in their learning needs is due to differences in age of arrival to the United States, educational history, native language ability and literacy, placement and instructional context in school, and sociocultural background. They identified three important principles to consider regarding literacy instruction for ELLs (pp. 91-93):

1. Research-based practices that have been identified to ensure the development of successful reading skills in

2. ELLs draw on a host of linguistic, metacognitive, and experiential resources from their first language according to their proficiency level.
3. Curricular design and delivery for adolescent ELLs must follow the principles of differentiated instruction.

Torgesen et al. (2007) also pointed out that although there have been few empirical evaluations of instructional approaches specifically for adolescent ELLs, there is relevant research that can offer recommendations about effective instruction for ELLs (pp. 94–98):

- *Content-based language and literacy instruction:* Preparing all students, and especially ELLs, for academic reading tasks requires embedding literacy instruction in content-area classes.
- *Academic oral language and vocabulary:* Effective vocabulary instruction for adolescent ELL's should be explicit, systematic, extensive, and intensive. Teachers should provide both direct teaching of word meanings in meaningful contexts and teaching of word-learning strategies such as using context and word parts. In addition, depending on their native language and reading proficiency, some ELLs may benefit from strategies that draw on cognate knowledge (i.e., words with similar spellings in English as their native language).
- *Direct, explicit comprehension instruction:* As with native English speakers, research indicates that ELLs benefit from direct, explicit instruction in reading comprehension strategies. Because of limited vocabularies and background knowledge, adolescent ELLs tend to be in even greater need of strategies.
- *Targeted interventions for ELLs with very limited literacy skills:* Effective interventions for adolescent ELLs who struggle with decoding words are similar to those found to be effective with younger children and native English speakers with decoding difficulties (i.e., systematic and explicit instruction in phonics).

Short and Fitzsimmons (2007) reiterated that many strategies for supporting literacy in native English speakers are applicable to adolescent ELLs. However, they emphasize that there are significant differences in the way that these interventions should be designed and implemented for ELLs. They refer to the title of their report, *Double the Work*, when they summarize the challenges facing ELLs:

It should be understood that adolescent ELLs are second language learners who are still developing their proficiency in academic English. Moreover, they are learning English at the same time they are studying core content areas through English. Thus, ELLs must perform double the work of native English speakers in the country's middle and high schools. And, at the same time, they are being held to the same accountability standards as their native English-speaking peers. (2007, p. 1).

For *Double the Work*, researchers were asked to review the literature on adolescent literacy and conduct site visits to three promising programs. In addition, researchers collected and analyzed information on the demographic trends and academic achievement of ELLs. A panel of researchers, policy makers, and practitioners reviewed the information and developed the following list of challenges to improving the literacy of ELLs, as well as potential solutions:

- Lack of common criteria for identifying ELLs and tracking their academic performance
- Lack of appropriate assessments
- Inadequate educator capacity for improving literacy in ELLs
- Lack of appropriate and flexible program options
- Inadequate use of research-based instructional practices
- Lack of a strong and coherent research agenda about adolescent ELL literacy

Literacy Motivation and Engagement

Motivation and self-directed learning was one of the instructional elements identified by *Reading Next* (Biancarosa & Snow, 2004). The report noted that students become increasingly tuned out as they progress through upper grades, and it is therefore important to build student choices about the materials they read into the school day to keep them engaged. Providing relevancy to students' lives in what they read is another way to better engage them.

There is strong evidence that motivation and interest in reading decline after the elementary grades, especially for struggling readers (Torgesen et al., 2007; Kamil et al., 2008). The decline in motivation has two consequences that directly impact the growth of reading proficiency in adolescents. First, students with low interest in reading do not read as much as students with higher motivation, which affects the growth of vocabulary, background knowledge, and

reading strategies. Second, these students tend to be less engaged when they do read, which also results in less use and growth of reading strategies (Torgesen et al., 2007).

What Content-Area Teachers Should Know About Adolescent Literacy (National Institute for Literacy, 2007) addressed the role that motivation plays in developing successful adolescent readers and writers. The report noted, "An individual's goals, values, and beliefs regarding the topics, processes, and outcomes of reading affect students' motivation for reading.… Motivation also involves self-efficacy, or the belief that one is capable of success" (p. 34). Motivation contributes to reading engagement, and engaged readers tend to enjoy reading and read more often. Motivated adolescent readers are self-determined (i.e., they feel they have control over their reading); they self-regulate (i.e., they recognize if they are on task and employ strategies to achieve their goal); and they are engaged. The report also addressed factors that influence adolescents' motivation, including a change in their beliefs, values, and goals regarding school, and for struggling students, the effects of grading and grouping practices.

This report, as well as *Academic Literacy Instruction for Adolescents* (Torgesen et al., 2007), summarized the findings regarding motivational strategies used by teachers who successfully promote literacy in their students. Both reports supported the suggestion of Guthrie and Humenick (2004) to use three to five motivational enhancements, used in concert with one another. They noted that while there is no systematic research to determine which motivational elements are most powerful for specific students, teachers should follow the Guthrie et al. (2004) recommendation to first try to

- Focus students by setting clear goals and expectations for performance
- Guide students to focus on their own improvement
- Provide variety and choice in reading materials and assignments
- Provide opportunities for students to interact through reading

The fourth of five recommendations in the IES report is "increase student motivation and engagement in literacy learning" (Kamil et al., 2008, p. 7), and the report offered this advice:

To foster improvement in adolescent literacy, teachers should use strategies to enhance students' motivation to read and engagement in the learning process. Teachers should help students build confidence in their ability to comprehend and learn from content-area texts. They should provide a supportive environment that views mistakes as growth opportunities, encourages self-determination, and provides informational feedback about the usefulness of reading strategies and how the strategies can be modified to fit various tasks. Teachers should also make literacy experiences more relevant to students' interests, everyday life, or important current events. (p. 26)

The report explained that although the words motivation and engagement are often used interchangeably, they are not always synonymous. Motivation refers to the desire to become involved in a reading task, and engagement refers to the degree to which a student processes text deeply through the use of active learning strategies.

The conclusion reached by almost all of the adolescent literacy reports can be summed up by the following statement from *Academic Literacy Instruction for Adolescents*: "Even technically sound instructional techniques are unlikely to succeed unless we can ensure that, most of the time, students are engaged and motivated to understand what they read" (Torgesen et al., 2007, p. 11).

Professional Development

Time to Act identified teacher preparation and professional development as one of the major keys to successful adolescent literacy reform:

Determining what secondary school teachers need to know, ensuring they learn it, and supporting them in implementing that knowledge in classrooms is basic to achieving our goal of literacy for all.… Good teachers of adolescent students not only understand their own content-areas deeply, they also understand the specific literacy challenges created by the texts they assign. Such teachers are prepared to address the content learning needs of struggling readers as well as on-grade level readers in their classes. (Carnegie Council on Advancing Adolescent Literacy, 2010, p. 18)

Literacy Instruction in the Content Areas (Heller & Greenleaf, 2007, p. 1) concluded the following about middle and high school content-area teachers:

- Their roles and responsibilities regarding literacy instruction should be clearly it should be stated explicitly that they are not expected to provide basic intervention literacy instruction to struggling readers.
- They should identify the literacy skills that are essential to their content area, which they should be responsible for teaching.
- They must receive initial and ongoing professional development in teaching reading and writing skills that are essential to their content areas.

The report noted that at the secondary level the responsibility for teaching reading and writing often seems to belong to no one in particular. More often than not, content-area teachers see themselves first as specialists in their content area such as math, science, or history. While it is sometimes assumed that English teachers should be the ones to address reading skills, many of these teachers see themselves as experts in literature that requires reading and writing skills that are already in place.

If, as Heller and Greenleaf concluded, content literacy instruction must be a cornerstone of any comprehensive movement to build high-quality secondary schools, what kind of professional development is needed? The Carnegie Council on Advancing Adolescent Literacy (2010) suggested that improvements need to be made at both the preservice level (i.e., preparation of content-area teachers at the college level) and in-service professional development level (i.e., ongoing, quality training for new and experienced content-area teachers). It recommended that as a bare minimum, all middle and high school teachers should possess a working knowledge of (p. 20):

- How literacy demands change with age and grade
- How students vary in literacy strengths and needs
- How texts in a given content area raise specific literacy challenges
- How to recognize and address literacy difficulties
- How to adapt and develop teaching skills over time

Reading Next (Biancarosa & Snow, 2004) identified professional development that is both long term and ongoing as an essential element of successful adolescent literacy programs. The report noted that professional development must be delivered as part of a systematic, long-term effort that supports everyone in a school building: classroom teachers, administrators, reading and intervention specialists, paraprofessionals, and librarians.

Literacy Planning and Policy Issues

All of the adolescent literacy reports reviewed in this chapter concluded that literacy instruction does not end with the teaching of basic reading and writing skills in elementary schools and that all students need literacy instruction that is tied to content learning through high school. They also concluded that secondary school is not too late to help struggling readers and writers, but to ensure that students have the sophisticated literacy skills to succeed in college and the work force, concerted literacy planning efforts must take place at the school, district, state, and national levels.

Reading Next (Biancarosa & Snow, 2004) noted that while instructional improvements can have a tremendous impact, they are more effective if they are implemented in conjunction with infrastructure supports. The report recommended the following infrastructure elements (pp. 4–5):

- *A comprehensive and coordinated literacy program*—interdisciplinary and interdepartmental that may even coordinate with out-of-school organizations and the local community
- *Leadership*—from principals and teachers who have a solid understanding of how to teach reading and writing to the full array of students present in schools
- *Teacher teams*—interdisciplinary teams that meet regularly to discuss students and align instruction

Literacy Instruction in the Content Areas (Heller & Greenleaf, 2007, pp. 25-29) also presented several key considerations that education leaders and policy makers should keep in mind as they make policy decisions:

- The roles and responsibilities of content-area teachers must be clear and consistent.
- Every academic discipline should define its own essential literacy skills.
- All secondary school teachers should receive initial and ongoing professional development in the literacy of their own content areas.
- Content-area teachers need positive incentives and appropriate tools to provide reading and writing instruction.

FINAL THOUGHTS ABOUT ADOLESCENT LITERACY

In just 15 years, we have learned significantly more about effective teaching of reading and writing skills beyond Grade 3. We have also identified the toll that having significant numbers of adolescent students with below grade-level literacy skills takes on high school graduation rates, success in college, and preparedness for the work force. There are numerous web sites and organizations such as the Alliance for Excellent Education and the Center on Instruction that educators can turn to for information about adolescent literacy. There are also a number of research reviews and reports available such as those made possible by funding from sources such as the Carnegie Corporation and the federal government (e.g., Institute of Education Science, the National Institute for Literacy). There is still more we have to learn about how to support content-area teachers to embed literacy instruction in their classrooms, which intervention programs are most effective for struggling readers, and what we can do to address the needs of ELLs. However, research since 2000 has produced enough knowledge about what works so that there should be no delay in applying this knowledge at the classroom, school, and district levels. The following quote from the report of the Carnegie Council on Advancing Adolescent Literacy provides a challenging but attainable goal: "To reach the goal of providing quality literacy instruction for all our nation's adolescents, we must systematically link instruction to the growing knowledge base on literacy and inform it with up-to-date data relating to outcomes and best practices" (2010, p. x). This chapter has attempted to provide readers with the knowledge base necessary to inform their instructional practices.

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