We are fortunate to have a broad research base that helps us understand and describe, in detail, the nature of adolescent literacy. Findings from areas as diverse as cognitive science, sociology, motivation research, and discourse studies inform our ideas about adolescent literacy. From this research we are able to understand the skills and strategies, mindsets and motivations that promote adolescents’ literacy growth. We can also learn about the different contexts in which our adolescent students are encouraged to grow, build competency, take risks, and leave our classrooms as truly literate citizens of the 21st century. Similarly, research related to literacy instruction and learning helps us plan and deliver high-quality teaching. We know the nature of classroom environments that promote meaningful literacy development, and we know appropriate instructional routines and materials that foster development. Our understanding of assessment evolves continually, allowing us to build procedures and materials that help us measure and evaluate student literacy growth, the effectiveness of our instruction, and our accountability to students and their families.

COGNITIVE STRATEGIES AND READING

Cognitive science has much to inform how we conceptualize reading instruction, learning, and assessment. Developing readers learn phonemic awareness, phonics, fluency, vocabulary, and comprehension (National Reading Panel, 2000). Many of the cognitive processes are taught and learned as strategies. Teachers model, explain, demonstrate, and use strategies as they read and construct meaning with text. This mindful and effortful work can be learned by students. Over time and with practice, strategies can become automatic, that is, highly efficient, yet requiring little or no effort by the reader (Afflerbach, Pearson, & Paris, 2008).

As strategic readers, our students can anticipate and predict text content using prior knowledge, while monitoring their predictions using metacomprehension. They can determine the important materials in texts, provide summaries of text content, and derive vocabulary meanings. They can construct literal and inferential understandings of text, and they can critically analyze and evaluate the texts they read. When reading well, these adolescent readers are coordinating skill and strategy in a fluent and meaning-centered manner. Using the ALI, we gain information about the status of the skills and strategies that are at the heart of students’ attempts at successful reading.

The ALI is intended to help teachers best understand the particular challenges that their students face in constructing meaning from text. As well, ALI helps us examine the knowledge that students bring to acts of reading in specific content areas. Research focused on middle school and high school demonstrates that students must develop both reading-specific and content-area-specific knowledge and strategies to succeed in reading. That is, adolescents’ success in school reading tasks requires skills and strategies and knowledge of the particular content area. Assessment must reflect this understanding and provide information that teachers and students can use as they read in secondary school content areas.

Given the large numbers of students in our classrooms and the need to cover course content, secondary teachers must use carefully planned reading assessment that yields valuable information...
for instruction. The ALI offers efficient reading assessment that yields information on individual students’ reading ability, within the content areas of secondary school. It provides information not only on reading skill and strategy, but also how they are used in content areas. Over the course of secondary school, all students will benefit from assessment that describes their reading skill and strategy development in relation to the very reading that they do in school.

ADVANCES IN OUR UNDERSTANDING AND USE OF EFFECTIVE READING ASSESSMENT

As our understanding of readers’ cognitive development and affective characteristics grows, there is a parallel evolution of knowledge in the field of assessment and measurement. We are beneficiaries of continually refined ideas related to the validity, reliability, and usefulness of assessment in general and reading in particular. For example, we know that attaining construct validity for a reading assessment may be a daunting and resource-consuming process; however, successfully establishing the construct validity of an assessment is worth the effort. From construct-valid assessments we can make accurate and consequential inferences about adolescent readers’ development (Pellegrino, Chudowsky, & Glaser, 2001).

We also understand that effective instruction is the result of matching what is taught with what students need and are able to understand. Finding the zone of proximal development (Vygotsky, 1978) in which learning is optimal depends on our careful and consistent assessment—not on year-end tests. The Adolescent Literacy Inventory is developed to take full advantage of our accumulated knowledge of adolescent literacy; its use can inform the assessment process of inquiry into a student’s strengths and needs, focusing on critical aspects of literacy that students must develop for success in and out of school.

Consider that our most effective teaching is that which meets students at their current levels of ability and then asks students to apply themselves, with attention and learning, so that they might move to the next levels of achievement, of accomplishment. Vygotsky (1978) characterizes such good teaching and learning as working in students’ zones of proximal development. Talented teachers, working in these zones, scaffold new learning, building on students’ current competencies, presenting them with comfortable learning challenges and fostering their growth. But to teach ably in a student’s zone of proximal development, to present students with doable learning challenges, the teacher must have detailed and “fresh” assessment information that helps direct the instructional focus. Teachers must understand the knowledge of their individual student readers to customize instruction to best fit the teaching and learning situation. This is possible only with formative assessment information—derived from the student’s answers to questions, the teacher’s observation of the student reading, and demonstrations of the student’s ability to self-monitor any act of reading.

By having formative assessment data available, an able teacher can combine this information with knowledge of curriculum, teaching, and reading development so that all these sources are informing the challenging work of teaching. Though by no means an easy task, this informed process places us in the best position to help the adolescent reader work successfully through a textbook chapter, through a newspaper or magazine article, or through a blog on the Internet.

Successful assessment always involves making accurate inferences from our assessment information, or data. Whether our assessment is focused on comprehension strategies, decoding, fluency, or vocabulary, it is our job to reason about students’ instructional needs from the evidence that assessment provides. The greater the faith we have in our assessment materials and procedures, the more accurate and helpful our inferences about students’ needs may be. The ALI provides diagnostic reading data about the detail of students’ reading skills and strategies, along with information about how well they work in particular content areas.

Validity is an important aspect of all assessment. The ALI is intended to demonstrate strong construct validity as well as strong ecological validity. It is structured so that the use of ALI results has positive consequences for all students (Pellegrino, Chudowsky, & Glaser, 2001). The knowledge derived from asking literal and inferential comprehension questions can help us prepare students
Section 2  Theoretical and Research Basis of the Adolescent Literacy Inventory

to effectively use that which they understand from reading, to read critically and make judgments about texts and authors.

Our conceptualization of reading and reading achievement continually evolves. How we think about reading and student progress in reading is informed by the accumulated knowledge provided by reading research. We know that it is critical to consider the contexts in which students are asked to construct meaning from texts and to use what they learn from reading. A key feature of the ALI is the situating of student reading tasks with representative content-area texts that students will encounter and must understand in our classrooms. That is, the very texts that are used to gather diagnostic information about students’ reading come from popular and representative texts in middle and high school content areas.

When students read, they bring their cognitive skills and strategies to the act of constructing meaning. They also bring prior knowledge of content areas, whether U.S. history, biology, economics, earth science, or any other content area. Last, students bring domain-specific content strategies to help construct meaning. For example, students in science use schemas for scientific procedure to help them conceptualize, understand, and remember writing in science textbooks. Students of U.S. history may examine texts for evidence that an author uses to make claims about people, places, and events in history.

The Adolescent Literacy Inventory is focused on the important skills and strategies that comprise the construct of reading. It allows the teacher to examine students’ decoding, fluency, vocabulary, and comprehension processes. In doing so, it demonstrates construct validity. Moreover, because it includes actual middle school and high school content-area texts, the ALI has strong school reading validity.

ECOLOGICAL VALIDITY

Many reading assessments, including reading inventories, consist of short reading passages with follow-up questions. The reading passages are chosen so that they are accessible for many readers, and they often focus on what are considered general interest topics, not academic subjects. Thus, it may be difficult to make inferences about students’ academic reading and their achievement with school texts and tasks. Here, the ALI provides the important innovation of situating reading and our diagnostic approach to reading within particular school content areas. The resulting information we gather is generated from our student readers’ interactions with appropriate content-area text, not from passages that may have only tangential connection to the reading that is actually required of students in school. We are, after all, interested in assessment that can inform our teaching of reading in school content areas. The ALI uses texts that are representative of real reading in middle and high school and thus bring the added feature of ecological validity to the assessment and diagnostic process.

CHARACTERISTICS OF ADOLESCENT READERS AND WRITERS

We turn our attention now to the students for whom the Adolescent Literacy Inventory is intended. Adolescent students bring to our classrooms common abilities and needs, as well as complex individual differences. These differences include the degree of development of their cognitive skills and strategies, the amount and type of prior knowledge they possess related to both language and content-area learning, and their engagement with reading and writing tasks in and out of school. Insight into these differences helps us understand how and why some students progress through the school years with seeming ease, while others find succeeding in school to be a continuing struggle.

Readers’ cognitive skills and strategies are the rightful focus of developmental approaches to teaching reading and writing. In early stages, students must learn, practice, and become fluent in the “basics” of phonemic awareness and application (Torgeson & Wagner, 1998). As well, students
should read with increasing speed and accuracy (Rasinski, Retzel, Chard, & Linan-Thompson, in press). This fluency helps readers process texts that are challenging in the context of increasingly demanding schoolwork. Students’ reading vocabularies must continually expand; students must be able to strategically “figure out” unknown words and to build ever-increasing sight word vocabularies (Beck, McKeown, & Kucan, 2002). Comprehending, or constructing meaning from text, is always the goal of student reading (Snow, 2002). Thus, teaching reading strategies that help students predict text contents, monitor the construction of meaning, seek clarification of understanding, and summarize meaning are imperative (Brozo & Simpson, 2007; Buehl, 2001). As students construct literal and inferential meanings from the texts they read, they will also increasingly encounter situations in which they must read critically, evaluating the truthfulness, accuracy, and usefulness of the texts they read (Pressley & Afflerbach, 1995).

Adolescents must also develop in their ability to understand and use content-area knowledge (Brozo, 2006). Following elementary school, reading instruction rarely focuses on basic cognitive skills and strategies. In their place, learning focuses on vast amounts of factual and conceptual materials from across the different content areas. Students must read about tectonic plates in earth science. They must develop an understanding of the role of the United States in world history. They are required to construct meaning from texts for which they may have minimal prior knowledge. At the same time, many adolescents lead lives that are rich in literacies that are not commonly acknowledged or taken advantage of in formal school settings (Gonzalez, Moll, & Amanti, 2005; Moll, Amanti, Neff, & Gonzalez, 1992).

It is not uncommon for particular groups of adolescents to become disengaged from reading and writing (Anderson, 2002). We know that teaching and learning efforts do not realize their full potential if our students are not focused on classroom reading and writing tasks. Over time, occasional disengagement with schoolwork can lead students to become habitually “turned off” to school. We know that this is particularly challenging for students who may have experienced ongoing cycles of failure (some of it public) in school prior to their adolescent years. In time, this repetition of bad experiences can create a negative mindset in students, leading to passive failure (Johnston & Winograd, 1985).

So far we have touched on several separate areas of concern. Do my students have the requisite cognitive skills and strategies? Do they have sufficient prior knowledge and experience so that new content-area learning makes sense and can be placed in their mental schemas? How can I motivate my students to learn this new, unfamiliar material? However, you also need to know whether productive or disabling interactions exist among these factors. A motivated reader who lacks prior knowledge for the content of a social studies textbook will seek help, persevere, and expend effort to construct meaning. Success for this student will reinforce the idea that there is reward for work taken seriously and done well. In contrast, the student who has an established record of struggling as a reader may take a different tack toward the same reading assignment. Lack of motivation, bred by prior failure experiences and the sense that reading doesn’t matter, leads a student to give up early in reading a social studies chapter. The student’s lack of prior knowledge for the text content further compounds the seemingly insurmountable challenge of understanding the text and using it in the related assignment.

In summary, there are many factors that can influence the successful interactions of adolescent readers and texts. We do well when we provide appropriate instruction and supportive classroom contexts that result in accomplished reading. We must be vigilant for those students and situations where other factors make their immediate reading experience difficult and lead them away from reading.

**FORMATIVE ASSESSMENT**

Adolescents move through their middle and high school careers understanding the importance of tests and their results. Students’ developing understanding of tests is that they increasingly matter in terms of entrance into specific school academic programs, in terms of exiting from high school and gaining admission to college and university. While these high-stakes summative assessments
are of great importance, we do well to understand that test scores are a single measure of student performance, most often gathered during one single day in the student’s school year. Typically, an end-of-year test score is a representation of the teaching, learning, and assessment that preceded it.

We believe that while student learning and teacher accountability are measured on a single day by single test, in actuality this accountability is established across the school year by careful formative assessment. That is, test scores tend to get better when we have an ongoing and developmental assessment focus, for this helps us in the here and now of our daily teaching. The Adolescent Literacy Inventory is intended to serve in this critical role.

Summative assessment, such as end-of-unit or semester tests, offers a summary measurement of student learning. These assessments dwell on important learning content and learning benchmarks that are reflected in both daily curriculum and instruction and state and school district standards. How does formative assessment complement summative assessment? Formative assessment is that which helps us identify, understand, and describe students’ current needs and abilities. Thus, formative assessment, by informing our ongoing instruction, helps lead to successful results in summative assessment.

Effective reading assessment programs comprise both formative and summative assessment. Adequate yearly progress (AYP), competency tests, and exit tests get much attention from parents, the media, and legislators. While these summative assessments are in the spotlight, the hard work of teaching and learning is best informed by formative assessment. Many of our secondary school assessments are summative; they provide information on what students have learned in different content-area classes and may figure in promotion and retention decisions. Missing is a focus on our secondary students’ continuing growth as readers. Most readers do not ever cease to learn to read better. The idea that we move from “learning to read” to “reading to learn” in the elementary grades needs reconsideration.

At the heart of our conceptualization of formative assessment and its connection to instruction and learning is the “teachable moment.” As well as we can know our students’ current abilities and needs, from cognitive, content-area knowledge, and motivation perspectives, we can use this information to plan, in fine-grained detail, successful instruction. This is not a revelation, nor is it simple. What we are describing is the nitty-gritty of teaching and learning, driven by our teaching knowledge of how readers develop, the particular skills and strategies that are central to that development, and the content-area knowledge that represents core curricular content and goals in the different subjects we teach: science, social studies, literature, history, economics, and civics.

The Adolescent Literacy Inventory provides teachers with critical formative assessment information. As we observe students reading content-area texts, we have a window in which to observe reading skill and strategy development as students read. The prior knowledge that students bring to these reading endeavors also helps us identify reading strength and challenge in relation to both skill and strategy and content-area learning.

The ALI helps us understand student reading as it develops. Through investigation of both reading process and product, the ALI helps us understand what strategies and skills are well developed and successful and which are in need of immediate attention. The formative assessment information provided by the ALI helps us formulate instruction to meet students’ current needs and to help move students along the path to reading independence in the 21st century.

Increasingly, there is attention being given to the possible consequences of our assessments (Snow, Griffin, & Burns, 2005). As a diagnostic instrument, the ALI reports on students’ approximate grade-level reading achievement—and this information is gathered from reading in actual content-area texts, chosen specially for ALI. A positive consequence of the situating of diagnosis among the content-area texts that students must read for school success is that we can get a better gauge as to where students are in relation to both reading skills and strategies and content-area knowledge.

Students are not reading texts that are contrived or distant to their school experiences when they partake in the ALI—the texts are specially selected to provide teachers with the detailed information they need to meet students’ immediate reading problems, whether finding main ideas, predicting chapter contents, developing content-area vocabulary, weighing evidence and claims, or answering a variety of questions.
From these reading and related tasks we gain a view to students’ specific needs, be it fluency development, sight word vocabulary and vocabulary derivation skills, word decoding, or literal, inferential, or critical understanding of text. The specificity of the information gathered from examining adolescent readers’ processes and products can inform instruction to best address students’ current needs. This is a strong positive consequence of using the ALI for formative reading assessment.

ACADEMIC VOCABULARY

Academic vocabulary refers to word knowledge that makes it possible for students to engage with, produce, and talk about texts that are valued in school (Brozo & Simpson, 2007). Because textbooks are the most common print source in middle and high school, students must be knowledgeable in the key terminology of the disciplines in order to learn from their reading (Marzano & Pickering, 2005). Concern about how secondary students expand and use word knowledge has been growing, according to Pearson, Hiebert, and Kamil (2007), who note “after a nearly 15-year absence from center stage, vocabulary has returned to a prominent place in discussions of reading, and it is alive and well in reading instruction and reading research” (p. 282).

The RAND Reading Study Group (2002) has reaffirmed the fundamental relationship between vocabulary knowledge and overall reading comprehension. This relationship is even more critical for content texts due to the new and numerous technical words youth must understand for successful meaning making to occur (Harmon, Hedrick, & Wood, 2005).

The ALI offers users at least three assessment options, each of which can yield insights into students’ knowledge of academic vocabulary. When students complete the text impression activities before each textbook reading passage, users will learn how sensibly students can use content vocabulary within the context of their own anticipatory compositions.

The vocabulary self-awareness activity adds another assessment dimension to a student’s knowledge of critical content vocabulary. In advance of reading, key terms from the passage are presented to students, who rate their knowledge by providing definitional information and examples. After reading, students return to the vocabulary self-awareness charts and reconsider their understanding of key vocabulary terms from the passage.

A third way users can assess students’ word knowledge is through the maze placement passages, which require students to select the most appropriate words to fill in the blanks of short textbook excerpts. Using words taken from The Living Word Vocabulary (Dale & O’Roarke, 1981), which represents the most comprehensive study of grade-level appropriate words ever conducted, maze tasks require students to read a passage in which every nth word or particular type of word has been deleted. When students come to this spot, they must select answers from multiple-choice items, one of which is the correct word. Cloze/maze has been well documented in the research literature as a viable approach to reading assessment (DuBay, 2004; Madelaine & Wheldall, 2004).

RELEVANT PRIOR KNOWLEDGE

We have known for some time that what learners take from their reading depends on how much they bring to it (Bransford & Johnson, 1972; Pressley, 2000; Wilson & Anderson, 1986). Skillful readers use their prior knowledge as they interact with text to enhance comprehension (Afflerbach, 1986; Chiesi, Spilich, & Voss, 1979; Snow & Sweet, 2003; Spires & Donley, 1998). Youth who have been the beneficiaries of rich and varied print and life experiences are likely to possess the kind of prior knowledge necessary to comprehend content-area texts at meaningful levels (Best, Rowe, Ozuru, & McNamara, 2005; Kintsch, 1998; Nassaji, 2002). On the other hand, students with limited prior knowledge for text topics, even if they possess word attack skills, are likely to find it difficult to learn much from their reading. With the sophisticated content-area material found in textbooks middle and high school students must read every day, being a good decoder of words is not nearly enough...
for thoughtful comprehension to occur. We see this in the findings of the National Assessment of Educational Progress (Donahue, Daane, & Grigg, 2003). Many 8th and 12th graders demonstrate competency at Basic levels in simple reading tasks that require reliance on students’ decoding and superficial comprehension skills. Far fewer of these students reach Proficient or Advanced levels, which place a greater demand on students’ prior knowledge and increasingly complex reading strategies. Thus, in addition to decoding and vocabulary skills, students’ levels of background knowledge of text topics will determine whether they have successful reading experiences (Kintsch, 2005).

Prior knowledge for textbook topics can be assessed with the ALI by noting the accuracy of responses students give for the clozed words in the maze placement passage. Because these short passages are taken directly from the same sections of the textbook from which the longer reading passages are taken, students’ ability to read them accurately indicates a degree of relevant prior knowledge for the topic.

When ALI users ask students to compose or dictate a text based on the impression words, another important indicator of the extent of relevant prior knowledge is obtained. Students who create sketchy or irrelevant impression texts are likely to possess limited prior knowledge for the topic. Conversely, those who can generate an elaborate and highly relevant impression text are certain to have the knowledge bases in place for successful comprehension of the textbook passage. Users may choose to have students fill out the left circle of a Venn diagram after generating their impression text so their prereading ideas and information can be compared with what they actually learn from reading a passage. Directions for the text impression activity and accompanying use of Venn diagrams can be found in Section 6.

READING ENGAGEMENT

Our adolescent students face many challenges as they progress from elementary school to middle school and then high school. Students who are accomplished readers often experience the Matthew effect (Stanovich, 1986), in which initial and then ongoing success in reading contributes to motivation and confidence in ensuing acts of reading. Thus, students who learn that reading is an important tool for learning, a worthwhile pastime, and a connection to the things that they care about can be expected to continue to read and experience success, becoming dedicated lifelong readers. In contrast, those students who struggle in reading, who associate reading with failure, and who cannot establish a connection between regular reading and their personal lives may well experience a “reverse” Matthew effect. Negative associations with reading, in school and out, and a cycle of failure in school reading settings may lead to an attitude toward reading that is quite negative: reading is to be avoided whenever possible.

These students remind us that while cognitive skills and strategies are central to reading success, they do not by themselves guarantee it. Students must be engaged readers (Guthrie & Wigfield, 1997). When student readers are engaged, they approach reading tasks with a clear sense of purpose and a set of cognitive tools that they use to construct meaning. Their appropriate prior knowledge for the text being read helps engaged readers connect what they know with what they will learn. In addition, engaged readers view reading as a positive, if sometimes challenging, force in their lives. Reading for these students is a tool to learn, a means to reflect and gain insight, and a way to be entertained. Engaged readers, having experienced success, view themselves in a positive light, contributing to enhanced self-concept as readers and self-esteem as students.

Without engagement, students will demonstrate a lack of motivation and unwillingness to persevere when confronted with a reading challenge or problem. This disinterest for reading and lack of engagement can reach critical mass, leading a student to avoid reading at all costs. This prevents opportunities for students to practice the reading skills and strategies they learn and limits their reading development. The benefits one can gain from continued reading, including increased fluency and vocabulary, cannot be realized.

The ALI assessment process will provide many clues to student engagement. A teacher or specialist with a trained eye and sensitive disposition will note in a student’s body language, facial
expressions, and language production the degree of attention to and enthusiasm for the reading activities in the assessment. Clear signs of engagement include students who are focused and curious, asking questions and producing plenty of language in response to prompts and questions; engaged students have positive things to say about the reading and related assessment activities. Signs of disengagement include frowning, lack of response to prompts, giving up quickly, and general listlessness or even resistance.

The interactive assessment option of the ALI offers users many additional insights into students’ level of engagement for the texts and related activities. The interactive process, described in detail in Section 8, makes it possible for user and student to experience something like an authentic reading lesson around a textbook passage. This form of assessment involves interactions before, during, and after reading in order to learn which strategies help students activate and build prior knowledge, learn new vocabulary, decode words in context, read fluently, and answer comprehension questions accurately and fully. Each interactive assessment activity allows teachers and specialists to note the degree of enthusiasm students exhibit for them.

**CONTENT LITERACY**

Content literacy is a unique form of literacy requiring both critical foundational reading skills as well as specialized abilities and strategies (Brozo & Simpson, 2007). Secondary students need highly developed content literacy skills and abilities in order to negotiate the volume and complexity of required textbook reading. Thus, it can’t be assumed that once students are taught how to read in elementary school they have the necessary skill set for the reading demands of secondary textbook prose. Reading is a complex developmental process, and the ability to understand text grows with each new print experience.

There is plenty of evidence that reading skills and abilities developed in elementary school are not adequate for the challenges of increasingly complex text in middle school and beyond (Duke, Pressley, & Hilden, 2004; Underwood & Pearson, 2004). Every new text and reading situation requires a refined application of literacy skills and abilities. This is especially true of content-area literacy. Findings from the National Assessment of Educational Progress (NAEP) clearly demonstrate that youth who can comprehend complex prose on the NAEP are higher achievers in middle and high school (Campbell, Hombo, & Mazzeo, 2000; Grigg, Daane, Ying, & Campbell, 2003). This means that better readers are better students in all the subject areas.

The ALI’s focus is entirely on content literacy. Students must demonstrate reading ability with passages taken directly from content textbooks in science, math, social studies, and English—the four core disciplines of a secondary school curriculum. Comprehension questions interspersed throughout and at the conclusion of each reading passage sample students’ understanding of content text at the literal, interpretive, and critical levels. Further indicators of students’ understanding of content text can be obtained by completing a Venn diagram with the text impression activity. This requires students to reconsider their prereading impression text after completing a passage and add shared and newly learned information and ideas to the Venn diagram.

**INTERACTIVE ASSESSMENT**

Some have characterized interactive assessment as teaching while testing (Brozo, 1990). This approach to diagnosing student needs has its roots in dynamic assessment (Feuerstein, 2000), which focuses on the ability of the learner to respond to interventions. Applied to literacy assessment it involves the teacher or specialist modeling reading processes and eliciting these same processes from the students to determine whether they read more fluently, decode and learn key vocabulary more effectively, and comprehend at a more thoughtful level.

Interactive assessment for literacy makes sense because reading itself is an interactive process. According to the RAND Reading Study Group (2002), reading comprehension is “the process of
simultaneously extracting and constructing meaning through interaction and involvement with written language" (2002, p. 11). Thus, active readers and learners interact with text to enhance comprehension (Afflerbach, 1986; Chiesi, Spilich, & Voss, 1979; Pressley, 2000; Snow & Sweet, 2003; Spires & Donley, 1998). Furthermore, if reading is an interactive, constructivist process, then our assessments should account for ways new strategies are learned and new understandings emerge for students as a result of interactions with the teacher during text processing (Bean, 2000).

Interactive assessment allows teachers and specialists to explore ways of apprenticing and scaffolding youths’ acts of meaning making with print. In this way reading assessment becomes a process of discovering what students can do as a result of interactions (Lipson & Wixson, 1986). What is learned can then be translated directly into support strategies and interventions to increase students' academic literacy achievement in school.

The ALI is a highly flexible reading diagnostic tool that can be administered using an interactive process, depending on the user’s desired goals for the assessment and the literacy needs of the student. Directions for conducting an interactive assessment with the ALI are provided in Section 8.

**Reading Fluency**

Fluent reading is a goal of most elementary reading programs. With appropriate instruction most students learn to identify words with accuracy and speed and apply these skills with proper phrasing and expression to continuous text (Kuhn & Stahl, 2003). Thus, attention to reading fluency diminishes as students progress through intermediate and middle school years (Rasinski et al., 2005).

How accurately, rapidly, and expressively—that is, how fluently—a student reads a text will depend on the student’s word recognition, print knowledge, and print experience skills (Hasbrouck & Tindal, 2006), all in relation to the reader’s goals and the difficulty of the text. The more automatic these fundamental reading skills are, the more cognitive energy is reserved for thinking about and comprehending text (Tractenberg, 2002). The contrary may be true, as well. If a student has limited automaticity with fluency-related skills, then less cognitive capacity is available for the most important work of reading—comprehension (Strong, Wehby, Falk, & Lane, 2004).

Although curricular attention to fluency in language arts programs wanes as students advance through the grades, many struggling adolescent readers may still experience problems with accurate and quick decoding. This may be especially true for youth from urban areas (National Center for Educational Statistics, n.d.), English language learners (Vaughn, Mathes, Linan-Thompson, & Francis, 2005), and learning disabled students (Archer, Gleason, & Vachon, 2003). The ALI offers users an oral reading fluency (ORF) approach that focuses on measuring two dimensions of fluency—word identification accuracy and reading rate. An ORF assessment for adolescents is considered a useful and valid measure of fluency (Hasbrouck & Tindal, 2006; Rasinski, 2004). Specifically, ORF is determined by words correct per minute (WCPM), which tells users how many words a student can say correctly within one minute’s time.

**Oral Reading: Miscue Analysis**

An oral reading fluency measure allows users a quick check of students’ oral reading abilities. Because fluency has been shown to be related to overall reading ability, an ORF score may be an initial indicator of potential problems students are experiencing with word identification, word meanings, and even text comprehension. A common follow-up step to ORF screening is to undertake a closer analysis of potential problems by examining the nature of the oral reading deviations readers make. This diagnostic process is called miscue analysis.

A miscue is meant to denote any deviation a student makes from the cued or printed text. Goodman (1969) is credited with devising a diagnostic method for documenting and analyzing oral reading miscues. His research demonstrated that by using a systematic approach to recording and examining a reader’s oral rendition of a text, valuable insights into word-level and meaning-level
skills and abilities could be gleaned. When oral reading miscues are compared with comprehension tasks, users can further analyze the relationship between word-level skills and meaning-making abilities of students (Moore & Gilles, 2005).

In the years since Goodman’s groundbreaking work, numerous studies have been conducted that point to the benefits of analyzing miscues for determining how well students decode words in context (Brown, Goodman, & Marek, 1996; Fawson, Ludlow, Reutzel, Smith, & Sudweeks, 2006; Goodman, Watson, & Burke, 2005). When reading any text orally three cueing systems are involved: (a) graphophonics, the ability to sound words according to knowledge of the alphabetic principle; (b) syntactics, the ability to understand words based on knowledge of word order; and (c) semantics, the ability to determine word meanings based on surrounding text. These cueing systems are highly developed in good readers and poorly developed or nonexistent in struggling readers (Clay, 2005; McKenna & Picard, 2007; Wagner & Torgeson, 1987). Thus, the more oral reading miscues a reader makes, the more difficult it is to make meaning with a text.

Research into miscue analysis has confirmed the logic and validity of established reading levels based on the number and seriousness of oral reading miscues readers make. Hargis (2005), for example, has determined that to be an “Independent” reader, students must make 2% or fewer significant miscues; an “Instructional” reader no more than 5%; and a “Frustrational” reader, 6% and more. Although these criteria seem strict, they are consistent with and supported by longstanding recommendations by Betts (1946), Harris and Sipay (1990), and Leslie and Caldwell (2006).

The ALI’s versatility allows for miscue analysis. Users may choose to conduct this level of assessment with high-interest passages taken from ancillary texts that support the content textbooks used in the inventory. Because oral reading of actual textbook prose is an uncommon practice, users can acquire samples of students’ oral reading abilities and subsequent comprehension with these graded high-interest, content-based passages. Results will yield rich data about students’ patterns of miscues and the influence these miscues may be having on the ability to comprehend key vocabulary and make overall meaning of the text. In addition, approximate reading levels and ranges by grade can be established based on the results.

In summary, research provides us with increased understanding of the details of reading development. As well, we continue to learn more about how to conduct effective assessments of reading. The Adolescent Literacy Inventory is a direct result of our increased understanding of reading and assessment and is intended to provide users with useful information about their adolescents’ ongoing challenges and successes.

REFERENCES


