

Don't Forget the Adolescents

Michael F. Hock and Donald D. Deshler

A new federal focus on reading initiatives at the elementary level will do little to help struggling adolescents who cannot read well enough to understand their textbooks.

Most people in the United States have a fundamental belief that all students should learn the basics of reading in the primary grades and continue to build on those skills throughout their elementary and secondary school years. But the reality is that more than 5 million high school students do not read well enough to understand their textbooks or other material written for their grade level. According to the National Assessment of Educational Progress (Grigg, Daane, Jin, & Campbell, 2003), 26% of these students cannot read material that many of us would deem essential for daily living, such as road signs, newspapers, and bus schedules. Students who are unable to handle the demands they face in high school will certainly struggle in technical school and college. For example, more than half the students in college remedial courses will drop out of college. If the reading challenges experienced by these individuals are unmet in high school, they face the real possibility of being undereducated, underemployed, and underprepared to participate successfully in the 21st century.

The National Adult Literacy Survey (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993) indicated that about 22% of adults were performing at Level 1, the lowest of five literacy levels. This Level 1 group is considered to be *functionally illiterate*—they lack the ability to use reading, speaking, writing, and computational skills in everyday life and work situations. For example, a functionally illiterate adult is unable to fill out an employment application, follow written instructions, or read the directions and complete a 1040EZ tax form. When confronted with printed materials, adults without basic literacy skills cannot function effectively.

U.S. policymakers are aware that the United States has a literacy problem. The No Child Left Behind Act (NCLB) offers a long-term strategy for improving adolescent literacy. However, many adolescents have short-term needs—only 40% of all high school students can read well enough to comprehend their textbooks. Over the past decade, there has been a significant investment made in understanding how people learn to read and in

how to teach reading and related skills. But most of that attention has been focused on preschool and the primary grades, not middle level and high school literacy.

Defining Literacy

Literacy has been defined as “an individual’s ability to use printed information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (Kirsch et al., 1993, p. 2). Literacy is neither a single skill suited to all types of texts nor a specific set of skills. Literacy is a set of ordered skills that can be used to accomplish diverse tasks. For example, individuals must possess the knowledge and skills to locate and use information from texts that include editorials, news stories, poems, and fiction. In addition, literate adolescents must be able to locate and use information contained in job applications, payroll forms, transportation schedules, maps, tables, and graphs.

Reading literacy can be rated on an achievement continuum that includes Below Basic, Basic, Proficient, and Advanced levels. For example, grade 8 students at the Below Basic Level can identify two explicitly stated facts from an article and use text to recognize the definition of a specific term. Students at the Basic Level can recognize the central idea in an article, identify a story’s theme, and provide specific text references to support a generalization. Students at the Proficient Level can use metaphor to interpret character and understand the directions for how to complete a document form. Those at the Advanced Level can explain thematic differences between poems and compare different descriptions to integrate character (Grigg, et al., 2002).

Few high schools have reading programs that teach students basic and advanced reading skills and strategies. Many high school students are expected to learn reading strategies independently when they really need explicit instruction before they master advanced reading strategies. This is particularly true for students with learning disabilities. In addition, Vacca (1998) states, “The faulty and misguided assumption, ‘If young children learn to read early on, they will read to learn throughout their lives,’ results in more harm than good” (p. 606).

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Improving Literacy Instruction in High School

Given that secondary students' reading performance reaches a plateau during their high school years (see figure 1), it is clear that the performance gap between their abilities and what they are expected to do widens. Adolescents who lack basic literacy skills need intensive, focused, sustained instruction to help them catch up with their peers. Lenz and Ehren (2002) have developed the Content Literacy Continuum (CLC), which describes five levels of literacy support that should be in place in every secondary school.

The five different levels in this continuum emphasize how important it is to infuse literacy instruction throughout the high school curriculum and that a host of high school teachers with different types of expertise are required to successfully address the broad array of students' needs. In addition, because the problems of adolescents with literacy problems are so significant, intervention outside of the school day is warranted. Hence, high schools should consider the important role that before- and after-school tutoring programs play to support services provided across the continuum. The key outcome associated with the continuum is that students will attain appropriate achievement standards on state assessment tests and demonstrate real-world content literacy.

Level 1: Ensuring mastery of critical content in all subject-area classes.

Adolescents who have poor literacy skills typically have great difficulty understanding most of the curriculum taught by their subject-area teachers during classes and don't acquire the core knowledge expected of all high school students. All subject-area teachers can use teaching aids and devices to help students better understand and remember content. The use of such tools as graphic organizers, prompted outlines, structured reviews, guided discussions, and other instructional tactics that modify and enhance the curriculum content in ways that promote its understanding and mastery have been shown to greatly enhance student performance (Lenz & Bulgren, 1995). These modifications represent a teacher's first response to meeting the needs of students who are struggling within content instruction. Although

Level 1 interventions are designed to help students who have limited levels of literacy, they also must be designed to benefit *all* students in an academically diverse class.

For example, a unit organizer can help students understand potentially confusing and complex subject matter in a unit of instruction. This organizer displays the main topics and the relationship of these topics to one another and other units being studied in the course. By carefully configuring the unit organizer to display core concepts and important vocabulary and then having students regularly use this organizer to study material from the unit, the unit test scores of students with literacy problems improve considerably.

Level 2: Weaving learning strategies within rigorous general education classes.

When Level 1 interventions are insufficient to improve the performance of students with literacy problems in a classroom, teachers must consider instructional methods at Level 2 of the intervention continuum and incorporate instruction on selected learning strategies into their classes. Students with literacy problems often lack the necessary learning strategies that help them understand and remember the information being taught (e.g., how to ask questions of themselves to check their understanding of what is being taught and how to use memory strategies to remember critical information for a test). On an ongoing basis, content-area teachers look for opportunities to point out particular strategies that would help students learn the information being taught. It is not enough, however, for teachers to merely tell students about a strategy that would be helpful for them to use; they must explain how to use the strategy, model its use, and then require students to use the strategy in relation to their content assignments.

The purpose of embedded strategy instruction is to teach students "how to learn" the subject-area material. Teachers can incorporate strategies for acquiring, remembering, and expressing course information into their classes. By teaching students strategies that are directly relevant to the demands of their course, they shift the instructional emphasis from just learning course content to acquiring the underlying processes to enable them to independently understand and remember the content.

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For example, at the beginning of an academic year, a history teacher might explain to the class that being able to read and paraphrase written historical information is important because paraphrasing is required to write reports, answer questions, and discuss information in class. The teacher would then share the specific steps involved in paraphrasing content-area materials and model how to paraphrase historical information to complete different types of learning tasks. Class activities and assignments would, in turn, be structured to require students to paraphrase text and use the paraphrased information. The teacher would expect students to use the newly learned strategy in a host of naturally occurring situations within the course and would provide feedback on student work.

Level 3: Supporting mastery of learning strategies for targeted students.

Some students who lack literacy skills have great difficulty mastering learning strategies within the classroom as presented in Level 2. If the instructional conditions are not conducive to their learning (e.g., large class size, little time for individual feedback, and limited opportunity to ask questions for clarification), Level 3 interventions may be necessary. In these interventions, students with literacy problems receive specialized, intensive instruction from someone other than the content-area teacher (e.g., a special education teacher, a study-skills teacher, or a resource room teacher).

Continuing with the example cited for the Level 2 interventions, if the history teacher notices that one or more students in the class are struggling with paraphrasing, support personnel (e.g., the special education teacher) would be asked to provide more instruction. An explicit instructional sequence would be followed that ensures student understanding of each step of the strategy, offers opportunities to practice the strategy in materials that are at the appropriate instructional reading levels, provides elaborated feedback after each practice attempt, and teaches students to generalize the strategy to a broad array of learning tasks and materials. Such intensive instruction would be provided until the student gains the necessary confidence and masters the strategy enough to be able to complete assignments in the general education classroom.

Level 4: Developing intensive instructional options for students who lack foundational skills.

In nearly every high school, there is a small group of students who cannot respond adequately to the intensive strategy instruction provided in Level 3 interventions. For these students, teachers need to consider interventions at Levels 4 and 5 on the continuum. Although the numbers of students who require interventions at these levels are relatively small in most school systems, educators need to be aware that these students are present and require a type of instruction that is often not available to them. These are students who have severe learning disabilities; who have specific underlying language disorders in linguistic, metalinguistic, and metacognitive areas; who are English-as-a-second-language learners; or who have had prolonged histories of moving from one school to another. As a result, they may lack many of the foundational skills required for advanced literacy.

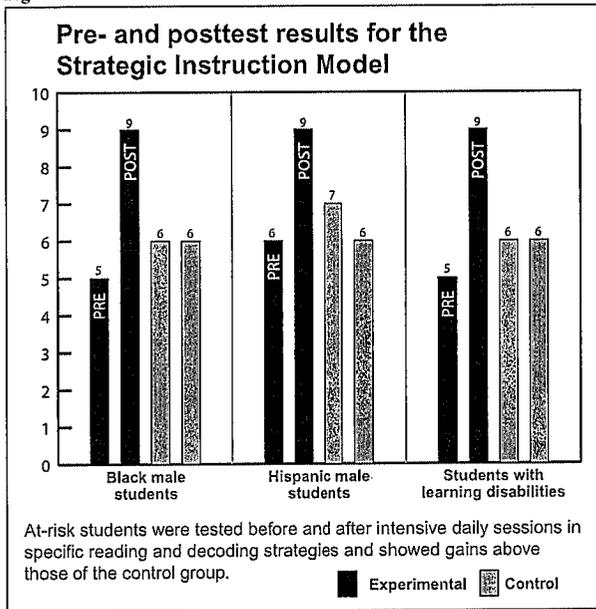
Students who receive Level 4 Interventions learn content literacy skills and strategies through specialized, direct, and intensive instruction in listening, speaking, reading, and writing skills. Reading specialists and special education teachers work together at this level to develop intensive and coordinated instructional experiences designed to address severe literacy deficits. For example, they may implement an intensive reading program for those students who are reading at the first- through third-grade levels. These professionals may also help content-area teachers make appropriate modifications in content instruction to accommodate severe literacy deficits.

Level 5: Developing intensive clinical options for language intervention.

In Level 5 interventions, students with underlying language disorders learn the linguistic, metalinguistic, and metacognitive foundational skills they need to acquire the necessary content skills and strategies. Generally, at this level, speech pathologists deliver one-on-one or small-group curriculum-relevant language therapy in collaboration with other support personnel who teach literacy skills. They also help content-area teachers make appropriate modifications to accommodate severe language disorders.

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Figure 2



During the first NCA Outcomes Accreditation Cycle, all ninth-grade students in the targeted high school were pretested. Students who earned scores two or more years below grade level were to receive instruction. The program was so successful that the teachers decided to set up an experiment to demonstrate the program's success by comparing the performance of all of the students in the next year's freshman class who were reading at least two years below grade level with students in a control high school (matched on grade, sex, pretest score, and race).

Instructional program. The designated students at the targeted high school received 50 minutes of intensive instruction daily in the Strategic Instruction Model (SIM), a research-based reading program. Students were taught in small, pullout groups (one teacher to four or five students). The instruction lasted three to eight weeks, depending on how many sessions each student required to reach mastery. After a student had mastered the strategy, he or she returned to instruction in the English class.

Results. Figure 2 shows the students' grade-level scores on the pre- and posttests. The darkly shaded bars depict the mean scores on pre- and posttests for the students enrolled

at the experimental high school. The lightly shaded bars show the mean scores on pre- and posttests for the students at the comparison school. The mean decoding skills of Black and Hispanic male students and students with learning disabilities at the experimental high school improved about three grade levels while they were in the program. Similar students in the comparison high school made either small gains or no gains.

What Next?

Every year thousands of adolescents arrive in high school totally unprepared for the curriculum and literacy demands they encounter. Strategies are needed *immediately* to address this pressing concern—these students can't wait for more research or another round of school reform initiatives to take hold. Federal, state, and local authorities should consider the following short-term actions:

- Identify current practices that are being successfully used to improve literacy skills in high schools throughout the country. These practices and the surrounding conditions that have contributed to their success should be described in detail for other schools to emulate.
- Establish demonstration sites to showcase the programs and practices that produce significant outcomes for adolescents with literacy problems. These sites can serve as examples to others who want to immediately implement successful practices.
- Support professional development programs that teach administrators and teachers how to implement scientifically based practices. Although there are still many unanswered questions about adolescent literacy, there is much that we already know. Resources should only be devoted to professional development programs that prepare teachers to use practices that have been validated and shown to produce significant outcomes.
- Change initial teacher preparation programs to include increased attention on literacy instruction. Currently, many preservice programs include almost no training for prospective high school teachers on how to deal with literacy problems in the adolescents they will be teaching.

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Did You Know?

Portrait of High School Dropouts 2000

Although progress was made during the 1970s and 1980s, high school dropout rates have remained steady during the 1990s. During the past decade, some 4 million adolescents have dropped out of school.

- Each year 383,000 students (4.4%) in grades 10–12 leave school without graduating.
- The dropout rate for students living in poverty is six times higher than that of their peers who aren't poor.
- The dropout rate for minority students is between two to four times higher than that of White students.
- In 2000, the proportion of the population that did not complete high school and was no longer enrolled in high school varied according to racial and ethnic groups. Specifically, 3.8% of Asian/Pacific Islanders, 27.8% of Hispanics, 13.1% of Blacks, and 6.9% of Whites had not completed and were not enrolled in high school.

Source: National Center for Education Statistics. *Dropout Rates in the United States: 2000*.

Additional strategies that should be a part of long-term plans to eradicate adolescent illiteracy include:

- Support the adoption and implementation of promising school reform models that have emerged within the past decade that provide a blueprint for changing the overall structure of high schools to create an overall environment that is conducive to literacy development for *all* students.
- Make research on adolescent literacy as high a priority in this decade as early reading was during the 1990s. There is a great deal that we must learn about how to more effectively teach underprepared adolescents to read, write, and speak. In the absence of these answers, many of the problems that underprepared adolescents present will not be addressed.

- Establish mechanisms and expectations for various agencies (e.g., the National Science Foundation, the Office of Educational Research Initiatives and Services, the National Institute of Child Health and Human Development, and the Office of Special Education Rehabilitation Services) to collaborate to address the complex issues surrounding adolescent literacy—this problem is too big and complex for any one agency to tackle.
- Encourage federal education agencies to support significant and sustained connections between researchers, practitioners, and policymakers to guide both the knowledge production and knowledge utilization enterprise on questions surrounding adolescent literacy.
- Support research and development that is sensitive to the realities of secondary schools and the unique aspects of adolescent development.
- Insist that research and development efforts on literacy interventions address issues of scalability and sustainability. Promising instructional practices must not only be validated through research but also be shown to work on a large-scale, sustainable basis. Unless this happens, the lives of very few adolescents will be affected.

Conclusion

Although NCLB holds great promise for reforming U.S. schools, its effects will not be realized for many years. Likewise, the effects of the significant work done on early reading during the past decade by the National Institute of Child Health and Human Development will not affect millions of adolescents who are no longer in primary grades. The reality is that 15-year-olds who struggle with reading pose different challenges than those 5-year-old beginning readers pose. Solutions relevant to adolescent development and appropriate for implementation within high school settings are desperately needed.

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Michael F. Hock (mhock@ukans.edu) is a research associate at the University of Kansas in Lawrence.

Donald D. Deshler is the director of the University of Kansas Center for Research on Learning and a professor in the Department of Special Education.

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