

How *Jamestown Reading Navigator*[™]
Supports Research-Based Instruction
for Struggling Adolescent Readers

Decoding

Prepared for

Glencoe/McGraw-Hill

by

Interactive Educational Systems Design, Inc.

New York, NY



Glencoe

About This Paper

This paper presents research-supported best practices related to instruction of struggling adolescent readers—that is, students in grades 6–12 who are reading at least two levels below grade level—and describes how *Jamestown Reading Navigator*[™] supports those practices.

What Is *Jamestown Reading Navigator*?

Jamestown Reading Navigator is a reading intervention program designed specifically for students in grades 6–12 who are reading two or more reading levels below their grade in school. The program provides direct, explicit instruction and modeling of good reading practices, together with opportunities for students to practice and apply these reading strategies.

Jamestown Reading Navigator combines online activities featuring interactive multimedia for students to complete; engaging and appropriate online and print texts for students to read; an audio component for further guided or independent study; student writing in response to reading; student recording of fluency passages; an assessment program to monitor students' progress; an independent measure of progress monitoring; and teacher support materials, including professional development, lesson plans, instructional recommendations, and reteaching skills support. Major areas of focus for *Jamestown Reading Navigator* include

- Comprehension skills and strategies, designed for application to content-area reading
- Vocabulary
- Writing
- Fluency
- Decoding/phonics (for students with a particular need in this area)

The *Jamestown Reading Navigator* Learner Management System helps teachers manage individual student learning and provides ongoing, up-to-the-minute information on how students are performing. Online professional development modules and on-site professional development sessions offered by Jamestown Education help educators—teachers, administrators, literacy specialists, and others—learn how to implement *Jamestown Reading Navigator* more effectively. These sessions also provide information and suggestions to help educators develop effective strategies for working with struggling adolescent readers.

Jamestown Reading Navigator has been developed based on the most up-to-date research and expert thinking in adolescent literacy, drawing on more than 30 years of experience in reaching adolescent readers with the popular Jamestown Education print series. This paper describes the match between *Jamestown Reading Navigator* and the best available instructional thinking in a variety of specific areas that are important to the success of struggling adolescent readers, as described below.

Introduction

A Critical Need to Support Struggling Adolescent Readers

Problems with literacy have serious and long-lasting consequences. A lack of literacy skills is “one of the most commonly cited reasons” for students to drop out of school (Biancarosa & Snow, 2006, p. 7). A resource guide on adolescent literacy prepared for the Southwest Educational Development Laboratory described the problem as follows:

For secondary-level students . . . the social and economic consequences of not reading well can be cumulative and profound: the failure to attain a high school diploma, a barrier to higher education, underemployment or unemployment, and difficulty in managing personal and family life. Years of failing at what is deemed a hallmark of intelligence and worth can also leave struggling readers with emotional consequences, such as anxiety and low self-esteem, that affect personality and interpersonal relationships. These effects within and beyond the classroom walls show that by the secondary grades educators can no longer defer solutions to future development or instruction. (Peterson et al., 2000, p. 6)¹

¹ Peterson et al. (2000) is laid out in a paginated PDF format, but the format does not include page numbers. Page references for quotes from Peterson et al. (2000) that are given in this paper have therefore been calculated on the basis of page numbers shown in the document table of contents.

Numerous sources attest to the scope of the challenge. *Reading Next* cited both results from the National Assessment of Educational Progress (NAEP) and the opinions of experts in adolescent literacy that “as many as 70 percent of students struggle with reading in some manner” that requires instruction differentiated for their specific needs (Biancarosa & Snow, 2006, p. 8, citing Loomis & Bourque, 2001; NCES, 1999, 2006; Olson, 2006).

Adolescents struggle with literacy for a variety of reasons. For some, English may not be their first language. Others may have mild learning disabilities. In many cases, students may simply lack experience and skill with reading. Unfortunately, difficulties in reading don’t cure themselves, but instead tend to get worse as students get older—a phenomenon reading experts refer to as the “Matthew Effect” (Stanovich, 1986). These students need literacy instruction that addresses the specific challenges they face, using the best available research-based methods and principles, in order to improve their chances of succeeding both during school and afterward.

The State of Research on Struggling Adolescent Readers

Over the last two decades, attempts to improve student literacy on the national level have focused largely on elementary instruction, and particularly on early literacy—that is, literacy at the primary grades. For example, the focus of the Reading First initiative was on improving literacy at the primary levels. Recently, however, a number of efforts—including research summaries for a variety of sources, publication of the *Reading Next* report and other documents from the Alliance for Excellent Education, and position statements from organizations such as the National Reading Conference and the International Reading Association—have helped create a higher profile for instructional issues related to adolescent readers, and particularly the large proportion of adolescents who struggle with reading.

Initiatives such as the No Child Left Behind Act have raised expectations for instruction. Instruction is expected to be backed with solid research that concludes it is likely to result in the desired impact on student learning. Unfortunately, research on what constitutes effective literacy instruction for adolescents is still limited. According to the editors of a volume intended to “compile from the best researchers in the field a summary and synthesis of adolescent literacy research and practice,”

As of 2003, there is not a body of research to tell us appropriate interventions that will help struggling middle and secondary school readers who can barely read. As of 2003, we still do not have a body of research to provide us with appropriate interventions to help high school readers who can read fluently but remain 3 or 4 years below grade level in reading. (Jetton & Dole, 2004, p. 6)

Although research on what constitutes effective literacy instruction for adolescents is limited in significant ways, there is substantial support in research and expert opinion for a variety of specific instructional recommendations. The state of knowledge with regard to effective instruction for struggling adolescent readers fits the description of *best available evidence* as characterized by U.S. Department of Education Assistant Secretary Grover J. Whitehurst: that is, “the integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver instruction” (Whitehurst, 2002).

The Reading Next Report

A critical milestone in recent efforts to highlight the challenges related to adolescent literacy was the publication of *Reading Next*, a report to Carnegie Corporation of New York focusing on the needs of adolescent readers (defined in the report as those in grades 4–12), with a special emphasis on the needs of struggling readers. Preparation of this report included the following steps.

- A panel of five nationally known and respected educational researchers was convened in spring 2004, together with representatives of Carnegie Corporation of New York and the Alliance for Excellent Education.
- These panelists drew up a set of recommendations for how to meet the needs of struggling readers, including 15 specific elements of effective adolescent literacy programs that had “a substantial base in research and/or professional opinion” (Biancarosa & Snow, 2006, p. 12). These included both elements with an instructional focus and recommended infrastructure elements to improve adolescent literacy.

- The resulting paper was reviewed and augmented at the 2004 meeting of the Adolescent Literacy Funders Forum (ALFF).
- An Appendix was compiled of literature supporting each of the report’s main recommendations.
- In 2006, a second edition of the report was published.

The *Reading Next* recommendations thus represented a synthesis of research-informed expert opinion that serves as an important touchstone for much of what is known about effective adolescent literacy instruction. Several caveats, however, are in order with regard to using the recommendations as a yardstick for measuring instructional programs in general, and *Jamestown Reading Navigator* in particular.

- While all 15 elements identified by *Reading Next* are characterized as having “a substantial base in research and/or professional opinion” (Biancarosa & Snow, 2006, p. 12), the report nonetheless cautions that “the optimal mix of these factors has yet to be determined. . . . Nor does the remediation of adolescent literacy difficulties involve indiscriminately layering on all fifteen key elements. Choices should be matched to school and student needs” (Biancarosa & Snow, 2006, p. 29). The expectation is not that each literacy program should necessarily include all 15 elements, but that developers and adopters of such programs should select those elements that seem best matched to their specific circumstances.
- The focus of *Reading Next* is explicitly on “the large population of struggling students who already decode accurately but still struggle with reading and writing after third grade” (Biancarosa & Snow, 2006, p. 11). The report thus does not include recommendations related to areas such as decoding and fluency that may be important for readers who are struggling at a more basic level.
- Several of the elements of *Reading Next* relate to how infrastructure impacts adolescent literacy learning. The most that any purchased instructional program can do in these areas is to provide support to schools and districts as they implement these elements.

Development of This Paper

Development of this research-based white paper included the following steps.

- A top-level review of *Reading Next* was conducted to identify claims and recommended practices, including both those that are associated with the 15 key elements of adolescent literacy identified in the report and those that appear elsewhere in the report. As part of this review, information was collected about the sources in the Appendix to *Reading Next*, which listed literature supporting each of the 15 key elements.
- Well-known experts in the field of adolescent literacy were consulted to identify key, current, and reputable sources related to instruction for struggling adolescent readers. These included both experts who had been consulted during the development of *Jamestown Reading Navigator* and an independent expert not previously associated with the program.²
- Key documents were identified for review, with priority given to two types of documents:
 - *Broad policy-oriented research reviews and surveys of expert opinion, developed by reputable institutions and authors, with a goal of identifying key elements in effective adolescent literacy programs*
 - *More focused research syntheses and meta-analyses from reputable sources, describing the state of research and/or theory related to a specific relevant topic in adolescent literacy (e.g., comprehension, writing, formative assessment)*

² Key contributors included Dr. Thomas W. Bean, professor in literacy/reading and coordinator of doctoral studies in the Department of Curriculum and Instruction, University of Nevada at Las Vegas; Dr. William G. Brozo, professor of literacy, Graduate School of Education, George Mason University; and Dr. Douglas Fisher, professor of language and literacy education, San Diego State University. Drs. Brozo and Fisher had previously consulted with the development team for *Jamestown Reading Navigator*. These experts provided input into interpretation of the research literature, as well as recommendations of sources to review, but are not responsible for writing the summaries of the literature or for developing the correlations of the instructional recommendations to *Jamestown Reading Navigator*.

In addition to these two types of documents, some specific research reports were also identified for review, in the case of studies that were particularly germane to topics under investigation.

- Sources were reviewed and summarized, with special reference to
 - *Specific instructional recommendations*
 - *The nature of the evidence supporting each recommendation*
- Instructional recommendations were consolidated from multiple sources.
- Cross-comparison of the research-based recommendations and *Jamestown Reading Navigator* verified that *Jamestown Reading Navigator* supports each research-based recommendation listed in this paper.

In the final paper as presented here, each section spells out specific instructional recommendations that are supported by a mix of research and expert opinion. A table then provides information on how *Jamestown Reading Navigator* aligns with each recommendation.

Key policy-oriented documents and research syntheses that were reviewed for this paper are listed in the References section of the complete White Paper.

DECODING

“By the time students reach 4th grade, they should have developed the ability to apply the alphabetic principle, that is, the ability to manipulate the sounds of oral language and phonics and to correlate speech sounds with parts of words. Research shows, however, that about 10 percent of students enter middle and high school with deficits in their ability to decode print that will impair their fluency and comprehension.”—*Reading at Risk: The State Response to the Crisis in Adolescent Literacy* (NASBE, 2006, p. 19)

What Is Decoding?

Put simply, decoding is the ability to read words accurately (*Reading Next*, Biancarosa & Snow, 2006, p. 11). As used here, decoding incorporates and overlaps a variety of related skills and categories, including phonemic awareness, phonics, word analysis, word identification, the alphabetic principle, and word recognition.³

Why Is Decoding Important for Struggling Adolescent Readers?

Decoding is a set of fundamental skills that underlies all successful reading. According to Pressley (2000),

[I]n general, the more automatic decoding processes are, the better is the understanding of the word. Reading of words boils down to decoding and comprehension, with word-level comprehension depending greatly on the efficiency of decoding. (p. 547, citing Gough & Tunmer, 1986)

In many cases, struggling adolescent readers may be competent decoders who nonetheless lack other important reading and writing skills, such as those related to reading comprehension. However, researchers estimate that approximately 10 percent of adolescent readers do in fact struggle with decoding (Biancarosa & Snow, 2006, p. 11; NASBE, 2006, p. 19; Kamil, 2003, p. 8, citing Curtis & Longo, 1999). For these students, it is important to provide instruction that addresses their specific decoding needs.

The good news is that according to *Reading Next*, effective strategies for doing this have already been identified in the “thirty years of research” summarized by the National Reading Panel (Biancarosa & Snow, 2006, p. 11, citing NICHD, 2000). Specific instructional recommendations summarized below represent the fruits of that research, together with other strategies identified by experts in adolescent literacy that are supported by research and/or expert opinion.

³ Word recognition, as the term is used here, refers to general “facility in knowing that a group of letters represents a particular word” (Curtis, 2004, p. 119). For the purposes of this paper, automatic word recognition through direct teaching of sight words is addressed in the section on Fluency.

Instructional Recommendations

Phonemic Awareness

Phonemic awareness has been described in *Put Reading First*, a document based on the National Reading Panel report, as “the ability to hear, identify, and manipulate the individual sounds—phonemes—in spoken words” (Armbruster, Lehr, & Osborn, 2003, p. 10). Phonemic awareness is often described as part of the broader category of phonological awareness, which includes the ability to work with larger units in spoken language such as syllables and rimes, which often include more than one phoneme.

- **Phonemic awareness instruction.** According to the National Reading Panel, “[Phonemic awareness] instruction helped all types of children improve their reading, including . . . children in 2nd through 6th grades (most of them were disabled readers)” (NICHD, 2000, p. 2-50).⁴
 - *While this specific research finding relates directly only to students at the lowest grade level for which Jamestown Reading Navigator is intended, Reading Next’s general endorsement of the National Reading Panel’s findings as applicable to struggling adolescent readers suggests that phonemic awareness instruction also may be appropriate for students at higher grade levels who lack needed phonemic awareness skills.*
 - *Writing more specifically about beginning ELL students, Short and Fitzsimmons (2007) stated, “For adolescent ELL students who do not read or write in any language, it is important to teach them the components of reading: beginning with phonemic awareness and phonics (the sounds of a language and how to put sounds together to form words) and adding vocabulary, text comprehension, and fluency” (p. 34, citing August & Shanahan, 2006).*
- **Letters plus sounds.** The National Reading Panel found that instruction that used letters to teach phoneme manipulation had a considerably greater impact on reading than instruction that did not use letters but was limited to spoken sounds only (NICHD, 2000, pp. 2–64, 2–73).⁵

Phonics Instruction

- **Systematic and explicit phonics instruction.** Summarizing “suggestions for helping adolescents who struggle with word identification [that] have emerged from the work of researchers and clinicians,” Curtis (2004) stated, “*Systematic, explicit, and direct instruction produces the best results.* Identification of sounds and letter-sound relationships should be modeled, demonstrated, and applied in a logical and systematic manner” (p. 128; emphasis in original).
 - *In support of this conclusion, Curtis cited research by the National Reading Panel, which found that grade 2–6 students (the majority of which were disabled readers) showed significantly more improvement from systematic and explicit phonics instruction in four out of six areas (decoding regular words, decoding pseudowords, reading miscellaneous words, and reading text orally), with effect sizes for the various areas ranging from small to moderate (NICHD, 2000, p. 2-159).⁶ They found similar results for grades 2–6 students specifically identified as disabled readers, though not for students in grades 2–6 identified as low-achieving (NICHD, 2000, p. 2-160).⁷*
 - *Similarly, a research summary commissioned by the Southwest Educational Development Laboratory found that “Explicit instruction for word recognition . . . has been effective with struggling secondary readers” (Peterson et al., 2000, p. 13, citing Gaskins, Cuncelli, & Satlow, 1992; Lenz, & Hughes, 1990; Lewkowicz, 1985; Meyer, 1982). Peterson et al. (2000) also cited Henry (1993) in support of the argument that “these readers need extended decoding and spelling instruction to help them decode multisyllabic words” (p. 13).*

4 ES = 0.49 on immediate posttests (18 comparisons), $p < 0.05$; see NICHD, 2000, p. 2-66.

5 On immediate posttests, ES = 0.67 for programs that used letters (48 comparisons) v. 0.38 for programs that did not use letters (42 comparisons). On follow-up posttests, ES = 0.59 for programs that used letters (16 comparisons) v. 0.36 for programs that did not use letters (19 comparisons). All of these ES comparisons were significantly different in favor of programs that use letters at $p < 0.05$.

6 ES = 0.49 for decoding regular words (17 comparisons), 0.52 for decoding pseudowords (13 comparisons), 0.33 for reading miscellaneous words (23 comparisons), and 0.24 for reading text orally (6 comparisons). All of these results were statistically significant at $p < 0.05$.

7 For grades 2–6 disabled readers: ES = 0.32 (17 comparisons), $p < 0.05$. For grades 2–6 low achievers: ES = 0.15 (8 comparisons), results not statistically significant. Disabled readers were defined as “older children of average or better intelligence who were not making normal progress in reading”; low achievers were defined as “older children who were progressing poorly in reading and who varied in intelligence with at least some of them achieving poorly in other academic areas” (NICHD, 2000, p. 2-90).

- **Approach to decoding instruction: Mastery versus implicit understanding.** Curtis (2004) described a “difference in opinions . . . relative to whether instructional emphasis is best placed on mastery of the phonetic patterns that characterize the relationships among sounds and letters, or on development of an implicit understanding of those phonic generalizations via examples and discussions” (p. 124). According to Curtis, “Research suggests that both approaches can be effective . . . and that a combination of the two—beginning first with an emphasis on pattern mastery, then shifting to a focus on pattern generalization—may be most productive” (p. 125, citing Lovett, Lacarenza, & Borden, 2000; Lovett & Steinbach, 1997).
- **Reflective approach.** Based on “the work of researchers and clinicians,” Curtis (2004) concluded, “*Instruction should be reflective.* Learning to recognize patterns and making generalizations from and about them—not memorizing rules—should be the goal of instruction” (p. 128; emphasis in original).
- **Lesson characteristics.** Several researchers identified specific elements that should be a part of phonics/decoding lessons.
 - According to Curtis (2004), “*Lessons should be fast-paced, multisensory, lively and brief, and include materials that encourage students to apply the knowledge and skills being learned*” (p. 128, citing as examples Curtis & Chmelka, 1994; Curtis & McCart, 1992).
 - Curtis also cited the National Reading Panel report in support of modeling, demonstration, and application of sounds and letter-sound relationships (p. 128, citing NICHD, 2000).
 - Peterson et al. (2000) claimed that “*Successful programs . . . include an explanation of what skill is being taught, regular modeling of how to perform the skill, constant discussion of why the skill is important, and demonstrations of when it is best to apply the skill*” (p. 13, emphasis in original).
- **High-frequency word elements.** According to Curtis (2004), “*High-frequency sound-spelling relationships and words should be the focus of instruction.* When working with older readers, instruction should include the major sound-spelling relationships of consonants and vowels, syllable types, and basic reading-spelling vocabularies” (p. 128, citing Graham, Harris, & Loynachan, 1993; emphasis in original).
- **Word identification by analogy.** Curtis (2004) identified word identification by analogy as a “successful strategy” for word analysis. In this method, “Students learn how to use familiar words that rhyme with unfamiliar word parts to aid in their word identification” (Curtis, 2004, p. 126, citing Gaskins et al., 1988).

Practice Applying Decoding Skills

- **Practice with multiple word types.** Curtis (2004) stated, “Beyond instruction and practice in analyzing words, providing students with opportunities to apply what they have learned is also an essential part of improving their reading ability. . . . [A]pplication needs to occur with words that require students to use the knowledge and skills they are acquiring. For example, multisyllabic words such as *cockroach* and *scapegoat* provide students with a chance to generalize understanding of the sound of *oa* in ways that practice with words such as *boat* and *coat* do not” (p. 126, citing Curtis & Chmelka, 1994). This argument suggests a general value to practicing decoding skills with many different types of words, including multisyllabic words.
- **Practice of decoding in context.** Curtis (2004) also argued, “*Opportunities to practice identification of words in context should be frequent.* Word identification should never be viewed by students as an end in itself; it must always be seen as a means to an end. To accomplish this, regular opportunities to engage in oral reading—in a setting where teens are comfortable with taking risks—should be provided” (p. 129; emphasis in original). More specifically, “[A]pplication needs to occur in context, so that students can be encouraged to use their developing word-analysis skills to read unknown words on the page (rather than relying on the context to guess at them)” (Curtis, 2004, p. 126). Taken together, these recommendations suggest that students should be provided with opportunities to practice decoding in context, including oral reading, and should be encouraged to use their decoding skills in those contexts.

General Strategies

- **Computer technology.** In describing the potential value of technology programs to “provide needed supports for struggling readers,” *Reading Next* stated, “For example, there are computer programs that help students improve decoding” (Biancarosa & Snow, 2006, p. 19).
- **Tutoring.** In describing tutoring as a key element of effective adolescent literacy programs, *Reading Next* stated, “Some students require or would benefit from intense, individualized instruction. This is particularly true of the student who struggles with decoding and fluency” (Biancarosa & Snow, 2006, p. 18).

How *Jamestown Reading Navigator* Aligns with Instructional Recommendations for Improving Student Decoding

The following table describes how *Jamestown Reading Navigator* aligns with instructional recommendations described above for improving student decoding.

Summary of Decoding Recommendations	Application Through <i>Jamestown Reading Navigator</i>
Instruction on decoding should focus on adolescents with skill deficits in this area that might impact negatively on fluency and comprehension.	<i>Jamestown Reading Navigator</i> is organized into four treks (levels). Students who are assessed at readability grade levels 1–2 in an initial placement test are placed into Trek 1, which includes extensive decoding instruction. Students who are assessed above that level are placed into Trek 2, 3, or 4, which do not include decoding instruction. Students may also be placed into Trek 1 via teacher recommendation based on standardized tests, previous student work, and teacher observations.
Phonemic awareness instruction that combines letters and sounds should be provided for students with needs in this area.	Phonemic awareness instruction in Trek 1 of <i>Jamestown Reading Navigator</i> teaches students to relate sounds to specific letters and letter combinations. Students learn the relationship between vowel sounds and letters as they listen to and read poems that include rhyming words from certain word families or phonograms. Consonants and consonant blends and their corresponding sounds are covered thoroughly and taught explicitly, tapping into students’ prior knowledge and current level of phonemic awareness.
Systematic and explicit phonics instruction should be provided for students with needs in this area.	Trek 1 in <i>Jamestown Reading Navigator</i> provides students with systematic and explicit instruction in phonics. <ul style="list-style-type: none"> • Five vowel “characters” appear over the course of Trek 1. Each journey features one vowel character: <i>A</i>, <i>E</i>, <i>I</i>, <i>O</i>, or <i>U</i>. In each journey, the vowel character introduces 10 word family words in two groups of five each. Usually, two word families are introduced in each journey. • Trek 1 provides a systematic scope and sequence of explicitly taught vowel rimes or phonograms. Within this presentation of phonograms, initial consonants, consonant blends (such as <i>br</i>, <i>cl</i>, and <i>st</i>), and consonant digraphs (such as <i>th</i>, <i>sh</i>, and <i>ch</i>) to form word families appear. Over the course of the instructional sequence, Trek 1 explicitly covers all initial consonants, all the major consonant blends, and all the major consonant digraphs.

Continued ➡

Summary of Decoding Recommendations	Application Through <i>Jamestown Reading Navigator</i>
For best results, decoding instruction should combine mastery and implicit instruction approaches.	<p>Trek 1 includes both mastery of specific patterns and development of an implicit understanding of phonics generalizations through examples and discussion.</p> <ul style="list-style-type: none"> • Trek 1 provides a systematic scope and sequence of explicitly taught vowel patterns, based on their frequency of occurrence in English. • Students develop an implicit understanding of these phonic generalizations via examples in the Supplemental Words sections and the <i>inClass Reader</i> that help students recognize and generalize letter-sound relationships. <ul style="list-style-type: none"> – In the Supplemental Words sections, students apply what they have learned about the word families in the journey to decode new words containing the same word families, thus transferring their new knowledge to new words. – The <i>inClass Reader</i> selections include words students have not seen in the online lessons but that include the same word family rimes students have been taught, using different onsets.
Decoding instruction should be reflective, not rule based.	Instruction in <i>Jamestown Reading Navigator</i> is designed to help students recognize patterns and make generalizations. The program does not use a rule- or algorithm-based approach to teaching decoding.
Lessons should be fast paced, multisensory, lively, and brief; should incorporate explanation, modeling, demonstration, and application; and should include discussion of why skills are important.	<p>Phonics lessons in <i>Jamestown Reading Navigator</i></p> <ul style="list-style-type: none"> • Are fast paced, multisensory, lively, and brief. Lessons incorporate audio, visual, and tactile senses (through student keyboarding). • Incorporate explanation, modeling, demonstration, and application. Modeling is particularly rich, with an emcee and vowel letter characters. • Include explanations of why decoding skills are important.
Instruction should focus on high-frequency sound-spelling relationships and word elements.	The Trek 1 journeys are sequenced according to the most frequently occurring phonograms (sound and letter correspondences) in more than 5 million words in the English language, based on reputable research sources (Hanna et al., 1966; Fry, 2004).
Word identification by analogy can be an effective method for students to learn decoding.	<p><i>Jamestown Reading Navigator</i> uses several strategies that are based on word identification by analogy.</p> <ul style="list-style-type: none"> • In the Supplemental Words section, students learn new words within a word family by using their knowledge of familiar rhyming words to decode parts of unfamiliar words. • Students apply their knowledge of familiar words to decode unfamiliar rhyming words they encounter when reading <i>inClass Reader</i> selections.
Students should be guided to practice decoding with multiple word types, including multisyllabic words.	Students are introduced to a sequence of vowel rimes or phonograms and receive guided practice in combining these with a variety of initial consonants, major consonant blends, and major consonant digraphs. This includes some exposure to multisyllabic words, thus allowing students to generalize their understanding of the vowel rimes.

Continued ➔

Summary of Decoding Recommendations	Application Through <i>Jamestown Reading Navigator</i>
<p>Students should be provided with opportunities to practice decoding in context, including oral reading contexts.</p>	<p>Trek 1 provides several reading contexts where students have the opportunity to practice their decoding.</p> <ul style="list-style-type: none"> Oral reading practice occurs in each journey when students read a poem aloud and submit their best recording to the teacher. Trek 1 students also read selections in the Trek 1 <i>inClass Reader</i>, which provides more chances to use decoding skills in context by using familiar rhymes to decode unfamiliar words. This reading may be silent or oral.
<p>Computer technology can be an effective tool for helping students learn decoding.</p>	<p>Computer technology is the basis of <i>Jamestown Reading Navigator's</i> approach to decoding instruction. Computerized features that are used to teach decoding include the following:</p> <ul style="list-style-type: none"> An animated emcee and vowel characters lead the student through the journeys. This technology component increases motivation and interest, and also provides a visual and auditory experience that reinforces word meanings and pronunciations. Students complete decoding activities by dragging, clicking, and typing words and word parts. Students practice fluency, including accurate decoding, by speaking into a microphone and submitting their best recording to the teacher. Teachers evaluate students' recordings by using a rubric that includes criteria related to accuracy of word recognition.
<p>Tutoring should be provided for students who struggle with decoding.</p>	<p>Tutoring is recommended within <i>Jamestown Reading Navigator</i> for students who are experiencing difficulties with decoding.</p> <ul style="list-style-type: none"> The Sight Words Intervention Report and Word Families Intervention Report can be used to identify students who are having specific difficulties related to decoding in Trek 1. Reteaching Skills Support resources for Trek 1 include activities that tutors can use to reteach and reinforce the phonics and language structure skills covered in each online journey. These resources can be used either for students with decoding difficulties in specific areas or across the board as a general reinforcement for students throughout Trek 1.

INTRODUCTION References

Biancarosa, C., & Snow, C. E. (2006). *Reading next: A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York* (2nd ed.). Washington, DC: Alliance for Excellent Education. Retrieved January 8, 2007, from <http://www.all4ed.org/publications/ReadingNext/ReadingNext.pdf>.

Jetton, T. L., & Dole, J. A. (2004). Introduction. In T. L. Jetton & J. A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 1–11). New York: The Guilford Press.

Loomis, S. C., & Bourque, M. L. (Eds.). (2001). *National assessment of educational progress achievement levels 1992–1998 for reading*. Washington, DC: National Assessment Governing Board. Retrieved from <http://www.nagb.org/pubs/readingbook.pdf>.

National Center for Education Statistics (NCES). (1999). *Nation's report card: Reading 1998*. Washington, DC: U.S. Government Printing Office. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=1999500>.

National Center for Education Statistics (NCES). (2006). *Nation's report card: Reading 2005*. Washington, DC: U.S. Government Printing Office. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006451>.

Olson, L. (2006). A decade of effort. *Quality Counts*, 25, 8–10, 12, 14, 16, 18–21.

Peterson, C. L., Caverly, D. C., Nicholson, S. A., O'Neal, S., & Cusenbary, S. (2000). *Building reading proficiency at the secondary level: A guide to resources*. Austin, TX: Southwest Educational Development Laboratory. Retrieved April 3, 2007, from <http://www.sedl.org/pubs/reading16/buildingreading.pdf>.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360–407.

Whitehurst, G. J. (2002, October). *Evidence-based education (EBE)* [electronic presentation]. Retrieved May 31, 2007, from <http://www.ed.gov/nclb/methods/whatworks/eb/edlite-slide001.html>.

DECODING References

Allington, R. L. (2006). *What really matters for struggling readers: Designing research-based programs* (2nd ed.). New York: Pearson Education.

Armbruster, C. C., Lehr, F., & Osborn, J. (2003). *Put reading first: The research building blocks for teaching children to read* (2nd ed.). Washington, DC: Partnership for Reading, a collaborative effort of the National Institute for Literacy, the National Institute of Child Health and Human Development, and the U.S. Department of Education. Retrieved March 7, 2005, from <http://www.nifl.gov/nifl/partnershipforreading/publications/PFR-booklet.pdf>.

August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Mahwah, NJ: Lawrence Erlbaum Associates.

Biancarosa, C., & Snow, C. E. (2006). *Reading next: A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York* (2nd ed.). Washington, DC: Alliance for Excellent Education. Retrieved January 8, 2007, from <http://www.all4ed.org/publications/ReadingNext/ReadingNext.pdf>.

Curtis, M. E. (2004). Adolescents who struggle with word identification: Research and practice. In T. L. Jetton & J. A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 119–134). New York: The Guilford Press.

Curtis, M. E., & Chmelka, M. B. (1994). Modifying the Laubach Way to Reading Program for use with adolescents with LDs. *Learning Disabilities Research and Practice*, 9, 38–43.

Curtis, M. E., & Longo, A. M. (1999). *When adolescents can't read: Methods and materials that work*. Cambridge, MA: Brookline Books.

Curtis, M. E., & McCart, L. (1992). Fun ways to promote poor readers' word recognition. *Journal of Reading*, 35, 398–399.

Fry, E. B. (2004). Phonics: A large phoneme-grapheme frequency count revised. *Journal of Literary Research*, 36(1), 85–98.

Gaskins, I., Cuncelli, E., & Satlow, E. (1992). Implementing an across-the-curriculum strategies program: Reaction to change. In J. Pressley, K. Harris, & J. Guthrie (Eds.), *Promoting academic competence and literacy in school* (pp. 411–426). Boston: Academic Press.

Gaskins, I. W., Downer, M. A., Anderson, R. C., Cunningham, P. M., Gaskins, R. W., Schommer, M., et al. (1988). A metacognitive approach to phonics: Using what you know to decode what you don't know. *Remedial and Special Education*, 9, 36–41.

Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6–10.

Graham, S., Harris, K. R., & Loynachan, C. (1993). The basic spelling vocabulary list. *Journal of Educational Research*, 86, 363–368.

Hanna, P. R., Hanna, J. S., Hodges, R. E., & Rudorf, E. H. (1966). *Phoneme-grapheme correspondences as cues to spelling improvement*. Washington, DC: U.S. Department of Health, Education, and Welfare.

Henry, M. K. (1993). Morphological structure: Latin and Greek roots and affixes as upper grade code strategies. *Reading and Writing: An Interdisciplinary Journal*, 5(2), 227–241.

Kamil, M. L. (2003). *Adolescents and literacy: Reading for the 21st century*. Washington, DC: Alliance for Excellent Education. Retrieved February 17, 2007, from <http://www.all4ed.org/publications/AdolescentsAndLiteracy.pdf>.

Lenz, B. K., & Hughes, C. A. (1990). A word identification strategy for adolescents with learning disabilities. *Journal of Learning Disabilities*, 23(3), 149–158, 163.

Lewkowicz, N. K. (1985). Attacking longer words: Don't begin at the beginning. *Journal of Reading*, 29(3), 226–237.

Lovett, M. W., Lacarenza, L., & Borden, S. L. (2000). Putting struggling readers on the PHAST track: A program to integrate phonological and strategy-based remedial reading instruction and maximize outcomes. *Journal of Learning Disabilities*, 33, 458–476.

Lovett, M. W., & Steinbach, K. A. (1997). The effectiveness of remedial programs for reading disabled children of different ages: Does the benefit decrease for older children? *Learning Disability Quarterly*, 20, 189–210.

Meyer, L. A. (1982). The relative effects of word-analysis and word-study correction procedures with poor readers during word attack training. *Reading Research Quarterly*, 17(4), 544–555.

NASBE Study Group on Middle and High School Literacy. (2006). *Reading at risk: The state response to the crisis in adolescent literacy* (Rev. ed.). Alexandria, VA: National Association of State Boards of Education. Retrieved February 17, 2007, from http://www.carnegie.org/literacy/pdf/Reading_at_Risk_report.pdf.

NICHHD (National Institute of Child Health and Human Development). (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.

Peterson, C. L., Caverly, D. C., Nicholson, S. A., O'Neal, S., & Cusenbary, S. (2000). *Building reading proficiency at the secondary level: A guide to resources*. Austin, TX: Southwest Educational Development Laboratory. Retrieved April 3, 2007, from <http://www.sedl.org/pubs/reading16/buildingreading.pdf>.

Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 545–561). Mahwah, NJ: Lawrence Erlbaum Associates.

Short, D., & Fitzsimmons, S. (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*. Washington, DC: Alliance for Excellent Education. Retrieved February 27, 2007, from <http://www.carnegie.org/literacy/pdf/DoubletheWork.pdf>.

REFERENCES



The McGraw-Hill Companies

ONE PRUDENTIAL PLAZA
130 E. RANDOLPH STREET, #900
CHICAGO, IL 60601

1-800-334-7344
glencoe.com
glencoe.com/catalog