

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

Motivation and Engagement

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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*[™] supports those practices.

What Is *Jamestown Reading Navigator*?

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

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

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

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

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

Introduction

A Critical Need to Support Struggling Adolescent Readers

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

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

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

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

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

The State of Research on Struggling Adolescent Readers

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

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

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

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

The Reading Next Report

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

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

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

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

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

Development of This Paper

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

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

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

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

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

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

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

MOTIVATION AND ENGAGEMENT

“Throughout the upper grades, motivation and engagement play a pivotal role in determining whether students benefit from content learning. Research shows that engagement is strongly related to reading achievement and as such has been found to be a more potent variable in performance than other learner background characteristics such as age or economic status.”—*Reading at Risk: The State Response to the Crisis in Adolescent Literacy* (NASBE, 2006, p. 24)

Why Are Motivation and Engagement Important for Adolescent Readers?

An extensive body of research demonstrates that how students think and feel about themselves, the subject matter, and their ability to learn affect how well they learn. Multiple sources attest the importance of this component. For example:

- *Reading Next* identified “motivation and self-directed learning” as one of 15 “promising elements of effective adolescent literacy programs . . . that had a substantial base in research and/or professional opinion” (Biancarosa & Snow, 2006, pp. 4, 12). Another closely related element of effective adolescent literacy programs identified by *Reading Next* was “*Diverse texts* . . . at a variety of difficulty levels and on a variety of topics” (p. 4; emphasis in original).³
- Kamil’s (2003) synthesis of research on adolescent literacy found, “Motivation is one concept that continually surfaces as an important focus in reading and learning to read, particularly for adolescents. It is often viewed as one of the determiners of adolescent literacy. . . . Motivation and engagement are critical for adolescent readers. If students are not motivated to read, research shows that they will simply not benefit from reading instruction” (pp. 7–8).
- According to the National Reading Conference, “Adolescents’ perceptions of how competent they are as readers and writers, generally speaking, will affect how motivated they are to learn in their subject area classes (e.g., the sciences, social studies, mathematics, and literature). Thus, if academic literacy instruction is to be effective, it must address issues of self-efficacy and engagement” (Alvermann, 2001, p. 2).
- Fisher and Ivey’s (2006) recommendations for evaluating adolescent literacy intervention programs for struggling adolescent readers included the guideline “Reading and writing in the intervention should be engaging” (p. 183).
- The International Reading Association’s (IRA) Commission on Adolescent Literacy stated, “Adolescents deserve instruction that builds both the skill and desire to read increasingly complex materials” (Moore et al., 1999, p. 5).

3 For more information on how *Jamestown Reading Navigator* aligns with instructional recommendations related to this area, see the Diverse Texts section of this paper, which follows this section.

Guthrie and Wigfield (2000) described the relationship between engagement—a term they use to describe what happens when students are “intent on reading and writing to understand” (p. 403)—motivation, and achievement in reading as follows:

Engaged reading is strongly associated with reading achievement. Students who read actively and frequently improve their comprehension of text as a consequence (Cipielewski & Stanovich, 1992). . . . This connection between engagement and achievement, measured as the ability to understand narrative and expository text, was shown in a national sample of students (Campbell, Voelkl, & Donahue, 1997). At all three ages studied (9, 13, and 17 years), the more highly engaged readers showed higher achievement than the less engaged readers. . . . As students become engaged readers, they provide themselves with self-generated learning opportunities that are equivalent to several years of education.

Engagement in reading may substantially compensate for low family income and educational background. . . .

The pattern of engagement and achievement . . . is consistent with the Matthew effect, in which the high achievers improve more rapidly than low achievers over time in school (Stanovich, 1986). As relatively good readers tend to read more, they increase their competence, which increases their reading ability. We suggest that motivation mediates this Matthew effect. That is, increasing competence is motivating, and increasing motivation leads to more reading (Guthrie, Wigfield, Metsala, & Cox, 1999). Motivation is the link between frequent reading and reading achievement. This link sustains the upward (and downward) spiral of achievement (Guthrie, Wigfield, et al., 1999). In this perspective, motivation is the foundational process for reading engagement and is a major contributor, when things go awry, to disengagement from reading. (pp. 404–405)

In other words, improving students’ motivation helps boost engagement, which in turn leads to greater achievement.

Unfortunately, students’ motivation to read tends to decrease as they grow older. As the IRA’s Commission on Adolescent Literacy noted, “Developing students’ advanced reading skills is insufficient if adolescents choose not to read. Unfortunately, students’ attitudes toward reading tend to decline as they advance into the middle grades, with a particularly disturbing impact on struggling readers” (Moore et al., 1999, p. 6). According to Guthrie and Wigfield (2000),

Several researchers have observed decreases in different aspects of motivation for reading. . . .

[D]eclines in interest and competence beliefs regarding reading occur in children’s transition to junior high school (Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991). Oldfather and colleagues (Oldfather & Dahl, 1994; Oldfather & McLaughlin, 1993) found that students’ intrinsic motivation to read declined as they went into junior high school. They attributed the change in motivation to changes in classroom conditions. Children in their study moved from a self-contained, responsive classroom that honored students’ voices and had no grades, to a teacher-centered environment in which students had fewer opportunities for self-expression and little opportunity for negotiating with teachers about their learning. . . .

The largest decreases in intrinsic reading motivation seem to occur at two points: during the early to middle elementary school years, and then into middle or junior high school. (p. 409)

Compounding this age-related change, problems with motivation tend to be worse for struggling readers, in ways that are often both a result of and a contributing factor in their learning difficulties. As Guthrie (2004) put it,

[E]ngagement and achievement are reciprocal. Locked in a spiral, they grow together. . . . Reciprocal forces are equally potent in the opposite direction. Students with fewer skills than their peers read relatively less and avoid texts when possible. Such avoidance brings less text exposure and fewer learning-to-read opportunities. . . . These students define themselves as disinterested readers. Because engagement in reading and achievement in reading are mutually causal, they both must be cultivated in school. A neglect of one is a neglect of both. (p. 6)

For all of these reasons, addressing student motivation is an important component of effective instruction for struggling adolescent readers.

What Is Motivation?

One of the challenges in describing research in motivation and related areas is that the researchers tend to use a variety of different, frequently overlapping terms that differ in subtle ways. Guthrie and Wigfield (2000), in their extensive review of research related to motivation, reading engagement, and achievement, defined motivation (in a reading context) as

the individual's personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading. Under this rubric, we include motivational goals, intrinsic motivation, extrinsic motivation, self-efficacy, and social motivation. (p. 405; emphasis in original)

Self-Efficacy

Self-efficacy, in a school context, is defined as the belief and the confidence that students have the capacity to accomplish meaningful tasks and produce desired results in academic settings. Research has demonstrated that students with high school-related self-efficacy are more engaged and motivated than students with low self-efficacy—with all the positive consequences that brings for ongoing academic performance. For example, Guthrie and Wigfield (2000) cited Schunk and Zimmerman's (1997) review of “research showing that students with high self-efficacy see difficult reading tasks as challenging and work diligently to master them, using their cognitive strategies productively” (Guthrie & Wigfield, 2000, p. 408).

Intrinsic and Extrinsic Motivation

According to Guthrie and Wigfield (2000),

Intrinsic reading motivation refers to an individual's enjoyment of reading activities that are performed for their own sake (Deci, 1992) and pursued during free time (Morrow, 1996). Intrinsic motivation is also characterized by a disposition to perform the activities (Ryan, Connell, & Grolnick, 1992). (p. 407)

In contrast,

Extrinsic motivation for reading is the desire to receive external recognition, rewards, or incentives (Deci, Vallerand, Pelletier, & Ryan, 1991). Incentive programs that provide pizza or school recognition for book reading rely on and probably strengthen extrinsic motivation. (Guthrie & Wigfield, 2000, p. 407)

Guthrie and Wigfield noted that intrinsic and extrinsic motivation “are moderately and positively correlated” (p. 407, citing Miller & Meece, 1997; Wigfield & Guthrie, 1997) and that “[b]oth [intrinsic and extrinsic motivation] predict children's reading amount and frequency” (p. 407). However,

[E]xtrinsic motivation is usually associated with the use of surface strategies for reading and the desire to complete a task rather than to understand or enjoy a text or a task (Meece & Miller, 1999). Further, extrinsic motivation can produce self-terminating behavior. When children win the incentive (e.g., the pizza) their reading often ceases. Extrinsic incentives often lead students increasingly to become dependent on rewards and recognition to energize their reading (Barrett & Boggiano, 1988). (p. 407)

Further:

There are several consequences of a strong extrinsic orientation and focus on performance goals. Students with performance goals frequently rely on memorizing, guessing, and other surface learning strategies for reading. They attempt to avoid challenging tasks and give up easily when frustrated. These students are not cognitively engaged in reading and frequently adopt work-avoidant goals, attempting to meet their performance goals with minimal effort (Meece & Holt, 1993). Thus, these patterns of motivation activate behavior that do [sic] not promote long-term engagement, and ultimately can undermine the life of a literate, learning community. (Guthrie & Wigfield, 2000, p. 415)

The goal for effective instruction is thus to help boost students' intrinsic motivation.

Summary Finding

The following summary of findings on the role of motivation in cognition and language use shows the interconnected nature of these categories and their importance to improving students' reading:

Students with high intrinsic motivation, a learning goal orientation, and high self-efficacy are relatively active readers and high achievers (Guthrie, Wigfield, et al., 1999). Why should this be? It is likely that motivational processes are the foundation for coordinating cognitive goals and strategies in reading. For example, if a person is intrinsically motivated to read and believes she is a capable reader, the person will persist in reading difficult texts and exert effort in resolving conflicts and integrating text with prior knowledge. However, if a text is not fulfilling intrinsic motivational goals, such as involvement, the person will terminate or minimize the cognitive activity of reading that material. A learner with high involvement motivation will seek books known to provide that satisfaction. The cognitive abilities needed to find books, avoid distraction while reading, and assimilate new ideas are activated if the text is fulfilling goals of involvement. This is consistent with both a cognitive science of reading (Lorch & van den Broek, 1997) and a situated account of the acquisition of expertise (Greeno et al., 1998), as well as the development of intrinsic motivation (Deci, 1992). In sum, becoming an excellent, active reader involves attunement of motivational processes with cognitive and language processes in reading. (Guthrie & Wigfield, 2000, p. 408)

What Is Engagement?

As described by Guthrie and Wigfield (2000), engagement appears to encompass a variety of connected elements. Engaged readers, according to Guthrie and Wigfield, “are intent on reading and writing to understand”; have a “devotion to reading”; possess a sense of ownership, i.e., “self-confidence and command of reading and writing”; enjoy reading for its own sake; attain a state of “total absorption” in reading; and engage in on-task behavior (p. 403, citing Au, 1997; Oldfather & Dahl, 1994; Turner, 1995; Csikszentmihalyi, 1991; Berliner & Biddle, 1995; Tobin, 1984). For their own research synthesis, Guthrie and Wigfield adopted and elaborated on Guthrie, McGough, Bennett, and Rice’s (1996) characterization of engaged readers as “motivated to read for a variety of personal goals, strategic in using multiple approaches to comprehend, knowledgeable in their construction of new understanding from text, and socially interactive in their approach to literacy” (p. 403). In this view, motivation represents a component of engagement, but not its entirety. Engagement also embraces elements such as quality and effectiveness of the student’s activities when learning—not just engagement of the student, but engagement with the content and skills students should be learning.

Seen from this perspective, student engagement is an important mediating variable in determining student achievement. As described by Alvermann (2001),

Guthrie and Wigfield (2000) concluded that various instructional practices, while important, do not directly impact student outcomes (e.g., time spent reading independently, achievement on standardized tests, performance assessments, and beliefs about reading). Instead, the level of student engagement (including its sustainability over time) is the mediating factor, or avenue, through which classroom instruction influences student outcomes. (p. 7)

Research results are thus valuable in documenting not only the valuable outcomes from engagement, but also those practices that can help foster it.

Instructional Recommendations

- **Teacher involvement.** Guthrie and Wigfield (2000) identified teacher involvement—defined as “the teacher’s knowledge of individual learners, caring about their progress, and pedagogical understanding of how to foster their active participation” (p. 415)—as an “instructional process” that “[has] been shown through empirical and theoretical arguments to impact engagement processes and learning outcomes” (p. 409). They cited a finding by Skinner and Belmont (1993) that “when students perceived teachers to be involved (i.e., interested in their progress) and autonomy supportive (i.e., providing students some control of learning), students were engaged in the classroom (e.g., participating in class discussions, actively learning, and appearing happy). . . . Noteworthy was the finding that teacher involvement did not directly influence outcomes, but involvement had a significant benefit on engagement, which then appeared to lead to positive student outcomes” (p. 416). This suggests a value to providing resources

to teachers that assist them in becoming involved in students' progress. The reference to supporting students' autonomy also suggests a value to materials that provide students with some degree of control over their own learning—a point addressed below in the bullet on student choices.

- **Appropriate challenge level.** According to *How People Learn*, a synthesis of research on learning across the subject areas that incorporated findings from multiple areas of research, “Challenges . . . must be at the proper level of difficulty in order to be and to remain motivating: tasks that are too easy become boring; tasks that are too difficult cause frustration” (National Research Council, 2000, p. 61). Similarly, Tomlinson and colleagues (2003) cited a research study that found that “when academic tasks were poorly matched to students’ readiness levels, impacts were negative. When students were asked to do tasks for which they did not have requisite skills, both their achievement and feelings of self-worth decreased. When students were asked to do tasks that were too simple for their skills level, they disengaged with the tasks” (p. 127, citing Csikszentmihalyi et al., 1993). These findings speak to the important motivational aspects of making sure that students are matched to tasks that are at an appropriate difficulty level for them or are provided with appropriate scaffolding to help ensure that assigned tasks are brought within their capabilities.
- **Learning and knowledge goals.** Another area identified by Guthrie and Wigfield (2000) as contributing to student engagement was a focus on learning and knowledge goals in students’ instruction, as distinguished from a focus on performance-oriented goals. They cited Roeser, Midgley, and Urdan’s (1996) finding that “teachers’ learning-goal orientation in the classroom contributed to their students’ self-efficacy. When students believed that teachers thought that understanding the work was more important than just getting right answers, students were likely to believe in their capacity to do the hardest work. Students who were learning-goal oriented (e.g., dedicated to understanding content, using strategies effectively, and linking their new knowledge to previous experiences) were likely to be more highly engaged than other students. In contrast, when students’ goals are dominated by the performance orientation of seeking to outperform others or demonstrate their competence or a procedural emphasis (e.g., completing a complex series of steps correctly[;] Meece, Blumenfeld, & Hoyle, 1988), they will be less engaged in learning” (pp. 409–410). This suggests a value to basing classroom and individual instructional goals primarily on learning for understanding.
- **Clear goals and feedback.** Both Guthrie and Wigfield (2000) and Alvermann (2001) cited Schunk and Rice’s (1993) finding that “providing clear goals for reading tasks and feedback on progress toward success increased self-efficacy and strategies for text comprehension” (Guthrie & Wigfield, 2000, p. 408; see also Alvermann, 2001, p. 6).
 - Guthrie and Wigfield (2000) cautioned that evaluations that are highly objective and standardized may be easy to administer but “fail to reflect student ownership, motivation, and reading practices” and are less likely to support student motivation than “highly student-centered and personalized” assessments, such as portfolios and project-based exhibits (p. 415). Such evaluations require that students have “ample time for students to think, plan, write, and revise” and involve opportunities for students to be self-expressive. They reported, “Teachers who are known to be able to spark and sustain their students’ attention and interest in reading often report that they evaluate effort and progress rather than absolute skill or comparative advantage” (p. 415, citing Stipek, 1996).
- **Student choices.** Student choice is also an important element of motivation (Guthrie & Davis, 2003; Turner, 1995). As students enter preteen and teen years, their choices about many things outside of school increase significantly, yet options in school remain limited (Bean, 2002; Hinchman et. al., 2003/2004). When students are given the prerogative to select texts they want to read and to respond in creative and personally meaningful ways to those texts, motivation and sustained engagement increase (Brozo & Simpson, 2007; Worthy, Moorman, & Turner, 1999).
 - According to Reading Next, “[C]ompetency in reading is necessary but insufficient by itself to engender better academic performance. Students need to be self-regulating not only to become more successful academically, but also to be able to employ their skills flexibly long after they leave school. . . . [S]elf-regulation is only developed when students are given choices and the instructional support and aids needed to succeed at their chosen tasks” (Biancarosa & Snow, 2006, p. 16). Specific examples of areas where student choice could be fostered, according to Reading Next, include “opportunities to select for themselves the materials they read. . . . One of the easiest ways to build some choice into the students’ school day is to incorporate independent reading time in which they can read whatever they choose” (Biancarosa & Snow, 2006, p. 16).

– Allington (2006) argued, “Choice is important because it seems largely related to interest and to control” (p. 62). He cited results from Guthrie and Humenick’s (2004) meta-analysis, which found that “providing choices for students over what to read, who to read with, and where to read produced an effect size nearly as large as access to interesting texts” (p. 62), and from Hidi and Harackiewicz (2000), who “found that giving students choices, ‘even when seemingly trivial and instructionally irrelevant, seems to enhance interest’ ” (Allington, 2006, pp. 62–63, quoting Hidi & Harackiewicz, 2000, p. 154).

– As noted previously, Guthrie and Wigfield (2000) identified this characteristic as “autonomy support”: that is, “the teacher’s guidance in making choices among meaningful alternatives relevant to the knowledge and learning goals. Studies confirm the conventional wisdom that choice is motivating. . . . Evidence for the benefits of autonomy support on intrinsic motivation has been shown in many investigations (Cordova & Lepper, 1996; Deci et al., 1991). For example, Deci, Schwartz, Sheinman, and Ryan (1981) reported that teachers who enabled students to make choices about their learning and participation in instructional decisions created a classroom environment in which students were intrinsically motivated to learn the content and contributed actively to classroom activities. Specific to reading, Grolnick and Ryan (1987) showed that an autonomy-supportive context increased motivation and comprehension in reading. . . . As students perceive that teachers respect them enough to provide genuine choices, students increase their effort and commitment to learning” (pp. 411–412).

- **Collaboration.** Guthrie and Wigfield (2000) described advantages that many teachers identify from collaboration, defined as “the social discourse among students in a learning community that enables them to see perspectives and to socially construct knowledge from text” (p. 413), including “increase[d] interest in the content of learning,” active learning over an extended period, and a greater disposition to “read more independently in the future” (pp. 413–414, citing Hootstein, 1995; Morrow, 1996; Nolen & Nichols, 1994; Zahorik, 1996).

– Along similar lines, Guthrie (2004) stated, “The fourth ingredient [of a dynamic context to support comprehension strategy instruction] is classroom discourse among students” (p. 10).

– Nokes and Dole (2004) identified social interaction as an essential part of the process of learning reading strategies (pp. 169–170).

– The National Reading Panel identified cooperative learning, which it defined as including strategies in which “peers instruct or interact over the use of reading strategies” (NICHHD, 2000, p. 4-45), as a strategy that had “a firm scientific basis for concluding that [it] improve[s] comprehension in normal readers” (NICHHD, 2000, p. 4-42, based on 10 studies across grades 3–6).⁴

- **Strategy instruction.** Strategy instruction—defined as “teachers’ direct instruction, scaffolding, and guided practice in learning from text”—represents one of the areas identified by Guthrie and Wigfield (2000) as contributing to students’ engagement (p. 413). According to Guthrie and Wigfield, “Development of intrinsic motivation is strongly dependent on students’ competence. . . . If students are able to complete the reading tasks in their classroom, and are aware of their abilities and limitations, they will be more motivated than if they are less capable or less aware. . . . Consequently, strategy instruction in reading, in forms that are either direct or implicit, is likely to be empowering and motivating. . . . Initial evidence suggests that such reading strategy instruction increases reading self-efficacy” (p. 413, citing Deci et al., 1991; J. Harter, 1982; S. Harter, 1981; Schunk & Zimmerman, 1997). Similarly, Guthrie (2004) stated, “To increase the amount of engaged reading, teachers enable students to learn valuable content by using high-level reading strategies as they interact with significant reading materials. Emphasizing content and comprehension equally, they foster motivational development, which provides the impetus for integration of new knowledge” (p. 8).

- **Relevance to students’ interests and lives.** Multiple sources attest the importance of connecting instruction to students’ interests and making instruction relevant to the circumstances of students’ lives.

4 Bramlett, 1994; Guthrie, Van Meter, et al., 1996; Judy, Alexander, Kulikowich, & Wilson, 1988; Klingner, Vaughn, & Schumm, 1998; Mathes et al., 1994; Pickens & McNaughton, 1988; Soriano, Vidal-Abarca, & Miranda, 1996; Stevens, Madden, Slavin, & Farnish, 1987; Stevens, Slavin, & Farnish, 1991; Utter, 1988.

- Tomlinson and colleagues have identified a substantial body of research related to the positive effects of engaging students' interests as part of instruction. According to Tomlinson et al. (2003), "Questions and tasks that are interesting to students are more likely to lead to enhanced student engagement with the task, the student's sense that the work involved is rewarding, greater evidence of student creativity, increased student productivity, a higher degree of student autonomy, and a higher level of intrinsic motivation. . . . In general, it appears that interest contributes to a sense of competence and self-determination in learners and to positive learning behaviors, such as willingness to accept challenge and persist in it" (p. 128, citing multiple sources).⁵
- Guthrie and Wigfield (2000) cited the reasoning of "[m]any teachers, parents, and administrators" on the benefits of making interesting texts available to students, and then stated, "Providing an abundance of high-interest texts in the classroom enables teachers to adapt their reading instruction to the preexisting motivations of students. Such adaptation may explain the relatively high association between the size of a classroom library and student reading achievement, which has been documented across multiple nations" (pp. 412–413, citing Elley, 1992).
- In addition to calling for time for student reading and a choice of reading materials, Moore et al. (1999) stressed the importance of teacher support, including "actions such as bringing books to the classroom, arousing interest in them, orally reading selections, and fostering student-to-student and student-to-adult conversations about what is read. Adolescents deserve these supports so they will identify themselves as readers and take advantage of the times and choices that are offered" (p. 5).
- According to Reading Next, one way "to better engage students in literacy and learning is to promote relevancy in what students read and learn. As a first step, teachers need to 'tune in' to their students' lives in order to understand what they find relevant and why. Then teachers can begin to redesign instruction so that it is more obviously relevant to students" (Biancarosa & Snow, 2006, p. 16).
- Peterson et al. (2000) stated, "Reading success may not be enough to build self-efficacy, but it can be helped by . . . allowing a choice of tasks and materials that are personally meaningful" (p. 19, citing Alexander, 1997; Cope, 1993; Taylor & Adelman, 1999; Worthy, 1996).
- Fisher and Ivey (2006) stated, "Effective instruction for all adolescents focuses on their personal interests and incorporates diverse reading materials such as trade books and the digital texts they read on their own, and this is no less true for inexperienced older readers and writers" (p. 183, citing Alvermann, [2001]).
- **Real-world interactions.** Guthrie and Wigfield (2000) cited research on the value of "real-world interactions" to help stimulate students' motivation and engagement (p. 410). According to their description, "Real-world interactions are enjoyable, immediately interesting activities that can provide motivation for reading and learning from text (Brophy, 1998; Csikszentmihalyi, 1991). . . . An intrinsically motivating activity can induce reading, and reading can be optimized in an intrinsically motivating scenario. Zahorik (1996) found that both elementary and secondary teachers frequently reported that they attempt to motivate students with 'hands-on' activities, such as using manipulatives in mathematics, participating in simulations and drama, or growing seedlings in science. . . . Teachers believe that reading motivation can be increased when texts and books are connected to stimulating activities (Nolen & Nichols, 1994), related to learning events (Guthrie, Alao, & Rinehart, 1997), or connected to personally significant projects (McCombs & Whistler, 1997)" (pp. 410–411).

⁵ Amabile, 1983; Bruner, 1961; Collins & Amabile, 1999; Sharan & Sharan, 1992; Csikszentmihalyi et al., 1993; Fulk & Montgomery-Grymes, 1994; Vallerand, Gagné, Senecal, & Pelletier, 1994; Zimmerman & Martinez-Pons, 1990.

How Jamestown Reading Navigator™ Aligns with Recommendations for Improving Students' Motivation and Engagement

The following table describes how *Jamestown Reading Navigator* aligns with recommendations for improving students' motivation and engagement.

Summary of Motivation and Engagement Recommendations	Application Through <i>Jamestown Reading Navigator</i>
<p>Teachers should be knowledgeable about and involved in individual students' progress.</p>	<p><i>Jamestown Reading Navigator</i> provides a wide range of resources to help teachers stay informed about students' progress and able to intervene effectively to support students' learning. The Learner Management System includes a broad range of reports that provide detailed information about individual students' progress and that advise teachers when students need additional support. (For more details, see the section on Formative and Summative Assessment later in this paper.)</p>
<p>Instruction should match students with tasks of the appropriate level of challenge.</p>	<p><i>Jamestown Reading Navigator</i> includes a variety of features to help ensure that students are matched with tasks that present an appropriate challenge for them.</p> <ul style="list-style-type: none"> • Initial placement tests provide suggestions for students' appropriate reading levels. Based on placement test scores and other factors (such as standardized test performance, previous student work, and teacher observation), teachers place students in the appropriate program trek (level) that matches their reading level. • Ongoing assessments help teachers evaluate how well students are doing and intervene as needed to provide additional support or change students' placement in the program.
<p>Instruction should provide scaffolding support to students so that they can succeed in their assigned tasks.</p>	<p>Instruction in <i>Jamestown Reading Navigator</i> is scaffolded in a variety of ways to help ensure that students can succeed.</p> <ul style="list-style-type: none"> • Reading skills and strategies are introduced using the gradual release of responsibility model. (For more details, see the Comprehension section earlier in this paper.) • Tutor buttons within the program provide students with information and hints that can help them complete tasks within the online activities. • Reteaching support is provided within the online program for students who do not do well in the activities. • Additional <i>Reteaching Skills Support</i> resources are provided to the teacher for use with students who need extra help offline. These resources can be used as the basis for strategic tutoring.
<p>Instruction should focus students' attention on learning and knowledge goals.</p>	<p>Program features throughout <i>Jamestown Reading Navigator</i> focus on helping students learn important skills and knowledge, as distinguished from simply performing well on required tasks. Such features include the following:</p> <ul style="list-style-type: none"> • Reminder of the focus question of the current quest (unit) and the learning goals of the current journey (lesson) each time students log into their <i>Jamestown Reading Navigator</i> home page • Thorough instruction in skills and knowledge students need in order to succeed in their assignments • Online help through the Tutor buttons to guide students toward understanding how to complete an assignment • Assessments that focus on key content: specific sight words and word families (in Trek 1), reading skills, and vocabulary • Ongoing feedback in response to student performance in activities and assessments that focuses on <i>why</i> answers were correct or incorrect

Summary of Motivation and Engagement Recommendations	Application Through <i>Jamestown Reading Navigator</i>
Instruction should focus students' attention on learning and knowledge goals. <i>(continued)</i>	<ul style="list-style-type: none"> • Immediate reteaching online when students struggle with key skills • Learner Management System reports that provide teachers with information on key content, including detailed information on areas where students may need additional support • <i>Reteaching Skills Support</i> resources to help teachers present skills in alternative ways for students who need assistance beyond the online lessons
Goals for instruction should be clear to students.	<p><i>Jamestown Reading Navigator</i> clearly spells out goals of instruction for students. Learning goals for a student's current journey appear on the student's home page. Trek 1 learning goals relate to the journey's targeted sight words and word family words. Learning goals for Treks 2–4 address the targeted reading skill, vocabulary, writing, and fluency for that journey.</p>
Students should receive clear feedback on their instructional progress.	<p><i>Jamestown Reading Navigator</i> provides clear feedback to students on their instructional progress.</p> <ul style="list-style-type: none"> • Students receive immediate feedback after every online activity and assessment. In many cases the feedback is substantive, explaining why student choices were correct or incorrect. • Teachers are guided to assess students' writing and fluency assignments in ways that are clear and provide accurate feedback to students. • Teachers are encouraged to provide feedback on students' literature circle self-assessments. • Each student has access to a My Scores Report that shows scores from the student's online work.
Evaluations should be student centered and personalized.	<p>Teachers are encouraged to use the Learner Management System to read students' writing and listen to students' fluency recordings. Teachers are instructed on how to grade these fairly and accurately.</p>
Students should be supported in developing the capability to regulate their own learning through (a) opportunities to make choices about their learning and (b) support to help students succeed in their chosen tasks.	<p><i>Jamestown Reading Navigator</i> gives students choices in a variety of areas. For example:</p> <ul style="list-style-type: none"> • Students in Treks 2–4 choose which of two selections they want to read in even-numbered journeys in the online program. • From four selections in each <i>inClass Reader</i> unit, students choose two or more to read. • For independent reading, students can choose to read from the <i>inTIME</i> Magazines and other level-appropriate recommended texts. • Students have a choice of whether to take the Journey Pretest in Treks 2–4. • When students read selections in Treks 2–4, they can set their own written purpose for reading, or they can accept the purpose provided in the program. • Students are given the opportunity to take notes while they are reading online in Treks 2–4 but are not required to do so. • Students can choose whether to listen to the audio recording of the journey text selection, if the teacher has made this option available. • Students can choose whether to add notes to the Vocabulary Journal in Treks 2–4.

Continued ➡

Summary of Motivation and Engagement Recommendations	Application Through <i>Jamestown Reading Navigator</i>
<p>Students should be supported in developing the capability to regulate their own learning through (a) opportunities to make choices about their learning and (b) support to help students succeed in their chosen tasks. <i>(continued)</i></p>	<ul style="list-style-type: none"> Students in Treks 2–4 can choose whether to revisit the Focus on the Skill animation, review the vocabulary words, and reread the journey text selection before taking the Journey Test. <p>In each of these areas, students are provided with appropriate support to help them succeed in their chosen tasks. For example, Tutor buttons help students understand the various choices they can make, such as what happens when they decide to take the pretest, how to set a purpose for reading, and how to use the note-taking features. The program also supports student choices by ensuring that all text students read in <i>Jamestown Reading Navigator</i> is at an appropriate reading level.</p>
<p>Students should be provided with opportunities to collaborate over texts.</p>	<p><i>Jamestown Reading Navigator</i> provides multiple opportunities for students to interact with each other over texts.</p> <ul style="list-style-type: none"> The <i>inClass Readers</i> include end-of-selection questions for partner or small-group discussions. The <i>inClass Reader Teacher Guide</i> also provides suggestions for literature circle activities and discussions in conjunction with many of the <i>inClass Reader</i> selections. These activities provide opportunities for students to discuss and interpret what they have read and how it relates to the guiding question for the quest. <i>Reteaching Skills Support</i> for Treks 2–4 includes small-group activities for interacting with text, for students who need additional instruction to help them learn specific skills. Online professional development modules provide numerous suggestions for how to engage groups in collaborative activities before, during, and after reading. Collaborative activities for learning vocabulary are also included. An optional on-site professional development module titled Social Interaction to Deepen Learning and Motivate focuses on ways that discussion of text can deepen comprehension and student engagement. The section on Improving Writing in the <i>Teacher Resource Guide</i> includes recommendations for having students work together in pairs to suggest revisions and edits to each other’s written work. <p>For more details, see the section on Text-Based Collaborative Learning earlier in this paper.</p>
<p>Students should be taught strategies to make their learning more effective.</p>	<p>The central focus of <i>Jamestown Reading Navigator</i> is on helping students learn reading skills and strategies that can help them process texts and learn more effectively. As noted earlier in this section, student success in learning and applying these skills can contribute to students’ motivation and belief in their ability to succeed academically. Additionally, <i>Jamestown Reading Navigator’s</i> focus on content-area selections builds students’ subject knowledge and competencies for learning in actual secondary classrooms.</p> <p>For a listing of skills taught and descriptions of how they are taught, see the Comprehension section earlier in this paper.</p>

Continued ➔

Summary of Motivation and Engagement Recommendations	Application Through <i>Jamestown Reading Navigator</i>
<p>Instruction should be tailored to students’ interests, including access to interesting texts, and should be relevant to students’ lives.</p>	<p><i>Jamestown Reading Navigator</i> is tailored to be relevant to students’ interests and lives.</p> <ul style="list-style-type: none"> • Both online texts and print texts have been selected to match students’ likely interests and relate to their circumstances. Examples of topics and themes that were included are cars, cell phones, friendships, personal health, sports, the environment, and becoming independent. (For more details, see the Diverse Texts section later in this paper.) • Video clips with a narrator and exciting real-world footage build relevant prior knowledge for upcoming readings. • Many of the text selections are written about adolescents or written from an adolescent’s perspective. • Students have choices of which text selections to read in some of the online lessons and in the print materials. • Results from field testing and from a student advisory group included positive feedback that the text selections in <i>Jamestown Reading Navigator</i> are high interest and engaging. • <i>Jamestown Reading Navigator</i> was field tested with teachers and students across the United States. Reading specialists reviewed the program’s pedagogy, manuscript, and prototypes and gave suggestions for improvement. Similarly, a student advisory group gave feedback on the lesson design, the content, the graphics, and the usability of the program. Their ideas were incorporated into the program, helping ensure greater relevance and coordination to students’ interests. • Efforts were made to make writing topics interesting to students by giving them the opportunity to describe their own thoughts, opinions, and experiences. Students are encouraged to be creative and expressive in writing short stories, plays, poems, and journal entries.
<p>Instruction should incorporate motivating real-world interactions for learning from texts.</p>	<p><i>Reteaching Skills Support</i> resources incorporate hands-on activities that connect reading skills to real-world contexts, particularly in the Differentiating Instruction sections. Examples:</p> <ul style="list-style-type: none"> • Students make a “human bar graph” to understand graphic information. • Students choose a character from an appropriate music video or song, describe the character to the class—linking the characterization to appropriate phrases from the lyrics—and then play the song or show the video. • Students read a comic strip with the final panel missing, draw their predictions for what will happen next, and then compare their predictions with the complete comic strip.

INTRODUCTION References

- Biancarosa, C., & Snow, C. E. (2006). *Reading next: A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York* (2nd ed.). Washington, DC: Alliance for Excellent Education. Retrieved January 8, 2007, from <http://www.all4ed.org/publications/ReadingNext/ReadingNext.pdf>.
- Jetton, T. L., & Dole, J. A. (2004). Introduction. In T. L. Jetton & J. A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 1–11). New York: The Guilford Press.
- Loomis, S. C., & Bourque, M. L. (Eds.). (2001). *National assessment of educational progress achievement levels 1992–1998 for reading*. Washington, DC: National Assessment Governing Board. Retrieved from <http://www.nagb.org/pubs/readingbook.pdf>.
- National Center for Education Statistics (NCES). (1999). *Nation's report card: Reading 1998*. Washington, DC: U.S. Government Printing Office. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=1999500>.
- National Center for Education Statistics (NCES). (2006). *Nation's report card: Reading 2005*. Washington, DC: U.S. Government Printing Office. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006451>.
- Olson, L. (2006). A decade of effort. *Quality Counts*, 25, 8–10, 12, 14, 16, 18–21.
- Peterson, C. L., Caverly, D. C., Nicholson, S. A., O'Neal, S., & Cusenbary, S. (2000). *Building reading proficiency at the secondary level: A guide to resources*. Austin, TX: Southwest Educational Development Laboratory. Retrieved April 3, 2007, from <http://www.sedl.org/pubs/reading16/buildingreading.pdf>.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360–407.
- Whitehurst, G. J. (2002, October). *Evidence-based education (EBE)* [electronic presentation]. Retrieved May 31, 2007, from <http://www.ed.gov/nclb/methods/whatworks/eb/edlite-slide001.html>.

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- Alexander, P. A. (1997). Knowledge-seeking and self-schema: A case for the motivational dimensions of exposition. *Educational Psychologist*, 32(2), 83–94.
- Allington, R. L. (2006). *What really matters for struggling readers: Designing research-based programs* (2nd ed.). New York: Pearson Education.
- Alvermann, D. E. (2001). *Effective literacy instruction for adolescents*. Chicago: National Reading Conference. Retrieved February 13, 2007, from <https://www.nrconline.org/publications/alverwhite2.pdf>.
- Amabile, T. (1983). *The social psychology of creativity*. New York: Springer-Verlag.
- Au, K. H. (1997). Ownership, literacy achievement, and students of diverse cultural backgrounds. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 168–192). Newark, DE: International Reading Association.
- Barrett, M., & Boggiano, A. K. (1988). Fostering extrinsic orientations: Use of reward strategies to motivate children. *Journal of Social and Clinical Psychology*, 6, 293–309.
- Bean, T. W. (2002). Making reading relevant for adolescents. *Educational Leadership*, 60, 34–37.
- Berliner, D. C., & Biddle, B. J. (1995). *The manufactured crisis: Myths, fraud, and the attack on American public schools*. Reading, MA: Addison Wesley.
- Biancarosa, C., & Snow, C. E. (2006). *Reading next: A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York* (2nd ed.). Washington, DC: Alliance for Excellent Education. Retrieved January 8, 2007, from <http://www.all4ed.org/publications/ReadingNext/ReadingNext.pdf>.
- Bramlett, R. K. (1994). Implementing cooperative learning: A field study evaluating issues for school-based consultants. *Journal of School Psychology*, 32(1), 67–84.
- Brophy, J. (1998). *Motivating students to learn*. Boston: McGraw-Hill.
- Brozo, W. G., & Simpson, M. L. (2007). *Content literacy for today's adolescents: Honoring diversity and building competence* (5th ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Bruner, J. (1961). The act of discovery. *Harvard Educational Review*, 31, 21–32.
- Campbell, J. R., Voelkl, K. E., & Donahue, P. L. (1997). *NAEP 1996 trends in academic progress* (NCES Publication No. 97-985). Washington, DC: U.S. Department of Education.
- Cipielewski, J., & Stanovich, K. E. (1992). Predicting growth in reading ability from children's exposure to print. *Journal of Experimental Child Psychology*, 54, 74–89.
- Collins, M., & Amabile, T. (1999). Motivation and creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 297–312). New York: Cambridge University Press.
- Cope, J. (1993). *Exploring the reading development of 12th-grade Georgia high school students through reader autobiographies*. (ERIC Document Reproduction No. ED 354 506)
- Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology*, 88(4), 715–730.
- Csikszentmihalyi, M. (1991). Literacy and intrinsic motivation. In S. R. Graubard (Ed.), *Literacy* (pp. 115–140). New York: Noonday.
- Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1993). *Talented teenagers: The roots of success and failure*. New York: Cambridge University Press.
- Deci, E. L. (1992). The relation of interest to the motivation of behavior: A self-determination theory perspective. In A. Renninger, S. Hidi, & A. Krapp (Eds.), *The role of interest in learning and development* (pp. 43–70). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Deci, E. L., Schwartz, A. J., Sheinman, L., & Ryan, R. M. (1981). An instrument to assess adults' orientations toward control versus autonomy with children: Reflections on intrinsic motivation and perceived competence. *Journal of Educational Psychology*, 73(5), 642–650.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325–346.
- Elley, W. B. (1992). *How in the world do students read? IEA study of reading literacy*. The Hague, Netherlands: International Association for the Evaluation of Educational Achievement.
- Fisher, D., & Ivey, G. (2006). Evaluating the interventions for struggling adolescent readers. *Journal of Adolescent & Adult Literacy*, 50(3), 180–189.
- Fulk, B., & Montgomery-Grymes, D. (1994). Strategies to improve student motivation. *Intervention in School and Clinic*, 30, 28–33.
- Greeno, J. G., & The Middle School Mathematics Through Applications Project Group. (1998). The situativity of knowing, learning, and research. *American Psychologist*, 53(1), 5–26.
- Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, 52, 273–288.
- Guthrie, J. T. (2004, Spring). Teaching for literacy engagement. *Journal of Literacy Research*, 36(1), 1–30.
- Guthrie, J. T., Alao, S., & Rinehart, J. M. (1997). Engagement in reading for young adolescents. *Journal of Adolescent & Adult Literacy*, 40, 438–446.
- Guthrie, J., & Davis, M. (2003). Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading & Writing Quarterly*, 19, 59–85.
- Guthrie, J. T., & Humenick, N. M. (2004). Motivating students to read: Evidence for classroom practices that increase motivation and achievement. In P. McCardle and V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 329–354). Baltimore: Paul Brookes.
- Guthrie, J. T., McGough, K., Bennett, L., & Rice, M. E. (1996). Concept-oriented reading instruction: An integrated curriculum to develop motivations and strategies for reading. In L. Baker, P. Afflerbach, & D. Reinking (Eds.), *Developing engaged readers in school and home communities* (pp. 165–190). Mahwah, NJ: Lawrence Erlbaum Associates.
- Guthrie, J. T., Van Meter, P., McCann, A. D., Wigfield, A., Bennett, L., Poundstone, C. C., et al. (1996). Growth of literacy engagement: Changes in motivations and strategies during concept-oriented reading instruction. *Reading Research Quarterly*, 31(3), 306–332.
- Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. Kamil, R. Barr, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 3, pp. 403–422). Mahwah, NJ: Lawrence Erlbaum Associates.
- Guthrie, J. T., Wigfield, A., Metsala, J. L., & Cox, K. E. (1999). Motivational and cognitive predictors of text comprehension and reading amount. *Scientific Studies of Reading*, 3(3), 231–256.
- Harter, J. (1982). The perceived competence scale for children. *Child Development*, 53, 87–97.
- Harter, S. (1981). A new self-report scale of intrinsic versus extrinsic orientation in the classroom: Motivational and informational components. *Developmental Psychology*, 17, 300–312.
- Hidi, S., & Harackiewicz, J. M. (2000). Motivating the academically unmotivated: A critical issue for the 21st century. *Review of Educational Research*, 70(2), 151–179.
- Hinchman, K. A., Alvermann, D. E., Boyd, F. B., Brozo, W. G., & Vacca, R. T. (2003/2004). Supporting older students' in- and out-of-school literacies. *Journal of Adolescent & Adult Literacy*, 47, 304–310.
- Hootstein, H. (1995). Motivational strategies of middle school social studies teachers. *Social Education*, 59, 23–26.
- Judy, J. E., Alexander, P. A., Kulikowich, J. M., & Wilson, V. L. (1988). Effects of two instructional approaches and peer tutoring on gifted and non gifted sixth-grade students' analogy performance. *Reading Research Quarterly*, 23(2), 236–256.
- Kamil, M. L. (2003). *Adolescents and literacy: Reading for the 21st century*. Washington, DC: Alliance for Excellent Education. Retrieved February 17, 2007, from <http://www.all4ed.org/publications/AdolescentsAndLiteracy.pdf>.
- Klingner, J. K., Vaughn, S., & Schumm, J. S. (1998). Collaborative strategic reading during social studies in heterogeneous fourth-grade classrooms. *Elementary School Journal*, 99(1), 3–22.
- Lorch, R. F., & van den Broek, R. (1997). Understanding reading comprehension: Current and future contributions of cognitive science. *Contemporary Educational Psychology*, 22(4), 213–247.
- Mathes, P. G., et al. (1994). Increasing strategic reading practice with Peabody classwide peer tutoring. *Learning Disabilities Research and Practice*, 9(1), 44–48.
- McCombs, B. L., & Whistler, J. S. (1997). The learner-centered classroom and school: Strategies for increasing student motivation and achievement. In B. L. McCombs & J. S. Whistler (Eds.), *The learner-centered classroom* (pp. 63–101). San Francisco: Jossey-Bass.
- Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology*, 80(4), 514–523.
- Meece, J. L., & Holt, K. (1993). A pattern analysis of students' achievement goals. *Journal of Educational Psychology*, 85, 582–590.
- Meece, J. L., & Miller, S. D. (1999). Changes in elementary school children's achievement goals for reading and writing: Results of a longitudinal and an intervention study. *Scientific Studies of Reading*, 3(3), 207–230.
- Miller, S. D., & Meece, J. L. (1997). Enhancing elementary students' motivation to read and write: A classroom intervention study. *Journal of Educational Research*, 90, 286–301.
- Moore, D. W., Bean, T. W., Birdyshaw, D., and Rycik, J. A. (1999). *Adolescent literacy: A position statement*. Retrieved January 29, 2007, from http://www.reading.org/downloads/positions/ps1036_adolescent.pdf. Also published in the *Journal of Adolescent and Adult Literacy*, 43, 97–112.
- Morrow, L. M. (1996). *Motivating reading and writing in diverse classrooms* (NCTE Research Rep. No. 28). Urbana, IL: National Council of Teachers of English.
- NASBE Study Group on Middle and High School Literacy. (2006). *Reading at risk: The state response to the crisis in adolescent literacy* (Rev. ed.). Alexandria, VA: National Association of State Boards of Education. Retrieved February 17, 2007, from http://www.carnegie.org/literacy/pdf/Reading_at_Risk_report.pdf.

- National Research Council. (2000). *How people learn: Brain, mind, experience, and school* (expanded ed.). Committee on Developments in the Science of Learning and Committee on Learning Research and Educational Practice. J. D. Bransford, A. Brown, & R. R. Cocking (Eds.). Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- NICHHD (National Institute of Child Health and Human Development). (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.
- Nokes, J. D., & Dole, J. A. (2004). Helping adolescent readers through explicit strategy instruction. In T. L. Jetton & J. A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 162–182). New York: The Guilford Press.
- Nolen, S. B., & Nichols, J. G. (1994). A place to begin (again) in research on student motivation: Teachers' beliefs. *Teaching and Teacher Education*, *10*, 57–69.
- Oldfather, P., & Dahl, K. (1994). Toward a social constructivist reconceptualization of intrinsic motivation for literacy learning. *Journal of Reading Behavior*, *26*, 139–158.
- Oldfather, P., & McLaughlin, H. J. (1993). Gaining and losing voice: A longitudinal study of students' continuing impulse to learn across elementary and middle school contexts. *Research in Middle Level Education*, *3*, 1–25.
- Peterson, C. L., Caverly, D. C., Nicholson, S. A., O'Neal, S., & Cusenbary, S. (2000). *Building reading proficiency at the secondary level: A guide to resources*. Austin, TX: Southwest Educational Development Laboratory. Retrieved April 3, 2007, from <http://www.sedl.org/pubs/reading16/buildingreading.pdf>.
- Pickens, J., & McNaughton, S. (1988). Peer tutoring of comprehension strategies. *Educational Psychology: An International Journal of Experimental Educational Psychology*, *8*(1–2), 67–80.
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology*, *88*(3), 408–422.
- Ryan, R. M., Connell, J. P., & Grolnick, W. S. (1992). When achievement is not intrinsically motivated: A theory of internalization and self-regulation in school. In A. K. Boggiano & T. S. Pittman (Eds.), *Achievement and motivation: A social developmental perspective* (pp. 167–188). Toronto: Cambridge University Press.
- Schunk, D. H., & Rice, J. M. (1993). Strategy fading and progress feedback: Effects on self-efficacy and comprehension among students receiving remedial reading services. *Journal of Special Education*, *27*, 257–276.
- Schunk, D. H., & Zimmerman, B. J. (1997). Developing self-efficacious readers and writers: The role of social and self-regulatory processes. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 34–50). Newark, DE: International Reading Association.
- Sharan, Y., & Sharan, S. (1992). *Expanding cooperative learning through group investigation*. New York: Teachers College Press.
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, *85*, 571–581.
- Soriano, M., Vidal-Abarca, E., & Miranda, A. (1996). Comparación de dos procedimientos de instrucción en comprensión y aprendizaje de textos: Instrucción directa y enseñanza recíproca. [Comparison of two procedures for instruction in comprehension and text learning: Direct instruction and reciprocal teaching.] *Infancia y Aprendizaje*, *74*, 57–65.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, *21*, 360–407.
- Stevens, R. J., Madden, N. A., Slavin, R. E., & Farnish, A. M. (1987). Cooperative integrated reading and composition: Two field experiments. *Reading Research Quarterly*, *22*(4), 433–454.
- Stevens, R. J., Slavin, R. E., & Farnish, A. M. (1991). The effects of cooperative learning and instruction in reading comprehension strategies on main idea identification. *Journal of Educational Psychology*, *83*(1), 8–16.
- Stipek, D. (1996). Motivation and instruction. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 85–113). New York: Macmillan.
- Taylor, L., & Adelman, H. S. (1999). Personalizing classroom instruction to account for motivational and developmental differences. *Reading & Writing Quarterly*, *15*(4), 255–276.
- Tobin, K. (1984). Student task involvement in activity oriented science. *Journal of Research in Science Teaching*, *21*, 469–482.
- Tomlinson, C., Brighton, C., Hertberg, H., Callahan, C., Moon, T., Brimijoin, K., Conover, L., & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted*, *27*(2/3), 119–145.
- Turner, J. (1995). The influence of classroom contexts on young children's motivation for literacy. *Reading Research Quarterly*, *30*, 410–441.
- Utter, D. A. (1988). Activating comprehension through cooperative learning. *Reading Teacher*, *41*(4), 390–395.
- Vallerand, R., Gagné, F., Senecal, G., & Pelletier, L. (1994). A comparison of the school intrinsic motivation and perceived competence of gifted and regular students. *Gifted Child Quarterly*, *36*, 68–72.
- Wigfield, A., Eccles, J. S., MacIver, D., Reuman, D., & Midgley, C. (1991). Transitions at early adolescence: Changes in children's domain-specific self-perceptions and general self-esteem across the transition to junior high school. *Developmental Psychology*, *27*, 552–565.
- Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology*, *89*, 420–432.
- Worthy, J. (1996). A matter of interest: Literature that hooks reluctant readers and keeps them reading. *The Reading Teacher*, *50*(2), 2–10.
- Worthy, J., Moorman, M., & Turner, M. (1999). What Johnny likes to read is hard to find in school. *Reading Research Quarterly*, *34*, 12–27.
- Zahorik, J. (1996). Elementary and secondary teachers' reports of how they make learning interesting. *Elementary School Journal*, *96*, 551–564.
- Zimmerman, B., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology*, *82*, 51–59.



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