

How *Jamestown Reading Navigator*<sup>™</sup>  
Supports Research-Based Instruction  
for Struggling Adolescent Readers

# Fluency

*Prepared for*

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## 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*<sup>™</sup> 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)<sup>1</sup>

<sup>1</sup> 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.<sup>2</sup>
- 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)*

<sup>2</sup> 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.

## FLUENCY

“[T]he five major factors that impact advanced literacy skills and the ability of adolescents to understand and learn from what they read [are] speed and accuracy when reading text, vocabulary, background knowledge, comprehension, and motivation.”—*Reading at Risk: The State Response to the Crisis in Adolescent Literacy* (NASBE, 2006, p. 19)

### What Is Fluency?

Fluency is the ability to read text quickly, accurately, and with expression. It provides a bridge between word recognition and comprehension. Fluency incorporates instantaneous recognition of words, including common sight words, but extends beyond knowledge of individual words to reflect the meaningful connections among words in a phrase or a sentence. Fluent readers are able to recognize words and comprehend them simultaneously.

### Why Is Fluency Important for Struggling Adolescent Readers?

Fluency is an essential component of skilled reading, according to the National Reading Panel (NICHD, 2000, p. 3-1). Many researchers in adolescent literacy argue that for readers who “have not yet achieved automaticity in word recognition (fluency),” the simple task of decoding words takes up cognitive resources that are needed in order to understand the meaning of the text—thereby impacting student comprehension (Rasinski et al., 2005, p. 22, citing LaBerge & Samuels, 1974). This may help explain research findings such as those of Rasinski et al. (2005), who “found a statistically significant . . . and moderately strong relationship” between fluency (reading rate) scores and comprehension scores among 303 ninth-grade students (p. 25).<sup>3</sup> Allington (2006) argued that “there are a substantial number of rigorously designed research studies demonstrating (1) that fluency can be developed, most readily through a variety of techniques that involve rereading texts; and (2) that fostering fluency has reliable positive impacts on comprehension performance” (p. 107).

Researchers have also drawn connections among fluency, breadth of reading, and student motivation. For example, a summary of research prepared for the Southwest Educational Development Laboratory argued that “Excessively slow, halting reading limits comprehension and the amount of print that can be read, creating a burden that can extinguish the desire to read” (Peterson et al., 2000, p. 12, citing LaBerge & Samuels, 1974; Nathan & Stanovich, 1991; Samuels, 1994). Along similar lines, the Study Group on Middle and High School Literacy for the National Association of State Boards of Education declared:

Fluency of word identification is not sufficient for comprehension. Yet, it is an important prerequisite for it. If children read slowly and laboriously, their comprehension of texts will likely be limited. (NASBE, 2006, pp. 20–21)

<sup>3</sup>  $p < .001, r = .530$ , accounting for 28 percent of the variation in student comprehension achievement.

### How Can Fluency Be Improved?

Research and expert opinion agree that practice with reading—especially oral reading—is the key to helping students become more fluent readers. A variety of specific methods have been developed for helping students improve their fluency skills, with a particular focus on guided oral reading and repeated oral reading procedures, often with a modeling component. A research review and meta-analysis by the National Reading Panel found that “repeated reading procedures have a clear impact on the reading ability of . . . students with various kinds of reading problems throughout high school” (NICHD, 2000, p. 3-17).<sup>4</sup>

## Instructional Recommendations

### General Approaches and Guidelines

Research and expert opinion support the value of a variety of broad approaches and guidelines for helping improve student fluency.

- **Extensive reading.** Pressley (2000) noted that “[t]he development of fluent, automatic word recognition depends on many encounters with words . . . with the most natural way for that to occur through reading and lots of it” (p. 553, citing LaBerge & Samuels, 1974). Similarly, Allington (2006) claimed, “In learning to read it is true that reading practice—just reading—is a powerful contributor to the development of accurate, fluent, high-comprehension reading” (p. 35).
- **Oral reading practice (general).** Describing key features of “[n]ewer guided repeated oral reading techniques” that have proved effective, the National Reading Panel identified increased oral reading practice “through the use of one-to-one instruction, tutors, audiotapes, peer guidance, or other means,” compared to earlier approaches (NICHD, 2000, p. 3-11). Similarly, discussing the importance of developing word-analysis skills in context, Curtis (2004) noted, “In this regard, oral reading is increasingly being recognized for its effectiveness with older as well as younger readers” (Curtis, 2004, p. 126, citing Allinder, Dunse, Brunken, & Obermiller-Krolikowski, 2001; NICHD, 2000). Taken together, these comments suggest the general importance of oral reading practice, separate from the specific repeated oral reading techniques discussed below.
- **Repeated oral reading.** Repeated oral reading techniques are widely acknowledged as an effective method to improve student fluency. For example:
  - *As noted above, the National Reading Panel found that “repeated [oral] reading procedures have a clear impact on the reading ability of . . . students with various kinds of reading problems throughout high school” (NICHD, 2000, p. 3-17).*
  - *A report on adolescent literacy to the National Association of State Boards of Education endorsed this finding, stating, “There are specific methods to improve students’ automaticity so that readers can process text with minimal errors. Repeated readings, assessing word accuracy and reading rates, and providing models through paired reading or reading aloud can improve decoding, reading rates, expressive reading, and comprehension of passages that the reader has not seen” (NASBE, 2006, p. 21).*
  - *Curtis (2004) acknowledged that “repeated reading techniques . . . are very effective in improving fluency (as measured by rate) in older as well as younger students,” though she also raised questions about how well those gains transfer to comprehension (p. 127; emphasis in original).*
- **Modeling.** Summarizing “suggestions for helping adolescents who struggle with word identification [that] have emerged from the work of researchers and clinicians” (p. 128), Curtis (2004) stated, “*Fluent reading should be modeled, with numerous opportunities for students to practice. . . . Teachers should read aloud with their students, directing their attention to the rhythms in written language*” (p. 129; emphasis in original). Similarly, describing ways to help students build decoding skills, Peterson et al. (2000) claimed, “Struggling readers benefit from expert modeling of fluent reading” (p. 13, citing Chall, 1996).

<sup>4</sup> ES = 0.49 for 324 low-level readers from nine studies, ranging from grades 2–9; average ES weighted by sample size = 0.33. From the context, this appears to have included guided repeated oral reading studies.

- *Modeling is also a component, together with monitoring student growth, of “assisted” reading—a procedure that has been recommended by some experts to help develop student fluency. According to Curtis (2004), “Providing students with a model of fluent reading, along with a means for monitoring their growth, has been emphasized by some proponents of the use of repeated readings with adolescents (Harris, Marchand-Martella, & Martella, 2000; Hasbrouck, Ilnot, & Rogers, 1999). Based on their review of fluency research conducted with both younger and older students, Stahl and Kuhn (2002) also conclude that such ‘assisted’ repeated reading produces better results than an unassisted approach” (Curtis, 2004, p. 127).*
- **Independent reading.** While most of the research on effective fluency practices relates to oral reading in a planned context, independent reading is also described by some experts as an important part of helping students develop fluency. For example, after describing oral reading practices, Curtis (2004) stated, “Teens need to be provided with opportunities and encouragement to read independently as well” (p. 129).
- **Practice with reading words in meaningful contexts.** In response to the question, “What kinds of practice develop fluency?” the National Reading Panel referenced evidence that “reviewing and rehearsing word lists” is “insufficient as it may fail to transfer when the practiced words are presented in a meaningful context” (citing Fleischer, Jenkins, & Pany, 1979), and then stated, “Competent reading requires skills that extend beyond the single-word level to contextual reading, and this skill can best be acquired by practicing reading in which the words are in a meaningful context” (NICHD, 2000, pp. 3-10–3-11). Curtis (2004) made the same point, arguing that “*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” (Curtis, 2004, p. 129; emphasis in original).
- **Level-appropriate texts.** Allington (2006) argued that one cause of student difficulties related to reading fluency may be because “They have had limited reading practice in appropriately leveled materials” (p. 95) and instead have been reading texts that are too difficult. He stated further, “[T]he widespread evidence that struggling readers are often placed in texts that are too hard (given the level of support available) and the commonness of fluency problems in these students suggests that this hypothesis deserves consideration” (p. 96). This suggests that it may be particularly important to ensure that texts that are made available for student reading should be at an appropriate level of difficulty.
- **Frequent, appropriate assessment.** Several reviewers noted the importance of frequent and appropriate assessment in helping build fluency. For example:
  - *Based on the research, the National Reading Panel recommended that “teachers should assess fluency regularly,” using both formal and informal methods (NICHD, 2000, p. 3-4). Such informal methods can include “reading inventories . . . miscue analysis . . . pausing indices . . . running records . . . and reading speed calculations” (NICHD, 2000, p. 3-9, citing five studies).<sup>5</sup>*
  - *Allington (2006) cautioned, “For rate and fluency data to be useful, they need to be gathered regularly from texts that are used in the classroom” (p. 90). He argued specifically against rate of reading for isolated word lists and pseudo-words.*
- **Part of a larger reading program context.** The National Reading Panel found that in all the repeated oral reading and guided repeated oral reading studies they reviewed, “the fluency work was only part of the instruction that students received” (NICHD, 2000, p. 3-20). They cited a study cautioning against too much focus on fluency issues as a potential distraction from reading comprehension, and then concluded that repeated oral reading should occur “in the context of an overall reading program, not as stand-alone interventions” (NICHD, 2000, p. 3-20, citing Anderson, Wilkinson, & Mason, 1991). Similarly, Underwood and Pearson (2004) argued for “a balance that does justice to issues of comprehension, writing in response to reading, and critical examinations of text,” providing “rich opportunities to learn to comprehend printed text, while still providing a focus on the teaching of decoding skills, promoting growth in sight words, and providing opportunities and incentives for easy recreational reading. . . . Fluency—along with its attendant correlates, accuracy and automaticity—may indeed be a necessary, but surely not sufficient, condition for comprehension” (p. 139).
- **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).

5 Johnson, Kress, & Pikulski, 1987; Goodman & Burke, 1972; Pinnell et al., 1995; Clay, 1972; Hasbrouck & Tindal, 1992.

**Specific Strategies**

The following list includes a variety of specific strategies and activity structures for improving student fluency that are supported by research and/or expert opinion and used in *Jamestown Reading Navigator*.

- **Sight word recognition training.** Based on a combination of theoretical analysis and empirical evidence, Pressley (2000) concluded that training in “rapid recognition” of common words can improve students’ comprehension (pp. 546–547, 552, citing LaBerge & Samuels, 1974; Tan & Nicholson, 1997).<sup>6</sup> Other research has verified that sight word instruction can be highly effective across multiple age ranges for students with moderate and severe disabilities (Browder & Xin, 1998).<sup>7</sup> Taken together, these findings suggest a potential value for training students to recognize the most frequent sight words.
- **Computer activities and games.** In describing the potential value of technology programs to “provide needed supports for struggling readers,” *Reading Next* noted, “[T]here are computer programs that help students improve . . . fluency” (Biancarosa & Snow, 2006, p. 19).
  - *More specifically, Curtis (2004) endorsed computer activities and games as tools for promoting fluent word recognition, including multiple opportunities to practice recognition of the same words (p. 128).*
- **Specific oral reading formats.** Allington (2006) identified a variety of specific intervention strategies that “have demonstrated effectiveness in developing fluency and, concurrently, fostering comprehension” (p. 96). Some of these included the following:
  - *Choral reading, in which “all the students in a group read aloud together” (p. 99).*
  - *Echo reading, in which “[t]he teacher provides the fluent model, reading in phrases and with appropriate intonation” (p. 100), after which the students imitate the teacher.*
  - *Rereading for performance, a label for several activities (e.g., Reader’s Theater, Be the Character, and Oprah) in which “readers must attempt to take on the actual voice of the characters as well as attitude, stance, and personality. In each case multiple readings of the text, or segments of the text, are necessary” (pp. 103–104).*

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

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

Summary of Fluency Recommendations	Application Through <i>Jamestown Reading Navigator</i>
Students should read extensively.	<ul style="list-style-type: none"> <li>• Much of the time students spend online in <i>Jamestown Reading Navigator</i> consists of silent reading (supported in many cases by audio) and oral fluency activities. Students practice reading texts from a variety of genres (short stories, essays, poems, plays) and content areas (science, literature, social studies).</li> <li>• The program includes activities and print resources for reading off the computer, using the <i>inClass Reader</i> anthologies and <i>inTIME</i> magazines.</li> <li>• The program also provides a list of suggested additional readings for each quest (unit) in Treks (levels) 2–4 in the Resources section of the <i>Teacher Resource Guide</i>. These represent additional book-length texts that teachers could make available to their students.</li> </ul>

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6 In Tan & Nicholson (1997), below-average readers, ages 7–10, were trained to recognize target words quickly and accurately, using flashcards. These students answered more comprehension questions than students in a control group who had orally discussed the meanings of the target words with the researcher but had not seen the words, “despite the fact, that if anything, the control condition developed understanding of the target words better than did the training condition” (Pressley, 2000, p. 547).

7 According to the ERIC abstract of this study, “A review of 48 studies on the use of sight-word methodology to teach functional reading to individuals with moderate and severe disabilities found that sight-word instruction has been highly effective with this population. New strategies have included feedback procedures and applying constant time delay. A persistent limitation of the research is failure to measure functional use” (accessed June 28, 2007).

Summary of Fluency Recommendations	Application Through <i>Jamestown Reading Navigator</i>
Students should practice reading orally.	<p>Each online journey (lesson) in <i>Jamestown Reading Navigator</i> includes a fluency activity that involves oral reading.</p> <ul style="list-style-type: none"> <li>In Trek 1, students listen to an expert reader who reads a poem aloud. Then students make up to three recordings of their own readings of the poem and submit their best recording to the teacher.</li> <li>In Treks 2–4, students practice fluency by reading orally an excerpt from the text selection that is the focus of the journey. They make up to three recordings of their own readings and submit their best recording to the teacher.</li> </ul> <p>Additionally, the <i>Teacher Resource Guide</i> includes a section on fluency that explains the importance of oral reading to develop students’ fluency and encourages teachers to use oral reading activities with their students (in addition to the online activities).</p>
Instruction should include repeated oral reading activities.	<ul style="list-style-type: none"> <li>As noted above, the oral reading activities in <i>Jamestown Reading Navigator</i> provide opportunities for students to repeatedly read and record their passages.</li> <li>The <i>Teacher Resource Guide</i> provides guidance on how to carry out several specific repeated oral reading methods, including paired reading, choral reading, radio reading, and Reader’s Theater.</li> <li>An online professional development module and several optional on-site professional development sessions provide recommendations for a variety of repeated oral reading fluency activities.</li> </ul>
Instruction should include modeling of fluent reading.	<ul style="list-style-type: none"> <li>Fluent oral reading is modeled by the expert online recordings of the fluency passages. Students can choose to listen to these expert recordings as often as they wish.</li> <li>The <i>Teacher Resource Guide</i> section on fluency encourages teachers to model fluent oral reading and provides tips for doing so effectively.</li> <li>The online professional development module gives guidance to teachers for modeling oral reading.</li> <li>An optional on-site professional development session on Scaffolding Instruction to Build Fluency helps teachers explore activities that build accuracy, phrasing, and expression using paired readings, repeated readings, choral readings, and phrase-cued text lessons, including many techniques that involve modeling fluent reading.</li> </ul>
Fluency instruction should support a combination of modeling fluent reading and monitoring student growth in fluency.	<ul style="list-style-type: none"> <li>As described above, <i>Jamestown Reading Navigator</i> includes extensive modeling of fluent reading.</li> <li>The program also provides resources for teachers to monitor students’ fluency growth by assessing students’ fluency recordings from the online program and using a Fluency Record graph to chart student progress. (For more information about fluency assessments in <i>Jamestown Reading Navigator</i>, see the row later in this table on frequent, appropriate fluency assessment.)</li> </ul>

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Summary of Fluency Recommendations	Application Through <i>Jamestown Reading Navigator</i>
<p>Students should be encouraged to read independently.</p>	<ul style="list-style-type: none"> <li>• <i>Jamestown Reading Navigator</i> encourages students to read selections independently in the <i>inClass Reader</i> anthologies and <i>inTIME</i> magazines.</li> <li>• The program also provides a list of suggested readings teachers could make available to their students for each quest in Treks 2–4.</li> <li>• The <i>Teacher Resource Guide</i> section on fluency talks specifically about teacher practices that support independent reading.</li> <li>• An optional on-site professional development session on Shared and Independent Reading helps teachers explore ways to implement independent reading in the <i>Jamestown Reading Navigator</i> classroom.</li> </ul>
<p>Fluency practice should focus on reading words in meaningful contexts.</p>	<p>Throughout <i>Jamestown Reading Navigator</i>, reading skills are always practiced in the context of a paragraph, a passage, or a selection. Even when individual vocabulary words are taught, a sample sentence is always provided. Students are not drilled on lists of words.</p>
<p>Texts that are provided for student reading should be at an appropriate level of difficulty.</p>	<ul style="list-style-type: none"> <li>• Each trek in <i>Jamestown Reading Navigator</i> corresponds to a specific readability grade level range, calculated using the Dale-Chall readability formula (Chall &amp; Dale, 1995). Both online and print text selections that students read for each trek—including the fluency selections—fall within that range.</li> <li>• An initial placement test is used to place students into their appropriate trek, based on performance with reading and comprehending passages at different levels. Students are thus assigned to practice fluency with texts that are at an appropriate level of difficulty for them.</li> <li>• Suggested additional readings for Treks 2–4 are also linked to specific treks and their associated reading levels. Additionally, Lexile scores are provided for the suggested readings.</li> <li>• The teacher is encouraged to monitor students’ work and change their placement in the program if they are working at a level that is too easy or too difficult for them.</li> </ul>
<p>Student fluency should be assessed frequently, using appropriate measures.</p>	<p>Students’ fluency recordings for each journey can be evaluated by teachers, following guidelines provided in the Fluency section of the <i>Teacher Resource Guide</i> and also as separate downloads on the <i>Jamestown Reading Navigator</i> teacher home page (under Assessment). Instructions and resources (including print copies of students’ fluency passages for several journeys) are provided in the <i>Teacher Resource Guide</i> for calculating</p> <ul style="list-style-type: none"> <li>• Reading rate (correct words per minute, or CWPM)</li> <li>• Quality of the oral reading on five measures, using a scale of 1 to 4: accuracy, rate, phrasing, smoothness, and prosody (i.e., appropriate intonation and stress)</li> <li>• Miscue analysis</li> </ul> <p>Using these resources, students’ fluency can be assessed as often as desired by the teacher or required by the school or the district. Additionally, the <i>Teacher Resource Guide</i> section on Fluency provides guidance to teachers in how to assess students’ silent reading rate.</p> <p>Guidance in how to use these resources to evaluate student fluency is provided in the on-site implementation training for <i>Jamestown Reading Navigator</i>. Strategies for assessing student fluency are also covered in the online professional development module on oral reading fluency and in an optional on-site professional development session on classroom assessment of fluency.</p>

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Summary of Fluency Recommendations	Application Through <i>Jamestown Reading Navigator</i>
Fluency instruction and practice should occur in the context of a larger literacy program.	Fluency instruction and practice in <i>Jamestown Reading Navigator</i> represents only one facet of a broad-based program that also includes decoding, vocabulary, comprehension, content-area literacy skills, and writing.
Tutoring should be provided for students who struggle with fluency.	<p>Tutoring is recommended for students who are experiencing difficulties with fluency in the on-site <i>Jamestown Reading Navigator</i> implementation training.</p> <ul style="list-style-type: none"> <li>• Teachers are encouraged to consider tutoring if students show difficulties in their submitted oral fluency recordings.</li> <li>• Recommended tutoring activities for improving fluency include repeated readings, shared reading, choral reading, phrase-cued text practice, and self-directed reading.</li> <li>• In the on-site training, teachers are encouraged to conduct a miscue analysis once per quest (unit) in Treks 2–4 based on students’ oral reading. This helps them determine whether students may have underlying difficulties related to word recognition that might require remediation for skills covered in Trek 1.</li> </ul>
Fluency programs should train students to quickly recognize high-frequency “sight words.”	Trek 1 in <i>Jamestown Reading Navigator</i> teaches 100 common “instant words” that students must learn to recognize by sight, since they do not feature phonemic sound-spelling correspondences. These sight words are first introduced in isolation, and then students gain practice reading them in the context of sentences and poems. According to reputable research sources, the frequent sight words taught in Trek 1 represent approximately 50 percent of all the words appearing in written English (Fry, 1997, 1999, 2004).
Computer activities and games should be used to help students develop fluency, including multiple opportunities to practice recognition of specific words.	<p>Computer technology is central to <i>Jamestown Reading Navigator</i>’s approach to helping students develop fluency. Computerized features that are used to help students develop fluency include the following:</p> <ul style="list-style-type: none"> <li>• Students hear an expert reader read an excerpt from the selection. The expert reader models good fluency by reading with expression, accuracy, and appropriate speed. The student can listen to the expert reader as many times as he or she likes.</li> <li>• Students practice reading the excerpt and record it up to three times, allowing students to listen to themselves and choose their best recording.</li> <li>• Word recognition activities provide students with multiple opportunities to identify the same words: <ul style="list-style-type: none"> <li>– Trek 1 includes numerous computer activities that strengthen word recognition by having students match words to pictures, choose a word that best answers a question, and type/choose the correct word to fit into the line of the poem.</li> <li>– In Treks 2–4, students complete quick match and cloze activities to strengthen recognition of vocabulary words.</li> </ul> </li> </ul>

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Summary of Fluency Recommendations	Application Through <i>Jamestown Reading Navigator</i>
Instruction should incorporate formats for oral reading fluency activities that are supported by research and/or expert opinion, such as	
<ul style="list-style-type: none"> <li>• Choral reading</li> </ul>	<ul style="list-style-type: none"> <li>• The Fluency section of the <i>Teacher Resource Guide</i> encourages teachers to use choral reading and provides tips for how to implement it in the classroom.</li> <li>• The online oral reading fluency professional development module models choral reading for teachers.</li> <li>• On-site professional development sessions can also provide modeling of choral reading activities.</li> </ul>
<ul style="list-style-type: none"> <li>• Echo reading</li> </ul>	The Fluency section of the <i>Teacher Resource Guide</i> suggests echo reading as an activity that students can complete with each other in pairs or that students can complete after listening to the teacher model the reading. Echo reading is also similar to what occurs online when students listen to an expert reader read a passage and then read the passage aloud themselves.
<ul style="list-style-type: none"> <li>• Reading for performance</li> </ul>	The Fluency section of the <i>Teacher Resource Guide</i> includes subsections on Reader's Theater and radio reading, both of which are forms of reading for performance. The <i>Teacher Resource Guide</i> provides tips for implementing both of these approaches in the classroom.

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