

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

# Executive Summary

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## Executive Summary

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

This Executive Summary provides a top-level description of key issues underlying the development of the white paper, including a brief description of the *Jamestown Reading Navigator* program, summary discussion of how to meet the challenge of identifying effective instructional practices for struggling adolescent readers, and the development process for the white paper. This introduction is followed by a summary of the white paper’s findings in each of 16 broad areas:

- Decoding
- Fluency
- Vocabulary
- Comprehension
- Support for content-area literacy
- Text-based collaborative learning
- Motivation and engagement
- Diverse texts
- Writing
- Formative and summative assessment
- Strategic tutoring
- Differentiated instruction
- Technology
- Professional development
- Support for infrastructure improvements
- English language learners

## 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—with a specific focus on comprehension skills and strategies, designed for application to content-area reading, vocabulary, writing, fluency, and decoding/phonics (for students with a particular need in this area).

*Jamestown Reading Navigator* combines online multimedia activities and text selections; printed resources for students to read; and teacher support materials, including professional development, lesson plans, instructional recommendations, and reteaching skills support.

## Challenge: Identifying Effective Instructional Practices for 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).

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).

## The State of Research on Struggling Adolescent Readers

Recently, a number of efforts—including research summaries from 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 the bar for instructional design. Today's expectations are for solid research-based instruction that results in demonstrable gains in student learning. 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 regarding 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.

The preparation of *Reading Next* included recommendations from a panel of five nationally known and respected educational researchers, reviewed and augmented at the 2004 meeting of the Adolescent Literacy Funders Forum (ALFF), with an Appendix of literature supporting each of the report's main recommendations. 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.

### Development of the White Paper

Development of the research-based white paper followed the process described below.

A top-level review was conducted of *Reading Next* to identify claims and recommended practices. As part of this review, information was collected about sources included in the Appendix to *Reading Next*, which listed literature supporting each of 15 key elements. Additionally, well-known experts in the field of adolescent literacy were consulted to identify significant, current, and reputable sources relating to instruction for struggling adolescent readers.<sup>1</sup>

Based on these sources, additional noteworthy 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 vital 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, and formative assessment)

The significant policy-oriented documents and research syntheses reviewed for this white paper are listed in the Appendix to this Executive Summary.

Instructional recommendations were consolidated from multiple sources, and a cross-comparison verified that each research-based recommendation listed in the white paper is supported by *Jamestown Reading Navigator*. The paper presents instructional recommendations, based in research and expert opinion, for each of 16 broad areas as listed at the beginning of this Executive Summary and describes how *Jamestown Reading Navigator* supports those recommendations. Findings in each of these areas are summarized on the following pages.

<sup>1</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.

## Decoding

Decoding—the ability to read words accurately—is a set of fundamental skills that underlies all successful reading. 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.

*Jamestown Reading Navigator* provides decoding instruction targeted specifically to readers who are likely to need help in this area. This instruction aligns with research and expert opinion related to focus of decoding instruction, recommended instructional features and approaches, and opportunities for practice.

### Focus of Instruction

Decoding instruction in *Jamestown Reading Navigator* is directed toward students at the lowest reading levels—those who are most likely to have skill deficits in this specific area—with a content focus that is supported by research and expert opinion.

- Phonemic awareness instruction in Trek 1 (level 1) of *Jamestown Reading Navigator* teaches students to relate sounds to specific letters and letter combinations.
- Trek 1 in *Jamestown Reading Navigator* provides students with systematic and explicit instruction in phonics.
- Instruction focuses on high-frequency sound-spelling relationships and word elements.

### Instructional Features and Approaches

*Jamestown Reading Navigator* incorporates specific research-based instructional features and approaches to help students improve their decoding skills.

- *Jamestown Reading Navigator* uses computer technology to provide needed support for struggling readers in the area of decoding instruction.
- Decoding instruction combines approaches that stress both mastery of specific phonetic patterns and implicit understanding of phonic generalizations.
- Decoding instruction is reflective, guiding students to recognize patterns and make generalizations instead of memorizing rules.
- Lessons are fast paced, multisensory, lively, and brief; incorporate explanation, modeling, demonstration, and application; and include explanations of why skills are important.
- Instruction incorporates strategies that use word identification by analogy.
- The program provides teacher resources and guidance in tutoring students who can benefit from intense, individualized decoding instruction.

### Opportunities for Practice

*Jamestown Reading Navigator* provides opportunities for students to develop their decoding through practice.

- Students are guided to practice decoding with multiple word types, including multisyllabic words.
- Students are provided with opportunities to practice decoding in several contexts, including oral reading.

## Fluency

Fluency—the ability to read text quickly, accurately, and with expression—provides a bridge between word recognition and comprehension. It 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. 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 to understand the meaning of the text—thereby impacting student comprehension (Rasinski et al., 2005, p. 22, citing LaBerge & Samuels, 1974).

*Jamestown Reading Navigator* incorporates a variety of research-based practices to help students improve their reading fluency. These practices align with research and expert opinion regarding focus of fluency instruction, recommended instructional features and approaches, opportunities for less structured reading practice, and assessment resources.

### Focus of Instruction

*Jamestown Reading Navigator* includes an appropriate research-based focus on improving student fluency.

- Each online journey (lesson) includes an oral reading fluency activity in which students read and record text passages.
- Trek 1 teaches 100 common “instant words” that students must learn to recognize by sight.
- Fluency instruction and practice in *Jamestown Reading Navigator* represent one facet of a broad-based literacy program.

### Instructional Features and Approaches

*Jamestown Reading Navigator* incorporates instructional features and approaches for improving fluency that are supported by research and expert opinion.

- *Jamestown Reading Navigator* uses computer technology to help students develop fluency through modeling and guided practice. Fluent oral reading is modeled by the expert online recordings of the fluency passages.
- Additionally, teachers are encouraged to model fluent reading in the *Jamestown Reading Navigator* teacher materials and professional development.
- The program supports a combination of modeling fluent reading and monitoring student growth in fluency.
- Throughout *Jamestown Reading Navigator*, fluency skills are always practiced in context.
- Teacher materials and professional development encourage teachers to use a variety of formats for guided oral reading fluency activities, including choral reading, echo reading, and reading for performance.
- Recommendations are provided in the on-site *Jamestown Reading Navigator* implementation training for tutoring students who can benefit from intense, individualized fluency instruction.

### Opportunities for Less Structured Reading Practice

In addition to formal fluency activities, *Jamestown Reading Navigator* provides opportunities for students to develop their fluency through less structured reading practice.

- The program provides extensive opportunities for students to read online and print materials.
- Students are encouraged to read independently, in addition to their assigned readings.

### Assessment Resources

*Jamestown Reading Navigator* supports fluency assessment methods with a solid base in research and expert opinion to support instruction.

- A combination of diagnostic assessments and ongoing monitoring of student progress helps ensure that texts provided for student reading are at an appropriate level of difficulty. All of the texts used in *Jamestown Reading Navigator* have been evaluated to determine readability levels.
- Teachers can assess student fluency as frequently as needed or desired by teachers, using appropriate methods (e.g., reading rate, evaluation of the quality of oral reading based on a rubric, and miscue analysis) with guidance from the *Jamestown Reading Navigator* teacher materials.

## Vocabulary

Vocabulary knowledge is a key component both of general reading comprehension and of content-area literacy. As students grow older, vocabulary knowledge becomes more critical, not only for general reading comprehension but also for content-area learning.

Research supports a variety of broad approaches to improving students' vocabulary, including wide reading and broad language exposure to stimulate students' incidental word learning, instruction in transferable and generalizable strategies that can help students become more proficient at learning vocabulary on their own, and direct instruction in specific vocabulary words. *Jamestown Reading Navigator* supports all three of these broad approaches.

### Wide Reading and Broad Language Exposure

*Jamestown Reading Navigator* includes research-based features that help students gain vocabulary knowledge through wide reading and broad language exposure.

- The program incorporates opportunities for students to read extensively to develop vocabulary knowledge.
- Within *Jamestown Reading Navigator*, students are exposed to a variety of potential vocabulary words, including but not limited to words that are directly taught. Professional development encourages teachers to develop a word-rich environment in which students are immersed in words, including engaging word play and games.
- Teachers have the option to allow English language learners (ELLs) and other students to listen to spoken text while following along with printed text.

### Transferable Strategies

*Jamestown Reading Navigator* incorporates research-based practices for helping students develop transferable strategies they can use to learn new vocabulary on their own.

- Students are taught to analyze word meanings based on context.
- Teachers are guided to help students identify word meanings by analyzing morphemes.

### Focus of Direct Vocabulary Instruction

Direct vocabulary teaching in *Jamestown Reading Navigator* focuses on words that are most likely to be valuable to students, based on recommendations drawn from research and expert opinion.

- *Jamestown Reading Navigator's* approach to vocabulary instruction is planned, systematic, and sustained, based on specific learning goals for students to learn specific targeted vocabulary words.
- Vocabulary words that are selected for direct instruction are high frequency for mature language users, are found across a variety of domains, and are generally one to two years above the readability level of the text selection where they are used. This helps ensure that the words will be useful to students and are words that students are not likely already to know.
- Direct instruction in vocabulary includes words that will help students process content-area texts.
- Critical vocabulary is pretaught to help students understand instructional text passages.

### Direct Vocabulary Instructional Features and Approaches

Direct vocabulary teaching in *Jamestown Reading Navigator* incorporates a variety of research-based features and approaches for effective vocabulary learning.

- Students are actively involved in learning word meanings, including a variety of activities that require them to think about the meanings of the words. One of the common prereading vocabulary activities is having students use semantic mapping to complete a word web.
- Students are exposed to targeted vocabulary words multiple times and from multiple sources.
- Student-friendly explanations are provided for new vocabulary words.
- Most of the vocabulary sample sentences include instructional contexts that make it easy for students to deduce the word meaning.
- The program provides visual support for word learning, including animations, graphic organizers, and demonstrations.
- Students can follow hypertext links to be reminded of word meanings when they encounter vocabulary words in context.
- Teachers are provided with suggestions for extending vocabulary learning beyond the classroom.

### Opportunities for Direct Vocabulary Practice

*Jamestown Reading Navigator* provides opportunities for students to practice their vocabulary knowledge in ways that are aligned with research and expert opinion.

- The program uses computer technology to help students develop vocabulary knowledge, including multiple opportunities for practice.
- The lesson plans provided with *Jamestown Reading Navigator* often suggest that students work with a partner to study vocabulary words, providing opportunities for oral practice in a social context.
- Students are prompted to engage in oral and written composition using vocabulary words.

### Assessment Resources

*Jamestown Reading Navigator* supports vocabulary assessment methods with a solid base in research and expert opinion to backup instruction.

- Students' vocabulary learning is regularly assessed in multiple ways (e.g., assessing knowledge of definitions, synonyms, antonyms, characteristics of new words, and meaning in context) that are closely matched to the instructional context.

### Comprehension

Comprehension is a critical area of challenge for adolescent readers. By high school, text comprehension is not only an important part of performance in English language arts classes, but also an important “gate-keeper” skill for students to master content-area knowledge.

While “[r]eaders normally acquire strategies for active comprehension informally,” the National Reading Panel cautioned, readers “who are not explicitly taught these procedures are unlikely to learn, develop, or use them spontaneously” (NICHD, 2000, p. 4-40). *Jamestown Reading Navigator* incorporates a variety of research-based instructional approaches, focused on teaching specific comprehension skills and providing practice in their use.

### Focus of Instruction

*Jamestown Reading Navigator* focuses on helping students develop comprehension skills and strategies that are supported by research and expert opinion.

- Each journey in Treks 2–4 has a specific comprehension skill/strategy focus. *Jamestown Reading Navigator* provides explicit instruction in 32 comprehension skills/strategies.
- Students are provided with ample practice in answering questions both during and after reading, based on the online and print selections.
- Instruction in several reading skills incorporates teaching students how to generate questions related to texts for specific purposes.
- Students are taught summarizing.
- Students are taught a variety of skills related to story structure.
- Students are guided in using different types of graphic organizers in a variety of contexts.
- Students are taught to visualize what they are reading.
- Prereading activities for each online selection prompt students to activate their prior knowledge about the selection's topic. Additionally, teacher materials and optional professional development encourage teachers to help students use strategies for activating prior knowledge.
- Students are taught to read and interpret texts critically.
- As described under Vocabulary, *Jamestown Reading Navigator* includes an extensive framework for developing students' vocabulary knowledge to improve their text comprehension, focusing in particular on vocabulary that is used in the text selections.

### Instructional Features and Approaches

*Jamestown Reading Navigator* incorporates a combination of features and approaches for teaching comprehension skills that are supported by research and expert opinion.

- Comprehension skills and strategies are taught explicitly.
- Instruction in comprehension strategies includes modeling of the strategies using think-aloud and other procedures.
- Students have opportunities to work together while applying comprehension strategies to interpret texts, including ample opportunities for individual, collaborative, small-group, and whole-group instruction.
- Teaching of comprehension strategies is scaffolded, using the gradual release of responsibility model (Frey & Fisher, 2006), with focus lessons, guided instruction, collaborative learning, and independent learning.
- Students are prompted to develop metacognitive abilities to monitor their own comprehension.

### Opportunities for Practice

*Jamestown Reading Navigator* provides extensive opportunities for students to practice their comprehension skills.

- Students practice using comprehension skills in multiple contexts with texts from a variety of genres and subject areas.
- Practice with comprehension skills is extended over time.
  - *Comprehension skills are typically taught more than once, in more than one trek.*
  - *Review questions in each Journey Test check for transfer of reading skills taught earlier in the trek.*
  - *Reading tips in the side margins of online and print texts prompt students to employ reading skills and strategies they have already learned, monitor their comprehension as they read, and use “fix-up” strategies to clarify their understanding.*
- The program guides students to practice using multiple comprehension strategies in a coordinated way.
- As part of the program, students are prompted to read extensively from both online and print texts, in order to develop fluency and background knowledge. The program also provides additional resources and suggestions for independent reading.

### Support for Content-Area Literacy

The importance of improving literacy across the content areas is universally acknowledged. This involves helping students develop “the level of reading and writing skill necessary to read, comprehend, and react to appropriate instructional materials in a given subject area” (Readence et al., 2004, p. 4).

The emphasis of *Jamestown Reading Navigator* in relation to content-area literacy is on helping students develop transferable strategies for future reading. Many of these strategies are also taught as part of general text comprehension, but with a particular focus on how they can be used with content-area texts. The program aligns with research and expert opinion regarding the focus of content-area literacy instruction, features and approaches used in that instruction, and professional development for content-area teachers.

### Focus of Instruction

*Jamestown Reading Navigator* includes a strong focus on strategies that are supported by research and/or expert opinion for helping students improve their content-area literacy.

- Many of the specific comprehension skills/strategies that are covered in the journeys in Treks 2–4 have a clear potential applicability to content-area texts. For example:
  - *Students are guided to use graphic organizers with content-area texts.*
  - *Students are taught to write summaries of content-area texts.*

- *Instruction in several reading skills incorporates teaching students how to generate questions related to texts for specific purposes, including use with content-area texts.*
- *Students are explicitly taught to identify and/or analyze a variety of text structures, including cause and effect, compare and contrast, narrative and informational, problem and solution, and sequence.*
- *Students are taught strategies that are appropriate for answering questions about content-area texts and are provided with practice in applying those strategies both during and after reading.*
- Students are prompted to develop metacognitive abilities to monitor their own comprehension while reading content-area texts.
- Students are taught to activate prior knowledge in reading content-area texts.
- Students are taught vocabulary to improve their comprehension of content-area text selections.
- Instruction incorporates writing about content-area texts.
- Instruction includes extensive activities for students to speak and listen related to texts, including content-area texts.

### Instructional Features and Approaches

Literacy instruction provided by *Jamestown Reading Navigator* incorporates a variety of features that are supported by research and/or expert opinion for improving students' content-associated literacy skills.

- Texts used for teaching comprehension skills and strategies include content-area selections from a variety of subject areas, including science, social studies, literature, math, geography, music, art, health, and history.
- Activities provide extensive guidance to reinforce students' understanding *before* reading content-area texts, *while* reading content-area texts, and *after* reading content-area texts.
- Instruction in literacy strategies includes modeling of the strategies using content-area texts.
- The program incorporates a broad array of methods for assessing students' use of reading strategies with content-area texts and providing feedback to students on their performance.
- Teaching of reading skills and strategies is scaffolded, using the gradual release of responsibility model, consisting of focus lessons, guided instruction, collaborative learning, and independent learning.
- Students have multiple opportunities to work collaboratively in a variety of processes related to the content-area texts.

### Professional Development for Content-Area Teachers

*Jamestown Reading Navigator* professional development can help content-area teachers improve instruction and support for students' content-area literacy.

- Professional development is available to help content-area teachers strengthen effective literacy instruction in their classes. This professional development covers
  - *strategies for presenting subject-area texts so that students use reading as a tool for learning and mastering content-area standards;*
  - *use of content teaching aids such as structured overviews, anticipation guides, prompted outlines, concept mapping, prediction guides, guided discussions, “Say Something” activities, “React” activities, and reciprocal reading;*
  - *suggestions related to oral reading fluency, vocabulary, reading comprehension, and writing (online modules).*
- *Jamestown Reading Navigator* offers on-site professional development sessions that focus on building a school literacy community with the potential to help develop a comprehensive and coordinated, cross-disciplinary approach to content-area literacy. These sessions are designed to include content-area teachers as participants.

### Text-Based Collaborative Learning

Text-based collaborative learning represents an intersection of student interaction with texts—that is, student literacy activities—and collaboration with peers. Researchers have identified a variety of benefits from having students interact and collaborate with each other as they are reading and interpreting texts. These advantages relate both to motivation and to the development of specific types of literacy skills, such as the ability to explain and defend choices (Nokes & Dole, 2004, citing Pressley, 2002).

*Jamestown Reading Navigator* incorporates a research-informed focus on text-based collaborative learning. The program offers suggestions based in expert opinion on practices supporting effective student collaboration.

#### Focus of Instruction

Text-based collaborative learning in *Jamestown Reading Navigator* includes a focus on both texts that students read and texts that students write.

- The program provides multiple opportunities for students to interact with each other as they interpret reading texts.
- Teacher resources include recommendations to have students collaborate to discuss their own writing.

#### Guidance for Teachers on Effective Collaboration

*Flexible Grouping: Strategies for Success*, a resource for teachers related to student grouping, includes suggestions on the following:

- Ways to structure text-based collaborative activities so that everyone has something to contribute
- Assigning roles within groups

### Motivation and Engagement

An extensive body of research demonstrates that how students think and feel about themselves, the subject matter, and their ability to learn affects how well they learn. According to Guthrie and Wigfield (2000), improving students' motivation helps boost engagement, which in turn leads to greater achievement. One factor in motivation is students' self-efficacy—their belief and confidence that they have the capacity to accomplish meaningful tasks and produce desired results in academic settings. Another is their intrinsic motivation, or desire to accomplish literacy tasks for internal reasons such as personal enjoyment or the desire to learn.

*Jamestown Reading Navigator* incorporates a variety of research-based practices related both to helping empower students to succeed and engaging students' interests.

#### Empowering Students to Succeed

*Jamestown Reading Navigator* includes a broad array of strategies and features, based in research and expert opinion, that facilitate students' academic success and thereby improve their motivation and engagement.

- The program provides a wide range of resources to help teachers stay informed about students' progress and enable them to intervene effectively to support students' learning.
- Program features help ensure that students are matched with tasks that present an appropriate challenge for them.
- Instruction is scaffolded in a variety of ways to help ensure that students can succeed.
- Program features focus on learning and knowledge goals: helping students learn important skills and knowledge, as distinguished from simply performing well on required tasks.
- Goals of instruction are clearly spelled out for students.
- Students receive clear feedback on their progress.
- Teachers are provided with tools and suggestions for creating personalized, student-centered evaluations of students' fluency recordings and writing assignments.

- The program helps develop students' capability to regulate their own learning by giving them choices in a variety of areas, ranging from which texts to read (in many cases) to how students will proceed through the online activities (e.g., whether to take the Journey Pretests).
  - *In each of these areas, students are provided with appropriate support (e.g., explanatory Tutor buttons) to help them succeed in their chosen tasks.*
  - *The program also supports student choices by ensuring that all text students read in Jamestown Reading Navigator is at an appropriate reading level.*
- The central focus of *Jamestown Reading Navigator* is on developing reading skills and strategies that can help make students more effective learners in general, both within the program and in other classes. Such success can contribute to students' motivation and belief in their ability to succeed academically.

### Engaging Student Interests

*Jamestown Reading Navigator* is tailored in several ways to make it relevant to students' interests and lives.

- As described under Text-Based Collaborative Learning, the program provides multiple opportunities for students to interact with each other over texts—a practice that increases student motivation.
- Both online texts and print texts have been selected to match students' likely interests and to relate to their circumstances. Many of the text selections are written about adolescents or written from an adolescent's perspective.
- Video clips with a narrator and real-world footage build relevant prior knowledge for upcoming readings.
- *Reteaching Skills Support* resources incorporate hands-on activities that connect reading skills to real-world contexts.
- Writing topics give students the opportunity to describe their own thoughts, opinions, and experiences—activities that are likely to stimulate student interest.

### Diverse Texts

In order to harness the advantages of broad reading, it is important to provide students with access to texts that they are able to read and will be *motivated* to read. Research evidence suggests that providing appropriate, diverse texts for students can be a powerful tool for improving their literacy.

*Jamestown Reading Navigator* provides a substantial offering of interesting, diverse, and level-appropriate texts for students to read, following the recommendations of research and expert opinion.

### Interesting, Diverse Texts

Texts provided through *Jamestown Reading Navigator* have been selected to be interesting to students and to reflect diversity.

- Online and print texts that students read are not typical textbooks, but instead include authentic literature, adapted authentic texts, and content-area nonfiction.
- Both online and print reading selections focus on a broad range of topics that are likely to be interesting to students as well as appropriate for their reading level.
- At several points in the program, students have meaningful choices about which texts they will read—increasing a sense of control over their own learning and the likelihood that the texts will be interesting to them.
- Text selections represent a range of different lifestyles, including diverse cultures, socioeconomic levels, social groups, and geographic locations, including urban and rural experiences—increasing the chance that texts will connect to students' own background experiences.
- Text selection topics and accompanying visual images represent the cultural and demographic diversity of the United States and of the world as a whole.

### Level-Appropriate Texts

Texts provided through *Jamestown Reading Navigator* are at an appropriate reading level for students.

- Texts are provided at readability grade levels 1–9, calculated using the Dale-Chall Readability formula (Chall & Dale, 1995).
- Students are matched with texts that are at their own level.

### Writing

The importance of integrating reading and writing instruction for adolescents is attested by numerous sources. One reason for this importance is the close relationship between writing skills and reading comprehension. For example, Alvermann (2001) argued, “Effective teachers look for ways to integrate reading and writing as often as possible because they know that each process reinforces the other and can lead to improved comprehension and retention of subject area content” (p. 11, citing Tierney & Shanahan, 1991). Additionally, writing is a critical area of literacy that students need to master for its own sake, to succeed both academically and in the professional world.

While *Jamestown Reading Navigator* focuses primarily on helping students develop reading skills, the program also includes a substantial component that is dedicated to helping strengthen students’ writing in specific, research-supported ways.

### Focus of Instruction

*Jamestown Reading Navigator* includes an appropriate research-based focus on improving student writing about what they have read.

- Students are prompted to write in conjunction with their reading.
- Writing assignments typically challenge students to engage with academic content at their current literacy level. Many of the writing assignments have students reinforce and build upon content information from text selections.
- Summarizing is taught as a reading skill, and students are provided with opportunities to practice writing summaries.

### Instructional Features and Approaches

*Jamestown Reading Navigator* writing instruction incorporates a variety of features and approaches supported by research and expert opinion for helping students learn to write effectively.

- Writing instruction on the computer provides structured guidance and strategic instruction with each writing assignment.
- All of the writing assignments spell out specific reachable goals for writing, including a purpose for writing and characteristics of the final product.
- Goals provided for writing tasks include both content-oriented goals (e.g., adding more ideas during revision) and structural goals.
- Online writing activities guide students through a four-part writing process: plan, draft, revise, and publish. Students receive instruction on writing strategies related to planning, revising, and editing compositions by clicking the Tutor button.
- Writing instruction includes strategies for both
  - *generic processes such as brainstorming and collaboration for peer revision;*
  - *creating specific types of writing, such as narratives and persuasive writing.*
- Students are provided with models of good writing and guidance about important features for the various types of writing they will produce.
- Students are consistently prompted to engage in prewriting activities to help them generate and organize ideas for each writing assignment.
- Students are provided with explicit instruction on key vocabulary used in reading selections and then are prompted to incorporate vocabulary terms in their writing assignments.

- Students use a built-in software tool with basic word-processing capabilities, including copying, pasting, and deleting.
- Teacher print materials encourage collaborative approaches to writing assignments, including recommendations to develop helper-writer partnerships.

### Opportunities for Practice

*Jamestown Reading Navigator* provides extensive opportunities for students to practice writing in ways that can help develop and expand their literacy skills.

- Students gain experience writing in a variety of forms and genres, including descriptive writing, letters, newspaper articles, summaries, personal responses, journal entries, articles, stories, plays, speeches, advertisements, cartoons, poetry, essays, narrative writing, expository writing, and persuasive writing.
- Students are taught the understanding of style, mood, and tone as a reading skill; are exposed to a variety of styles and tones; and are prompted to include tone as a literary device in their writing.
- The variety of writing assignments provides students with ample opportunity to practice adapting their writing for a broad range of different contexts and purposes.
- Frequent opportunities to interact with the technology are provided through the writing assignments.

### Assessment Resources

*Jamestown Reading Navigator* incorporates features and instructional resources to support appropriate ongoing assessment of student writing.

- Teachers are provided with guidelines to evaluate students' writing assignments in the online program.
- Grades are recorded in the Learner Management System, the tool for tracking students' writing performance as they progress through the program.
- Suggestions for ongoing assessment in the teacher materials encourage teachers to have students reflect on their own writing and keep writing portfolios.

## Formative and Summative Assessment

Formative assessment and summative assessment share a common goal of evaluating student knowledge. The key distinction between the two is that *formative assessment* is intended to inform and guide adjustments to instruction on an ongoing basis, while *summative assessment* is intended to monitor progress and evaluate the overall success of both students and instructional programs on a more long-term basis.

Based on a review of 250 research studies across multiple ages and subject areas, Black and Wiliam (1998b) found that formative assessment resulted in “significant and often substantial learning gains” (p. 140). In particular, they found that many of the studies they reviewed concluded that “improved formative assessment helps low achievers more than other students and so reduces the range of achievement while raising achievement overall” (p. 141). Summative assessment plays a different, but also vital, role of monitoring student progress across time and subject areas, thus informing comprehensive and coordinated literacy programs of the type recommended by *Reading Next*.

*Jamestown Reading Navigator* includes a rich set of formative assessment features, together with several features that support summative assessment at the school and/or district level. These features align with research and expert opinion on assessment characteristics, feedback to students, and features related to reporting and instructional planning.

### Assessment Characteristics

*Jamestown Reading Navigator* aligns with research-based instructional recommendations relating to variety of assessments, frequency of assessments, and student self-assessment.

- *Jamestown Reading Navigator* provides a wide range of assessments, including both informal measures as students are carrying out learning activities and more formal assessments.
- Assessment is ongoing and frequent. A student who works daily in the program will likely encounter multiple assessments on a daily basis.
- At several points in the program, students are provided with opportunities to assess their own learning.

### Feedback

*Jamestown Reading Navigator* aligns with research results indicating that feedback to students is critical for formative assessment to have an impact on student learning.

- Students receive immediate feedback on all of their scored online activities and assessments. Typically, the feedback is substantive, showing whether their choice was correct or incorrect, what the correct choice was, and often why an answer was correct or incorrect.
- Feedback and access to their scores through the Learner Management System provide students with the opportunity to monitor and evaluate their own progress.

### Reporting and Instructional Planning

*Jamestown Reading Navigator* aligns with instructional recommendations based on research and expert opinion on how assessment data should be reported and used to guide instructional planning.

- *Jamestown Reading Navigator* maintains all data on student performance within the program in the Learner Management System, where it can be accessed by teachers and administrators.
- Assessment reports available through the Learner Management System provide ongoing information on student progress for teachers, administrators, students, and parents.
  - *Reports allow teachers and administrators to monitor individual and group progress throughout the school year.*
  - *Reports are available in a wide range of formats that provide summary information on student progress or detailed information about student performance in specific skill or content areas.*
- Results of assessments guide adjustments to instruction in a variety of ways, both through automated instructional decisions (e.g., assignment to review a lesson) and through assessment-informed teacher decisions.

### Strategic Tutoring

Strategic tutoring, defined as “provid[ing] students with intense individualized reading, writing, and content instruction as needed” (Biancarosa & Snow, 2006, p. 4), has been identified by *Reading Next* as one of 15 “promising elements of effective adolescent literacy programs . . . that had a substantial base in research and/or professional opinion” (p. 12). Similarly, researchers at the University of Texas at San Antonio described success from one-on-one academic tutoring as “well documented” (Harmon et al., 2004, p. 48), while Allington (2006) described the advantage of tutoring in terms of the research showing benefits from intensive instruction (pp. 151, 178).

*Jamestown Reading Navigator* provides resources and encouragement to teachers to use one-on-one tutoring as a component of program implementation. These resources, and the recommendations that are provided to teachers about their use, align with recommendations based in research and expert opinion about who should receive tutoring, what the focus of tutoring should be, and qualifications of those who deliver tutoring.

- *Jamestown Reading Navigator* provides resources to support tutoring for students who would benefit from intense, individualized instruction.
  - *Teachers can use the Learner Management System reports to identify students who are having difficulties in specific skills areas and might benefit from short-term help.*
  - *Reteaching Skills Support resources provide reteaching activity suggestions, reading passages, and blackline masters that tutors can use to reteach specific skills.*
  - *Tutoring is recommended in the program and its associated professional development for students who are experiencing difficulties with decoding and fluency.*
- Tutoring focuses on strategies that can transfer to content-area learning.
- Professional development resources help teachers improve their expertise as reading instructors and strategic tutors—aligning with the research finding that tutoring should be conducted by personnel with reading expertise. Additionally, activity and teaching suggestions in the *Reteaching Skills Support* resources help reinforce the expertise of tutors as they work with specific skill areas.

## Differentiated Instruction

Experts in adolescent literacy note that struggling adolescent readers vary widely, both in general characteristics and in regard to the particular sources of their reading difficulties. Programs for improving adolescent literacy are likely to be more effective if they take these differences among individual learners into consideration and include appropriate provisions for adjusting instruction in response to those differences.

*Jamestown Reading Navigator* incorporates a variety of features that support specific instructional recommendations for effectively differentiating instruction, based in research-informed expert opinion.

### Curriculum Flexibility

*Jamestown Reading Navigator* incorporates a variety of features that foster the kind of flexibility recommended by research-based expert opinion for supporting effective differentiated instruction.

- Schools can incorporate *Jamestown Reading Navigator* in the context of implementation models with varying degrees of emphasis on student-directed and teacher-directed learning, and varying amounts of time spent online and in print-based classroom activities.
- Instruction of content is differentiated through initial placement, optional lesson pretests in Treks 2–4, and a variety of reteaching features that focus instructional time on specific skills and knowledge where students have identified needs.
- Instruction is carried out in small, flexible groups adapted to the specific needs of students, including both homogeneous and heterogeneous grouping.
- The program systematically assesses student knowledge, understanding, and skill in light of desired learning goals through the initial placement test, ongoing formative assessments, and summative assessments at the end of each quest (unit)—providing the information needed to sustain flexible instruction.
- Audio and video elements of the program provide comprehensible input for English language learners, multimodality support for special needs students, and additional options for students who learn most effectively in nontraditional/nonstandard ways.
- Reteaching uses procedures and instructional materials for teaching content to students that differ from the original teaching strategy, supporting differentiation in the areas of process and materials. Typically, these activities also vary in the products that students are guided in creating to demonstrate their learning.
- Specific instructional recommendations are included in the *Reteaching Skills Support* resources for varying the process of instruction for ELL students and for students who may learn more effectively through different learning styles.

### Student Readiness

*Jamestown Reading Navigator* includes strategies supported by research and expert opinion for differentiating instruction based on student readiness.

- Students are placed in the program based on their readiness.
  - *The initial placement test suggests “cut scores” for placement in the program, so that students are working at a level that is appropriate to them, based on their reading levels.*
  - *The program also encourages teachers to take into consideration other measures of student reading levels in making their placement decisions, such as standardized tests, previous student work, and teacher observations.*
- The program provides multiple features for monitoring student assignments on an ongoing basis and adjusting them as needed to ensure that students are working at an appropriate difficulty level. These features include both automated instructional decisions and student performance data provided via Learner Management System reports.
- The program scaffolds instruction in several ways to help ensure that students get the support they need in learning new skills.
  - *Skills are taught to students using the gradual release of responsibility model.*
  - *Most reading skills are taught more than once, in more than one trek.*

- Tutor buttons in the online program let students access supplementary instruction related to specific skills and vocabulary.
- Immediate substantive feedback helps students reflect on their performance and understand why their responses were correct or incorrect.
- Because students work individually online, they advance through the program at their own pace, enabling them to move more quickly through familiar skills and vocabulary and spend more time on material they find difficult.
- The program flexibly adapts instruction to student needs in a variety of ways, including letting students test out of content they already know and having them review material in response to poor scores. The combination of quick assessments and mini-lessons for review helps students who need additional assistance with specific targeted skills.

#### Student Interests

*Jamestown Reading Navigator* includes several strategies based on research and expert opinion for matching instruction to student interests.

- The program gives students choice among different reading selections at several points, allowing them to pick the selection that better fits their interests.
- The reading selections were written or chosen based on high interest to middle school and high school students.

#### Personal Responsibility and Growth

In line with research and expert opinion, *Jamestown Reading Navigator* includes several features that help students become more aware of their learning strengths and weaknesses, learn to take responsibility for their learning, and develop metacognition.

- The program gives students choices in a variety of areas related to working conditions and processes.
- Students are guided to complete comprehension monitoring activities as they are reading text selections.
- After every online activity, students receive feedback and assessment that helps them see their learning strengths and weaknesses more clearly.
- Each student has access to a My Scores report that shows scores from the student's current quest and previous treks and quests. This helps students see both their current status and their progress over time.
- Teachers are prompted to encourage students to keep a Goals and Progress Chart as a way to track daily and long-term progress, and to ask themselves questions such as "What progress did I make? What would I do differently next time?"
- Program features foster a growth environment by focusing on each student's individual learning and progress toward instructional goals.
- Instruction takes place in a positive and affirming environment. Frequent work in pairs and small groups helps cultivate a sense of shared responsibility and community among students and the teacher.

#### Teacher Beliefs and Practices

Through a combination of program features, print teacher resources, and professional development, *Jamestown Reading Navigator* supports and/or promotes specific teacher beliefs and practices recommended by experts in differentiated instruction.

- Learner Management System reports and capabilities to review student work online provide tools for teachers to reflect on individual learners. Teachers also have the option of adjusting individual students' instructional assignments based on the result of their reflections.
- Student variance is underscored by a variety of program features, ranging from individual placement in the program to modular *Reteaching Skills Support* materials that provide differentiated instruction. Professional development provides information and suggestions on differentiating instruction based on individual students' needs.

- Detailed reports on student performance allow teachers to collect and study in-depth information about their students.
- Professional development resources, *Reteaching Skills Support* content, and other teacher print materials help teachers develop their expertise in a wide range of areas related to reading and writing.
- Initial placement test results, ongoing Learner Management System reports, and *Reteaching Skills Support* resources help teachers use students' instructional knowledge for preassessment and planning.
- Program flexibility allows teachers to adapt instruction in a variety of ways.

### Technology

Technology, including computer technology, has been used in a wide range of ways as a tool to support reading instruction. Despite a large body of research, the sheer breadth of technology applications means that research on specific approaches and designs is often thin on the ground—a problem that is exacerbated by technology's ever-changing capabilities. Expert opinion thus refers largely to technology's potential, resting on analysis and studies of specific instances of technology applications from which experts often derive broad recommendations.

Yet another dimension of technology use relates to technology as a *topic*, or focus of instruction. Changes in communication technology have prompted literacy scholars to look more broadly at what constitutes literacy and at what skills students need in order to communicate successfully in the world of today and tomorrow. Viewed this way, technology represents not only a means of instruction for adolescent readers, but also an array of distinct communication media, with their own language conventions and literacy requirements. In order to achieve competence both in interpreting meaning and in communicating via technology, students must master these conventions.

*Jamestown Reading Navigator's* approach to adolescent literacy instruction incorporates technology as a central component. The program uses technology as a tool in a variety of ways, supported by research and expert opinion, to help students learn specific literacy skills and knowledge. The program also provides opportunities for students to develop some of the skills and the knowledge needed for literacy in a technology context.

### Instructional Focus

Computer technology in *Jamestown Reading Navigator* reinforces student learning and provides guided practice with key content and skill areas for struggling readers.

- Students receive instruction, practice using their skills and knowledge, and receive feedback to help improve their performance.
- As specifically recommended by research-based expert opinion in *Reading Next* and other sources, computer technology is used in the program to help students with decoding, fluency, and vocabulary, among other areas of literacy instruction.

### Instructional Features and Approaches

*Jamestown Reading Navigator* utilizes technology to support specific instructional features and approaches that align with research and expert opinion.

- Because students work individually online, they advance through *Jamestown Reading Navigator* at their own pace.
- Support is customized to specific student needs.
- Students interact with the text selections in a variety of ways.
- Computer technology provides a highly structured approach to reading and writing instruction.

### Technology as a Writing Tool

In agreement with research and expert opinion, writing instruction in *Jamestown Reading Navigator* uses computer technology both as a medium for student production and as a means of teaching writing strategies.

- Students use a built-in software tool with basic word-processing capabilities including copying, pasting, and deleting.

- Writing instruction on the computer incorporates structured guidance and strategic coaching.
- Writing assignments provide frequent opportunities to interact with the technology.

#### Assessment Resources

*Jamestown Reading Navigator* uses computer systems to record formative and summative assessment information and make it available for monitoring student progress, in alignment with expert recommendations.

#### Technology as a Focus of Instruction

*Jamestown Reading Navigator* provides opportunities for students to develop technology-related literacy skills, as recommended by research-based expert opinion.

- As students work in the program, they acquire experience with a range of basic technology-related skills.
- The program guides students to acquire media-related literacy skills required for technology environments, such as critically examining information from multiple media and understanding an author's purpose and viewpoint.
- Text selections based on Internet articles in many of the online journeys provide students with guided practice in applying reading skills and strategies to the types of texts they might encounter on the Internet.
- Students are taught how to interpret information from graphics, particularly charts, graphs, and maps. Text selections with embedded graphics in many of the online journeys provide students with practice in integrating visual and text information.

### Professional Development

According to the *Reading Next* report, professional development is one of three critical elements (together with formative and summative assessment) for improving adolescent literacy, because of its importance for “ensuring instructional effectiveness” (Biancarosa & Snow, 2006, p. 5). Without professional development, it is difficult—if not impossible—to change teacher practice in the classroom and successfully implement new programs and more effective approaches.

Professional development is a key component of the *Jamestown Reading Navigator* program. A flexible range of professional development options meet the specific needs of individual schools and programs. These resources align with a variety of recommendations, based in research and expert opinion, for professional development that is likely to have an impact on teacher behavior, translating in turn to improvements in adolescent literacy.

#### Scope and Access

*Jamestown Reading Navigator* professional development aligns with recommendations based in research and expert opinion relating to scope and access for development of effective professional competency.

- *Jamestown Reading Navigator* provides resources for ongoing, long-term professional development that stretches over the instructional year, including on-site training sessions, online training modules, and ongoing instructional support from a reading coach via telephone and e-mail.
- Professional development provided with *Jamestown Reading Navigator* is designed to be systemic.
  - *Program implementation and follow-up training are typically attended by teachers, administrators, literacy coaches, teachers working with special populations, and teacher aides who will be involved with the program.*
  - *Optional on-site professional development in creating a school literacy team is designed to embrace teachers, administrators, literacy coaches, librarians, teachers of special populations, and content-area teachers.*
- *Jamestown Reading Navigator* professional development is designed to fit flexibly into the regular school schedule.
  - *Online modules are available for teachers to work on anytime, anywhere.*

- Typically, formal on-site professional development sessions are scheduled for staff training days or as a teacher release day. Districts can also schedule a training day at the school during a regular school instructional day for observation, interaction, modeling, and feedback.
- Interaction with the reading coach can take place during the regular school day and include telephone discussions, e-mail, conference calls, and Web-based meetings.
- Jamestown Reading Navigator professional development uses technology in several ways to individualize educators' professional development, including
  - online modules that teachers can complete individually, at their own pace and schedule;
  - use of multiple media to address different teacher learning styles;
  - capability to upload lessons created by individual teachers, share ideas, and receive feedback from other teachers;
  - e-mail communication with the reading coach.

### Content Focus

Jamestown Reading Navigator professional development incorporates content that is supported by research and expert opinion.

- Professional development available with *Jamestown Reading Navigator* covers effective research-based instructional practices relating to comprehension, vocabulary, fluency, writing, assessment, differentiated instruction, collaborative learning, and many other topics.
- Participants experience many opportunities to familiarize themselves with supporting research for recommended instructional practices.
- Hands-on analysis of student data is an integral part of the on-site follow-up training.
- Professional development is designed to help educators understand and appreciate student differences and adjust instruction accordingly.
- On-site professional development sessions can be used to support a team-oriented approach to adolescent literacy.

### Instructional Features and Approaches

Jamestown Reading Navigator professional development incorporates a variety of features and approaches supported by research and/or expert opinion.

- Professional development experiences are structured to provide consistent opportunities for participants to implement new ideas and reflect on the success of those ideas.
- Professional development in specific instructional strategies incorporates modeling, classroom demonstrations, and coaching.
- A variety of professional development strategies are utilized to achieve desired outcomes, including
  - presentation of information in on-site sessions;
  - hands-on workshops incorporating planning and analysis of student data;
  - individual online training modules including demonstrations, modeling, individual study, and articles on instructional practices;
  - planning and application in the teacher's own classroom;
  - ongoing interaction with a Jamestown Reading Navigator reading coach, including the potential for telephone discussions, e-mail, conference calls, Web-based meetings, and in-person consultations.
- Educators have multiple opportunities to explore new ideas to develop in-depth knowledge.
- Professional development includes multiple media and multiple options for learning, including learning on one's own and with others.
- Many of the professional development sessions include activities in which teachers get to experience, as students, the same instructional techniques they will be using with their students.

## Support for Infrastructure Improvement

In addition to elements relating specifically to the design of instruction, *Reading Next* and other policy documents also include recommendations relating to specific features of the larger school infrastructure that can have a positive effect on student literacy learning.

Direct responsibility for infrastructure rests with the local school, district, and/or literacy program. However, *Jamestown Reading Navigator* includes features and professional development offerings that can help support improvements in these areas, relating in particular to extended time for literacy, teacher teams, leadership, and a comprehensive and coordinated literacy program.

### Extended Time for Literacy

*Jamestown Reading Navigator* supports research-based recommendations for increased time for literacy instruction.

- The program accommodates instruction blocks of 45 to 90 minutes, offering flexible options for how much time each day students will work in the program. This represents a sizable portion of the two to four hours of daily literacy-connected learning recommended by *Reading Next* (Biancarosa & Snow, 2006, p. 20).
- Professional development offered in conjunction with *Jamestown Reading Navigator* can provide content-area teachers with strategies for incorporating a greater focus on reading and writing in the content areas.

### Teacher Teams

*Jamestown Reading Navigator* professional development in building a school literacy community provides a setting to help meet the *Reading Next* recommendation to organize teachers into interdisciplinary teams to coordinate instruction (Biancarosa & Snow, 2006, p. 21).

### Leadership

*Jamestown Reading Navigator* professional development includes resources that help support literacy leadership roles within schools.

- Optional on-site sessions focused on administrator training help provide principals and other administrators with the tools they need to act as leaders in school literacy, including
  - *maintaining fidelity to the Jamestown Reading Navigator implementation to achieve learning gains;*
  - *evaluating classrooms and/or teachers that are using Jamestown Reading Navigator;*
  - *accessing and using administrative-level reports to meet accountability standards;*
  - *instituting literacy change in the school community to raise student achievement.*
- Professional development resources provide opportunities for school administrators to become more informed on adolescent literacy issues and instructional methods.
- Administrators are encouraged to attend the general-focus on-site *Jamestown Reading Navigator* professional development sessions that are designed for teachers, and often do so.
- Professional development offerings provide training for both teachers and administrators in building a school literacy community and carrying out planning, implementation, and administrative functions (as appropriate) in connection with *Jamestown Reading Navigator*.

### Comprehensive and Coordinated Literacy Program

*Jamestown Reading Navigator* professional development in building an interdisciplinary school literacy community provides a setting for school personnel to collectively develop or revise a comprehensive, coordinated school literacy plan that incorporates *Jamestown Reading Navigator*, regular language/literacy courses, content-area instruction, and other school resources.

## English Language Learners

Adolescent English language learners (ELLs)—defined as “second language learners who are still developing their proficiency in academic English” (Short & Fitzsimmons, 2007, p. 1)—represent an expanding segment

of the population of struggling adolescent readers and one whose needs are typically not well met in many existing programs.

Although there is a broad overlap between principles of effective instruction for struggling adolescent readers in general and those of English language learners, there are also some important differences, arising from the distinct language backgrounds and often different experiences of ELLs.

Research and expert opinion support a variety of instructional practices for use with ELLs that are incorporated as part of *Jamestown Reading Navigator*. Many of these practices correspond to recommendations for instruction of struggling adolescent readers in general.

### Decoding

*Jamestown Reading Navigator* aligns with recommendations for providing decoding instruction as needed for ELLs.

- Instruction in phonemic awareness and phonics is provided for adolescent ELLs with skill deficits in this area.
- Instruction is organized so that students can receive specific, targeted instruction on sounds that may present particular challenges to them—for example, because they do not exist in students' native languages.
- All of the instructional materials in *Jamestown Reading Navigator* were developed specifically for adolescent readers, aligning with the recommendation that instruction in decoding for adolescent ELLs should be appropriate for teens.

### Fluency

*Jamestown Reading Navigator* aligns with the recommendation to provide fluency instruction for ELLs.

- The program incorporates extensive fluency instruction and practice throughout Treks 1–4.

### Vocabulary

Vocabulary instruction is particularly important for ELLs. *Jamestown Reading Navigator* provides an extensive program that aligns with recommendations related to vocabulary instruction for ELLs.

- The program incorporates a significant vocabulary instruction component at every level.
- Students have multiple opportunities to listen to spoken text while following along with printed text.
- The program provides Spanish-language glossaries for targeted vocabulary words in Treks 2–4 that teachers can download and print or e-mail to students.
- The Spanish-language glossaries and online word cards identify Spanish cognates for targeted vocabulary words.
- Students are taught to analyze word meanings based on context.
- Teachers are guided to help students identify word meanings by analyzing morphemes.
- Direct instruction in vocabulary includes words that will help students process content-area texts. Additionally, professional development is available on helping students develop academic vocabulary.
- Some multiple-meaning words are explicitly taught in Trek 1, aligning with the recommendation that ELLs should be taught multiple meanings of words. Additionally, teacher materials include a suggestion to focus on words with multiple meanings.
- Vocabulary words are taught using authentic contexts.
- The program uses a variety of instructional aids and devices to teach vocabulary to students, including interactive exercises with immediate feedback; spoken text; animation and graphics; semantic mapping to complete word webs; sample sentences; and personalized word cards.
- The program engages students in writing and speaking tasks that help them incorporate new words into their expressive vocabulary.

### Developing Key Background Knowledge

*Jamestown Reading Navigator* includes several features that help ELLs develop and activate background knowledge and experience, as recommended by research and expert opinion.

- Prereading activities in each online journey help students connect their learning to prior knowledge and experience.
- Teacher materials and professional development include suggestions for activating prior knowledge.
- The program includes features that help build students' general background knowledge in a variety of ways, including video clips, direct vocabulary instruction, prereading activities, and reteaching suggestions in the teacher materials.
- Program features allow ELLs to work at their own pace and complete review activities as needed, so they can take the extra time they may need to activate prior knowledge and build background knowledge.

### Comprehension and Content-Area Literacy

*Jamestown Reading Navigator* incorporates a wide range of features supported by research and expert opinion to help students develop their comprehension skills and content-area literacy.

- Each quest is organized around a guiding question, related to one or more content areas, that provides a focus for students' work—aligning with the recommendation that instruction for ELLs should use themes to provide a content-oriented context for language and literacy skill development.
- All of the reading skills and strategies are taught and practiced in the context of specific text selections.
- The program aligns to a research-supported cycle of modeling, explicit teaching, and formative assessment of comprehension strategies.
- Explicit online instruction in comprehension strategies includes animation to model the strategies using Think Aloud. Professional development is available to guide teachers through the use of modeling with students, including Think Aloud.
- Students complete a variety of active processes with the texts they are reading.
- The program incorporates a process-based approach to reading texts, including extensive activities before, during, and after reading.
- Students are taught critical thinking and reasoning skills related to text comprehension, including analyzing media, connecting across texts, recognizing fact and opinion, understanding an author's purpose, and understanding an author's viewpoint.
- Students are prompted to develop metacognitive abilities to monitor their own comprehension.
- Students are taught to make predictions about texts they will read, including analyzing what they know, connecting it to prior knowledge, making predictions before and during reading, and checking their predictions after reading.
- Students are explicitly taught to identify and/or analyze a variety of text structures, including cause and effect, compare and contrast, narrative and informational, problem and solution, and sequence. They are also taught a wide range of skills and strategies for “unpacking” text structures.
- Students are exposed to multiple genres, including academic genres, and are walked through a process of interpreting the texts, using specific, appropriate reading skills and strategies.
- Professional development is available to help content-area teachers incorporate content-area reading and writing instruction into their classes.

### Integrating Language Modalities

*Jamestown Reading Navigator* is designed to support the research-based recommendation to integrate language modalities with ELLs.

- The program incorporates both oral and written language use.

- Reading, writing, speaking, and listening are integrated in a variety of ways, including
  - *writing activities to support reading themes and ideas*
  - *audio support for written texts*
  - *online fluency activities integrating reading, listening, and speaking*
  - *group activities incorporating speaking and listening related to texts students have read*
  - *reteaching activities that include oral teacher modeling, oral student responses, and student reading*

### Collaborative Learning Strategies

*Jamestown Reading Navigator* incorporates several opportunities for student collaborative learning, as recommended in the ELL research literature.

- Students have multiple opportunities to work together, including interactive discussions of texts they read.
- Teacher resources include recommendations to have students review other students' written work.
- Students experience a mix of individual online activities, recommended paired and small-group activities, and suggested whole-class activities and discussions.
- Teacher resources suggest effective strategies for organizing collaborative group work in areas including group assignments, working routines, and assessments of groups and individuals.

### Motivation and Engagement

*Jamestown Reading Navigator* incorporates a variety of research-based practices related to helping improve ELL students' motivation and engagement.

- Program features help ensure that students are matched with tasks that present an appropriate challenge for them.
- Instruction is scaffolded in a variety of ways to help ensure that students can succeed.
- Expectations and goals of instruction are clearly spelled out for students.
- Students have frequent opportunities to select which texts to read from available choices. Students can also choose how they will proceed through the online activities (e.g., whether to take the Journey Pre-tests, whether and when to take notes while they are reading).
- Online and print texts have been selected to match students' likely interests and relate to their circumstances, including text selections related to immigration and changes in culture. Many of the text selections are written about adolescents or from an adolescent's perspective.
- Video clips with a narrator and real-world footage build relevant prior knowledge for upcoming readings.
- Writing topics give students the opportunity to describe their own thoughts, opinions, and experiences—activities that are likely to stimulate student interest.
- Optional professional development sessions focus on motivating the adolescent nonreader and the less proficient reader and on social interaction to deepen learning and motivate.

### Diverse Texts

*Jamestown Reading Navigator* aligns with research-based recommendations related to providing a variety of diverse, appropriate texts for ELLs.

- Students have access to texts that extend beyond regular textbooks, representing a range of appropriate reading levels and interesting topics.
- Text selections represent a range of diverse cultures, reflecting the cultural and demographic diversity of the United States and of the world as a whole. The readings thus provide a broad range of potential matches to students' cultural, ethnic, and/or racial identity.

### Writing

While *Jamestown Reading Navigator* focuses primarily on helping students develop reading skills, the program also includes a substantial component that is dedicated to helping strengthen students' writing in specific ways that are supported by ELL research and expert opinion.

- Online writing activities guide students through a four-part writing process: plan, draft, revise, and publish.
- Students receive instruction on writing strategies related to planning, revising, and editing compositions by clicking the Tutor button.
- Students receive instruction on strategies for creating specific types of writing, such as narratives and persuasive writing.
- Students practice writing in a variety of genres and for a variety of audiences, including typical academic types of writing.
- Writing assignments typically challenge students to engage with academic content at their current literacy level. Many of the writing assignments have students reinforce and build upon content information from text selections.
- Students experience extensive opportunities to practice writing in English.
- Students use a built-in software tool with basic word-processing capabilities, including copying, pasting, and deleting.

### Assessment

*Jamestown Reading Navigator* includes a rich set of assessment features that align with recommendations for ELL instruction.

- Within the treks, students complete a variety of online activities that function as formative assessments of student learning.
- Assessment is ongoing and frequent. A student who works daily in the program will likely encounter multiple assessments on a daily basis.
- The program incorporates a wide variety of different forms of assessments.
- Students receive timely, useful, and intelligible feedback from assessments, both online and offline.
- Clear directions, demonstrations, and guidance via the Tutor buttons help students understand what they are expected to do as part of their assessments.

### Differentiated Instruction

*Jamestown Reading Navigator* includes key features that assist in differentiating instruction for ELLs.

- ELLs have access to resources that are tailored to meet their specific needs, including
  - *Spanish glossaries*
  - *vocabulary word cards with Spanish cognates*
  - *Spanish issues of TIME Magazine*
  - *reteaching suggestions for ELLs*
  - *recommendations for familiarizing ELLs with computer technology and assisting them in using Jamestown Reading Navigator*
- Instruction is managed in a way that differentiates based on individual student performance, not just group characteristics commonly associated with ELL status.

### Technology

*Jamestown Reading Navigator* uses technology in a variety of ways, supported by research and expert opinion, to help ELLs develop specific literacy skills and knowledge while enhancing student motivation.

- Use of technology is scaffolded to help students succeed.
- The program uses multimedia in a variety of ways.

- Students are taught strategies to interpret information in a multimedia environment.

### Professional Development

Professional development provided in conjunction with *Jamestown Reading Navigator* addresses several recommendations based in research and expert opinion related to ELL instruction.

- A range of professional development services is available in conjunction with *Jamestown Reading Navigator* for those who work with struggling readers, including ELLs. These services include on-site training sessions, online training modules, and ongoing instructional support from a reading coach via telephone and e-mail.
- The program provides resources for ongoing, long-term professional development that stretches over the instructional year and provides many hours of training.
- Professional development covers effective research-based instructional practices on a wide range of topics related to adolescent literacy instruction.
- Professional development incorporates teacher collaboration and coaching through
  - *sharing experiences and lesson plans on a discussion board*
  - *services of the on-call Jamestown Reading Navigator reading coach*
  - *optional on-site professional development sessions that can help develop systems for ongoing collaboration and peer coaching*

### Support for Infrastructure Improvement

*Jamestown Reading Navigator* supports several research-based recommendations related to improving the infrastructure for ELL literacy learning.

- The program accommodates instruction blocks of 45 to 90 minutes, offering flexible options for how much time each day students will work in the program. This represents a substantial resource for increasing the amount of time ELLs spend reading and writing.
- On-site professional development sessions on Building a School Literacy Community provide a setting that can be used to develop a schoolwide program that addresses the specific instructional needs of ELLs.

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## Broad Policy Documents

Broad policy-oriented documents were reviewed for this paper in order to determine (a) critical areas for supporting adolescent literacy and (b) instructional recommendations for which a broad base of support exists in research and/or expert opinion. Typically, these documents included a top-level summary of research and/or expert opinion across a broad range of topics related to adolescent literacy.

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## Research Syntheses

Focused research syntheses and meta-analyses from highly respected scholars were reviewed for this paper to identify instructional recommendations for which a solid research and/or theoretical base exists on specific topics related to adolescent literacy.

Typically, these documents were designed to provide a comprehensive review of the state of instructional and/or developmental research on a particular topic, such as comprehension, writing, or formative assessment. Many of them were published in prominent journals or research handbook volumes. In a few cases, these research syntheses appeared in the context of a “how-to” book describing research-based instructional best practices for educators.

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