Houghton
Mifflin
Harcourt™

JOURNEYS

Every Reader
Empowered. Inspired. Confident.

A **RESEARCH-BASED** APPROACH

GRADES K–5

Every Reader

EMPOWERED INSPIRED CONFIDENT

CONTENTS

Overview

Houghton Mifflin Harcourt™ *Journeys* is a core reading program for grades K–6. In the program, students develop reading comprehension skills as well as skills with critical thinking, writing, speaking, listening, and research. *Journeys* uses digital tools and results-driven instruction to build better readers, and to scaffold and differentiate to meet all students' needs. Houghton Mifflin Harcourt *Journeys* has long been a leader with demonstrated efficacy. Increased research into how learning occurs and how technology supports learning has revealed new understandings of how students learn and how teachers can support learning. For Houghton Mifflin Harcourt this deeper understanding presented a call and a challenge to build upon the strengths and the efficacy of *Journeys,* and create an even more effective program. *Journeys* © 2017 is designed to provide universal access to rigorous, standards-based learning.

The purpose of this document is to demonstrate clearly and explicitly the scientific research base for *Journeys* © 2017. The program is built around what we know about effective instruction for elementary readers—how to support students in learning to comprehend and communicate orally and in writing—and what we know about how best to meet the needs of all learners through differentiation, ongoing assessment, and 21st-century learning, including the use of technology. This report is organized around the key elements of effective and research-based instruction in reading and English language arts. *Journeys* integrates each of these key themes and approaches into a comprehensive program that research suggests will support students as they progress to higher academic levels.

To help readers of this document understand the research and how it connects to *Journeys*, this report is organized as follows for each strand:

- **Defining the Strand.** This section summarizes the terminology and provides an overview of the research related to the strand.

- **Research that Guided the Development of *Journeys*.** This section identifies subtopics within each strand and provides excerpts from and summaries of relevant research on each subtopic.

- **From Research to Practice.** This section explains how the research data are exemplified in *Journeys*.

The combination of the major research recommendations and the related features of *Journeys* will help readers better understand how the program incorporates research into its instructional design.

A reference list of works cited is provided at the end of this document.

Research on the Effectiveness of *Journeys*

This research base outlines the foundational research upon which the Houghton Mifflin Harcourt *Journeys* © 2017 program was developed. The scientifically-based research cited in this document provides evidence that *Journeys* was designed using the latest academic and scholarly work about what constitutes good reading and English language arts instruction. The evidence-based practices outlined here were incorporated into the program to provide educators with the most effective tools and strategies, shown by previous research, to help children become confident, skilled readers.

Houghton Mifflin Harcourt *Journeys* program's content and pedagogy were not only informed by academic research but also direct efficacy research. Since the first version of *Journeys* was created, over 25 research studies have been performed to evaluate the program's effectiveness, and findings of this research have been used to improve and refine the instruction and structure of this program.

The overwhelming results of these studies indicates that usage of *Journeys* leads to improved student outcome's that are often greater than would be expected if students were exposed to other programs.

For example, early evidence of *Journeys'* impact on students' reading performance was provided in a statewide-comparative study including a total of 106 schools and over 18,000 students.[1] This research evaluated statewide student reading performance for schools using an early version of the *Journeys* program, to similar schools using alternative programs over the period of three years. The results of this quasi-experimental, "silver-standard" efficacy study clearly indicated student reading performance was improved for students using *Journeys* when compared to other students in the state using alternative reading programs.

Students using *Journeys* also witness significant increases in multiple reading skill domains, including reading comprehension, language, vocabulary, and word analysis.[2,3] Such improvements, as measured by percentile gains, from the beginning of the year to the end of the year, have been larger than expected as students have improved their relative standing on national tests after only using *Journeys* for one academic year.[2]
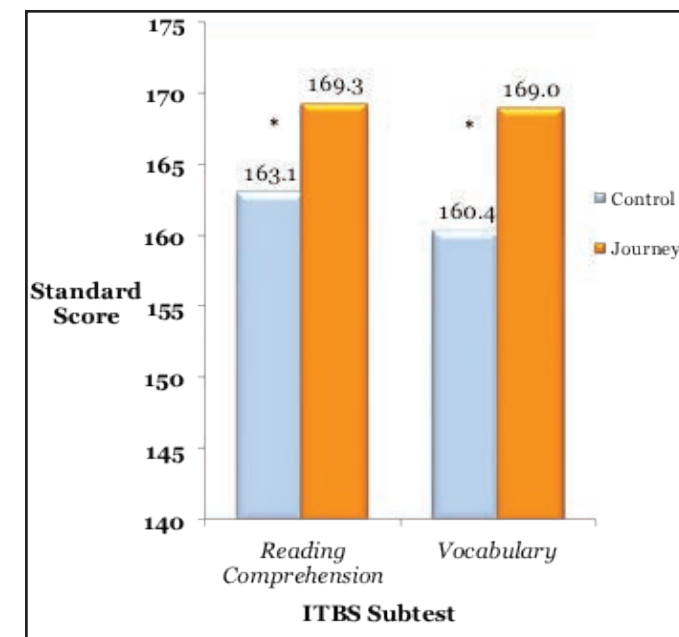

FIGURE 1

Results from a Two-Year Study of Journeys Impact on Students' Iowa Test of Basic Skills Performance[3]

Note: * indicates a significant difference at the p < .05 level.
Adopted from Resendez and Azin (2013, October).

Proof of *Journeys'* effectiveness has also been demonstrated using randomized control trials, the "gold standard" research design for product evaluation. A total of 46 classrooms and over 700 students participated in this two-year, experimental study of *Journeys.* Tracking students over the study period, statistical analysis indicated that using *Journeys* caused students to perform better on tests of reading achievement than similar students using other programs.[3] These effects were meaningful and conclusive, as this study design is the only research design that meets the What Works Clearinghouse's standards for program evaluation.[4]

The culmination of this research demonstrates that *Journeys* is an effective reading program that leads to better student outcomes. Research is ongoing as Houghton Mifflin Harcourt is committed to helping districts harness the power of *Journeys* in the classroom.

For more information on the efficacy research for *Journeys*, contact efficacy@hmhco.com

Footnotes

1. Resendez, M., Azin, M. (2014, July). A Study on the Effectiveness of Journeys in Texas Using Existing Data Sources Jackson, WY: Author.

2. PRES Associates Inc. (2014, November). *Houghton Mifflin Harcourt Journeys Common Core Pilot Study Report*. Jackson, WY: Author.

3. Resendez, M., Azin, M. (2013, October). *A Study on the Effects of Houghton Mifflin Harcourt's Journeys Program: Year 2 Final Report*. Jackson, WY: PRES Associates, Inc.

4. For more information on the What Work Clearinghouse evidence standards, visit http://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_procedures_v3_0_standards_handbook.pdf

STRAND 1: TEXT

Reading is an active and complex process that involves: understanding written text; developing an interpreting meaning; [and] using meaning as appropriate to type of text, purpose, and situation.

National Assessment of Educational Progress Reading Framework, 2012, p. iv

Texts worthy of instruction…allow readers to reflect on themselves and their actions; invite them in the worlds of others; understand the biological, social, or physical world; or solve problems that are timely and important. Texts worthy of instruction also allow students to develop their literary prowess and become informed citizens.

Fisher & Frey, 2012, p. 2

How is reading complex text like lifting weights? Just as it's impossible to build muscle without weight or resistance, it's impossible to build robust reading skills without reading challenging text.

Shanahan, Fisher, & Frey, 2012, p. 58

Defining the Strand

In the past, teachers may have adjusted the complexity of texts, to provide students with texts at their reading level, rather than expected all students to wrestle with complex texts. Teachers may have prompted personal connections with texts, rather than focused on textual analysis and synthesis. With a new focus nationwide on close reading and complex texts, teachers and students are now focusing their energies on building understandings and analyses of complex texts and engaging in repeated readings to explore multiple levels of meaning. Decoding and basic comprehension are the building blocks, but they are not enough. In today's rigorous classrooms, coherent and incisive spoken and written analytic responses are the ultimate means by which students demonstrate their proficiency in reading.

When selecting texts for instruction, Jones, Chang, Heritage, and Tobiason (2014) remind educators that many factors must be considered:

It is important to make sure that there is sufficient richness and complexity in a selected text to stimulate close reading. Students should read a variety of texts, but not every text can be, or needs to be, analyzed and examined in the deep manner required for close reading. Texts not selected for close reading can be used for other reading purposes…Texts used specifically for close reading should enable students to gain new insight into the text each time they read it… (p. 6).

Houghton Mifflin Harcourt's *Journeys* © 2017 engages students with rich and varied texts. The program includes high-quality texts that are rich and complex, and worthy of reading and thoughtfully responding through high-quality, collaborative discussions and varied written responses. Different genres offer opportunities for students to build content knowledge and better understand genre structures.

Research that Guided the Development of *Journeys*

## *Complex and High-Quality Texts*

Students read and write in Reading/Language Arts classes at every grade level—what changes is the complexity of the texts that they encounter and produce. This vision of text complexity is central to the progression of rigorous student standards which "hinge on students encountering appropriately complex texts at each grade level to develop the mature language skills and the conceptual knowledge they need for success in school and life" (Coleman & Pimentel, 2012, p. 3).

Elements of Text Complexity: In its research on reading and college readiness, ACT (2006) identified the following elements as central to making texts complex:

- **Relationships:** Interactions among ideas or characters in the text are subtle, involved, or deeply embedded.
- **Richness:** The text possesses a sizable amount of highly sophisticated information conveyed through data or literary devices.
- **Structure:** The text is organized in ways that are elaborate and sometimes unconventional.
- **Style:** The author's tone and use of language are often intricate.
- **Vocabulary:** The author's choice of words is demanding and highly context dependent.
- **Purpose:** The author's intent in writing the text is implicit and sometimes ambiguous. (ACT, 2006, p. 17)

Measures of Text Complexity: The complexity of a text depends on more than a simple calculation of the length of words and sentences. One model of measuring a text's complexity involves three factors—qualitative; quantitative; and in consideration of reader, text, and task:

1. A qualitative evaluation of text looks at the levels of meaning in the text, the text structure, the conventionality and clarity of the language, and the knowledge demands that the text's content places on readers.

2. A quantitative evaluation examines readability measures and other calculations of text complexity based on word and sentence length and familiarity.

3. A matching of the text to the reader and task considers such variables as the reader's motivation, knowledge, and experiences and the task's purpose and complexity.
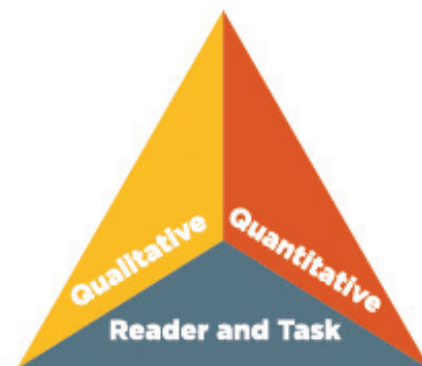
Importance of Complexity: Complexity matters. In its 2006 report, *Reading Between the Lines*, ACT, Inc. concluded that the main difference between students who reached the benchmark score level in their performance and those who did not was whether or not students could answer questions based on complex texts. Alarmingly, while the level of texts that students will encounter—in textbooks, journals, and the workplace—has increased over time, few students have been prepared to read, understand, and analyze these complex texts (ACT, 2009).

The Quality of Text: Texts selected for instruction must meet the criteria for appropriate text complexity (described above) as well as criteria for quality. Educators must ask the question: "Are these texts worth teaching?" In their qualitative study that examined the implementation of close reading instruction at the elementary level, Fisher and Frey (2012) found that the quality of texts mattered; teachers agreed that not all texts were worthy of a close reading.

In their study of research-based factors to improve reading comprehension in kindergarten through 3rd grade, Shanahan and colleagues (2010) found text selection to be a key factor, concluding that:

> ...early exposure to different types of text builds the capacity to understand the large variety of reading material that students will encounter as they move from grade to grade. Not only should teachers introduce students to a variety of texts, but teachers should also ensure that a selected text (1) is rich in depth of ideas and information, (2) has a level of difficulty commensurate with the students' word-reading and comprehension skills, and (3) supports the purpose of the lesson ....Stories with strong literary merit and informational texts that are accurate, well-written, and engaging are consistently a good choice for teaching reading comprehension. (p. 30–31)

Supporting Students in Reading Complex and High-Quality Texts: To support students in reading complex and high-quality texts, a close reading approach can be effective (Coleman & Pimentel, 2012). According to Cummins (2013), close reading is a word-, phrase-, paragraph- and sentence-level analysis of text by which the reader can determine "which details are most important and how these fit together logically to convey the author's central idea(s) or theme(s)" and then can begin "to critically evaluate these ideas or themes" (p. 1). In a qualitative study in which they looked at close reading instruction at the elementary level, Fisher and Frey (2012) found that students were able to approach complex texts with greater skill when they engaged in rereading and close reading procedures.

Teachers can also provide support for students by focusing on the various elements of text complexity and designing instruction accordingly. To identify which elements are likely to pose the most difficulty for students, educators must pre-read texts and map language features, identify new content and unknown vocabulary, and consider the students' purpose for reading and tasks related to the reading. For example, texts that pose knowledge demands for students can be made more accessible with a content preview. Unknown vocabulary can be pretaught. Text structures can be made explicit, so that students can use the organization to monitor comprehension and predict what will come next.

For some students, leveled texts can act as a scaffold, helping to prepare students to read more complex texts. Leveling assists students in learning to read (Clay, 1991). Matching the instructional activity with the learner's level has sometimes been referred to as the Goldilocks principle—activities should be not too hard or not too easy, but just right for learning to occur (VanLehn, Graesser, Jackson, Jordan, Olney, & Rose, 2007; Metcalfe & Kornell, 2005; Calkins, 2001; Wolfe, Schreiner, Rehder, Laham, Foltz, Kintsch, & Landauer, 1998; Morris, Blanton, Blanton, Nowacek, & Perney, 1995). Leveled texts can offer needed support for struggling readers and ELL students (Short & Fitzsimmons, 2007). According to Snow, Burns, and Griffin (1998) "regardless of a child's reading ability, if too many of the words of a text are problematic, both comprehension and reading growth itself are impeded" (p. 213). Finely leveled texts can provide scaffolding and build confidence.

For English learners, teachers must pay particular attention instructionally to the third factor of text complexity: the match between the text and the reader. For English learners, if what is most "complex" about the text is the content for the reader, the task the reader must perform, and the context, then teachers must keep these in mind as they plan instructional responses for these students (Bunch, Walqui, & Pearson, 2014).

High-quality, complex texts should not be made available for only certain populations of students. In their study on discussion-based approaches in middle and high school English classrooms, Applebee, Langer, Nystrand, and

Gamoran (2003) found that "upper-track classes read more traditional literature and essays; lower-track classes read more young adult literature and poetry" (p. 714). These kinds of differences put students on a permanent track, with struggling learners never having the exposure to canonical texts that they need. For this reason, it is essential to provide complex, high-quality texts to *all* students.

A Balance of Literary and Informational Texts

Exposure to both literary and informational texts is important. Literature texts are the content of the English language arts classroom and play an essential role, but informational texts, too, are important for preparing students for success in school and work. Most of the content students will encounter in school, in work, on the Internet and elsewhere is informational. As Duke (2004) asserts: "We are surrounded by text whose primary purpose is to convey information about the natural or social world. Success in schooling, the workplace, and society depends on our ability to comprehend this material" (p. 40). Informational texts are those that are written to convey information to readers about the natural or social world, and are one way that most of us come to understand the world around us. In an effective literacy program, students need exposure to high-quality literary *and* informational texts.

Distribution of Text Types: Increasingly, states and districts recognize the importance of offering a balance of literary and informational genres in instruction in the reading and English language arts classroom.

In recognition that:

- "Literary and informational texts are marked by distinct structural characteristics that readers rely on as they seek to understand what they read" (p. 7)
- Readers "read literary and informational texts for different purposes" (p. 8)

The National Assessment of Educational Progress (NAEP) includes literary texts (fiction; literary nonfiction, such as essays, speeches, autobiographies, and biographies; and poetry) and informational texts (exposition, argumentation and persuasive texts, and procedural text and documents). The Reading Framework for the 2013 National Assessment of Educational Progress (NAEP) specifies the percentage balance of literary and informational texts required as students progress through the grade levels; in NAEP, the proportion of informational texts is high and increasing over time.

Distribution of Literary and Informational Passages by Grade Level in 2013 NAEP Reading Framework		
Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	30%	70%

(National Assessment Governing Board, 2012).

The Relationship of Text and Content: Teaching varied text types is crucial for student learning. Through reading, students build knowledge and understanding. Informational texts are particularly important for study because it is through these texts that students build their understandings of the world around them. Including instruction in arguments has also been shown to be beneficial. As part of a research study on teaching argument to young children, Riley and Reedy (2005) found that instruction in argument led to improved critical thinking.

Reading and content-building share a recursive relationship. Reading helps students build content knowledge; content knowledge helps students better comprehend new and complex texts. Numerous studies have shown that deepening students' knowledge of a topic improves their comprehension (Graves, Cooke, & LaBerge, 1983; McKeown, Beck, & Blake, 2009).

In a study with students in grade 3, Best, Floyd, and McNamara (2008) found that while students' comprehension of narrative text was most influenced by decoding skills, their comprehension of expository texts was most influenced by their knowledge base. From their research, "we can conclude that children with less prior knowledge will struggle to form a coherent situation model when reading expository texts because they are not able to generate the necessary inferences" (p. 153). Similarly, to teach argument writing, Ferretti, Andrews-Weckerly, and Lewis (2007) recommend that teachers build students' content knowledge.

In addition to building content knowledge of the content of texts, as they read students build knowledge of genres and structures of texts. This content helps them become better readers and writers. In *Writing Next,* Graham and Perin (2007) conducted a meta-analysis of research on the impact of specific types of writing instruction, resulting in the identification of 11 elements of effective writing instruction for adolescents. Among their findings? Adolescents benefit from "opportunities to read, analyze, and emulate models of good writing" and from the use of "writing as a tool for learning content material" (p. 5).

Teaching across Text Types: Research suggests that the approaches students take to reading and comprehending fiction and informational texts differ (Klingner, Vaughn, & Boardman, 2007). Because comprehension strategies do not necessarily transfer from one type of text to another, students need to be supported in learning how to read across multiple texts (Ogle & Blachowicz, 2002, p. 270). Williams (2005) conducted a series of studies and found that at-risk students were able to transfer what they learned to new texts when they were given explicit instruction with a focus on text structure. Readers need specific, advanced skills to comprehend content-area texts (Shanahan & Shanahan, 2008). Strategies instruction has been shown to be effective for content-area readers (see Cantrell, Almasi, Carter, Rintamaa, & Madden, 2010; Duke, 2004; National Institute for Literacy, 2007; National Institute of Child Health and Human Development, 2000; Hollingsworth & Woodward, 1993; Nokes & Dole, 2004; Snow, 2002; Underwood & Pearson, 2004).

Engaging Content, Topics, and Themes

When selecting texts for the classroom, educators must pay attention to elements discussed previously in this report—complexity, quality, and genre. Yet another element to consider is whether the text is of interest to students. Texts used in the classroom should engage students' interest and motivate them to continue reading.

Characteristics of Engaging Texts: Well-written nonfiction texts on topics of interest and fiction with interesting characters, exciting plots, and familiar themes will engage readers. Other properties of texts that have been shown to increase student interest include interesting topics (Schiefele, 1999; Fountas & Pinnell, 1996, 2001, 2006)), appealing format (Schraw, Bruning, & Svobada, 1995), relevance (Schraw & Dennison, 1994), and appropriate language and complexity (Fountas & Pinnell, 1996, 2001, 2006). Particularly for those students who prefer to read nonfiction or who are interested in the topics of the texts, informational texts purposefully selected have been shown to engage and motivate readers (Caswell & Duke, 1998; Jobe & Dayton-Sakari, 2002).

Instructional Benefits of Engaging Texts: Studies have shown a high correlation between personal interest and text learning—and these findings hold up "for both short and long text, narratives and expository text, younger and older students, and students with high or low reading ability" (Schiefele, 1999, p. 265). Students who are interested in what they are reading are mentally engaged (Hidi & Boscolo, 2006). Guthrie, Hoa, Wigfield, Tonks, Humenick, and Littles (2007) studied the connection between motivation and comprehension among elementary students and found that "interest and positive affect for reading invariably were associated with high cognitive recall and comprehension of text" (p. 306). Selecting texts of interest to students appears to increase their generalized motivation for learning (Guthrie, Hoa, Wigfield, Tonks, & Perencevich, 2006) and their persistence in reading and completing text-related tasks (Ainley, 2012). Using students' interests to guide text selection is particularly important with nonfiction texts; this as a starting point, followed by the teacher reading aloud while modeling strategy use is effective at developing non-fiction comprehension skills (Calkins, 2001).

From Research to Practice

Complex and High-Quality Texts in Journeys

Houghton Mifflin Harcourt's *Journeys* © 2017 includes complex texts, appropriate for each grade level, with engaging themes, rich language, and elements of style. In *Journeys*, the texts offered at each grade level are appropriately complex, as based on:

- Quantitative measures of text complexity
- Qualitative measures of text complexity
- The match of tasks, texts, and readers

With each text, teachers are provided with the detailed information about complexity that will allow them to tailor instruction in focused ways to support readers in successful comprehension.

At the opening of each lesson, teachers are provided with a **Text Complexity Rubric** that visually identifies and describes the text-specific elements of text complexity for the **Anchor Text** and **Paired Selection,** such as in this example from the grade 4 Teacher's Edition:

Additionally, in the Teacher's Edition teachers are reminded of **Reader and Task Considerations** so that they can determine how much support their students will need to be successful in comprehending and analyzing the lesson's text. For an example of this feature, see this chart from grade 4:

The varied supports and resources in *Journeys* help students prepare for reading, engage in multiple close reads for deep comprehension, and communicate their analysis of complex texts:

- The enhanced **Student eBook** offers annotation, highlighting, and commenting tools that help students to read closely and save and organize their notes in *myNotebook.*
- The **Prepare for Complex Texts** section offers specific supports for students.
- The **Be a Reading Detective** feature supports students' close reading.

- The program's **First Read / Second Read** design helps readers engage in close reading.
  During multiple reads of the text, teachers are supported with appropriate scaffolds that prompt students to use text evidence to support their claims and conclusions, and to deeply analyze the text based on the target outcomes that frame the CA CCSS. In terms of responding, after the **First Read,** students engage in a **Collaborative Discussion.** After the **Second Read,** they **Dig Deeper** to analyze the text at high depth-of-knowledge levels, such as in the prompts and **Performance Task** from the grade 4 example (below). And, finally, students' third, independent read takes them to the **Reader's Notebook** to respond to the text.

- Instruction in academic language builds students' access to complex texts.
- The **Text X-Ray** feature supports teachers in helping students deconstruct texts.
- The **Trade Book Connections** and expanded **Trade Book Lessons** at the end of units in grades 1 through 5 offer additional complex-text reading opportunities. Practice and exposure to extended texts help students build reading stamina.
- Digital tools enable students to capture their annotations and textual evidence via a digital notebook and then import it to online **Performance Tasks**.

Appropriate scaffolds are built into the reading process to support readers. Scaffolds include:

- Focused, text-dependent questions
- Multiple texts sequenced to build students' content knowledge
- Opportunities for rereading with the **First Read/Second Read** design
- Explicit instruction on related skills, such as annotation
- Sentence frames, cognate call-outs, idiomatic expression call-outs, linguistic transfer and non-transfer supports, and other in-time scaffolds for English language learners

This example from the grade 4 Teacher's Edition shows how one text is introduced for teachers, with specific suggestions for scaffolding students' close reading:

To help teachers support *all* students in developing their reading skills, the program offers **Leveled Readers** in addition to the core program texts. These texts offer leveled support that aligns with the core instruction for small groups, including:

- Struggling Readers
- On-Level Readers
- Advanced Readers
- English Learners

Each of these **Leveled Readers** is offered along with instructional suggestions in the Teacher's Edition for:

- Introducing the Text
- Supporting the Reading
- Discussing and Revisiting the Text

The Balance of Literary and Informational Texts in Journeys

High-quality literary and informational texts are at the center of *Journeys* © 2017. The *Journeys* texts offer engaging narratives and expository texts about interesting topics and offer an expanded focus on literary *and* informational texts across the grade levels.

At grade 4, for example, students read from a wide range of text genres including:

- Informational Text
- Tall Tale
- Play
- Realistic Fiction
- Fable
- Myth
- Folktale

- Historical Fiction
- Biography
- Fantasy
- Advertisements
- Poetry
- Narrative Nonfiction
- Science Fiction

Every text in *Journeys* © 2017 is introduced with a clear identification of its genre, and the features of that genre, such as in these examples from grade 4:

In *Journeys,* **Unit Openers** describe the unit topic or theme, offer a hook to the content with a video or media connection that gives additional background or context, link to the **FYI Site** and **Channel 1,** and preview the **Unit Performance Task**.

The **FYI Site** for grades K through 5 is tied to unit topics and extends students' knowledge of new content and ideas. These links to vetted nonfiction articles connect to each unit's topic and provide opportunities for students to expand their understanding of the topic and use the articles as a source for research and writing. The **FYI Site** is continually updated with new content to support students' increased domain knowledge.

Interactive Lessons in Listening, Speaking, and Writing offer contemporary and engaging tutorials along with activities on topics of interest to students.

HMH's partnership with **Channel One News®** enables users of *Journeys* to access video clips related to social studies and science topics via links in the **Student eBook.** With these resources, students will build additional background and content-area knowledge.

Engaging Content, Topics, and Themes in Journeys

The *Journeys* © 2017 program recognizes the reciprocal relationship between literacy and content knowledge. The more that students know about a topic the more easily they can comprehend texts about the content; the most students read about a topic, the more they build their knowledge of that topic. Through reading complex and high-quality literary and informational texts throughout *Journeys* © 2017, students strengthen their content knowledge and encounter engaging themes and texts. By building their content knowledge, students are better prepared to comprehend increasingly complex texts as they continue through school.

In *Journeys,* the content of lessons is carefully designed around themes and topics that support the essential building of students' knowledge of different domains.

Lessons are organized around specific **Topics,** such as in grade 4:

· Helping Others	· The Environment
· Civil Rights	· Individual Contributions
· Raising Money	· Service Animals
· Traditional Tales	· Traditional Tales
· Visual Arts	· Agriculture
· Research	· Native American History
· Performance Arts	· Media
· Hurricanes	· Citizens' Rights
· Forces of Nature	· Life Cycles
· Interdependence	· Animal Behavior
· Insects	· Inventions

STRAND 2: TECHNOLOGY AND MULTIMEDIA LEARNING

For hundreds of years the primary vehicle for instruction has been words, such as lectures or textbooks. Advances in computer and communication technologies now allow instructors to supplement verbal modes of instruction with visual modes of instruction, including dazzling graphics that students can interact with. Research on multimedia learning provides encouraging evidence that under appropriate circumstances, students learn better from words and pictures than from words alone...

Mayer, 2013, p. 396

Those who use blended approaches base their pedagogy on the assumption that there are inherent benefits to face-to-face interaction (both among learners and between learner and instructor) as well as the understanding that there are some inherent advantages to using online methods in their teaching. Thus the aim of those using blended learning approaches is to find a harmonious balance between online access to knowledge and face-to-face human interaction.

Osguthorpe & Graham, 2003, p. 228

Defining the Strand

Numerous studies have attested to the effectiveness of technology to facilitate student learning and increase achievement in the classroom (see syntheses and meta-analyses conducted by Cheung & Slavin, 2012a, 2012b; Goldberg, Russell, & Cook, 2003; Means, Toyama, Murphy, Bakia, & Jones, 2010; Waxman, Lin, & Michko, 2003; Tamim, Bernard, Borokhosvski, Abrami, & Schmid, 2011; and Teh & Fraser, 1994).

By using technology in and out of the classroom, teachers use a medium that meets the expectations and interests of 21st century students. In studying technology use by young people, the Kaiser Family Foundation found that "media are among the most powerful forces in young people's lives today" (Rideout, Foehr, & Roberts, 2010, p. 1). Young people today have grown up with technology, leading to Prensky (2001) to use the term "digital natives" to describe them. Media has expanded our concept of literacy, redefining how we communicate and locate information (International Reading Association, 2009; Rhodes & Robnolt, 2009). Today's instruction must reflect these changes.

While studies attest to the positive impact of technology in the classroom, technology alone does not improve student learning. To be effective, technology must be used purposefully and meet specific design requirements (Mayer, 2001, 2005, 2013). In *Journeys*, technology is used intentionally to foster increased learning. Technology supports data-drive instruction with the program's numerous computer-based assessment tools. Multimedia presentations engage learners and enhance access to grade-level content. Easy-to-use interfaces, customizable options, and 24/7 access all mean that users can learn how they want whenever they want.

Research that Guided the Development of *Journeys*

Engagement via Technology

Researchers and educators recognize the important link between student engagement—their interest, enjoyment, and time on task—and student learning. In the English language arts classroom, student engagement is a "powerful determinant of the effectiveness of any given literacy approach" (Strangman & Dalton, 2006, p. 559). By identifying tools and strategies that promote engagement, teachers can increase motivation and improve learning and performance. An increasing body of evidence supports the idea that technology use in the classroom increases student engagement.

In their synthesis of research on improving student engagement, Taylor and Parsons (2011) found multimedia and technology use to be a key, shared element in engaging classroom environments. Chen, Lambert, and Guidry (2010) found that Web-based learning led to increased student engagement and learning outcomes in their study.

What is the nature of technology's engagement? Reinking (2001) attributes greater engagement in multimedia environments to the following factors:

· The interactive nature of technology
· Availability of embedded scaffolds
· The game-like nature of the delivery
· The social learning environment created through technology

Game-based learning in the classroom has particular implications for student engagement because engagement is intrinsic in game-playing. Computer-based games are powerful tools for learning that impact student engagement and motivation (Prensky, 2000).

Instructional Responsiveness via Technology

Technology has been shown to have particular benefits in English language arts, writing, and reading. "Computers help shorten the work of composing and revising...Technology also opens new opportunities for helping children learn the rudiments of grammar and composition, while encouraging them to share their work with one another" (National Commission on Writing, 2006, p. 60). Their review of research on technology-supported learning led Reimann and Aditomo (2013) to conclude that computer-assisted instruction had the highest impact on students' writing. Goldberg, Russell, and Cook (2003) conducted a meta-analysis of 26 studies that examined the performance of K-12 students who were taught writing with computers compared with those taught in paper-and-pencil conditions. The "results of the meta-analysis suggest that on average students who use computers when learning to write are not only more engaged and motivated in their writing, but they produce written work that is of greater length and higher quality" (online). Students in grade 8 "whose teachers more frequently asked them to use the computer to draft and revise their writing scored higher [on NAEP] than those whose teachers did so less frequently. Students whose teachers never asked them to draft and revise their writing on a computer scored the lowest" (National Center for Education Statistics, 2012b, p. 17).

Technology provides the means for teachers to increase their instructional responsiveness. With improvements in computer-based assessment practices and data collection and analysis, teachers can have up-to-the-minute data about student learning and performance enabling them to offer feedback and redirect instruction accordingly. "Technology can also analyze and provide immediate feedback on performance, and can suggest modifications in instruction where necessary to improve student achievement." (CEO Forum on Education & Technology, 2001). Computer-based assessments can support teachers and students with frequent, consistent, timely, diplomatic, and evaluative feedback (Bischoff, 2000).

Research shows the benefits of technology for many student populations:

Benefits to Lower Performing Students: Online learning approaches have been shown to be effective across types of learners, including lower-performing students, (Cheung & Slavin, 2012a, 2012b; Means, Toyama, Murphy, Bakia, & Jones, 2010) perhaps, in part, because of the power of technology to embed scaffolds at the point of use. In the 2011 computer-based administration of the NAEP writing assessment, students who took advantage of online tools and scaffolds outperformed those who did not. Those "who used the [online] thesaurus [tool] scored higher, on average, than students who did not use it, and students who used it two or more times scored higher than students who used it only once..." (p. 18). Similarly, the highest performers also used the backspace key and the spell-check tool more frequently than the lowest performers (National Center for Education Statistics, 2012b). As MacArthur (2009) discusses, outlining programs, word processing, spell checkers, and other applications can help struggling writers with all stages of the writing process—from drafting to revising.

Benefits to English Learners: Macaruso and Rodman (2011) found that computer-assisted instruction benefited young English learners, with a treatment group outperforming a control group across foundational reading skills. Similarly, Lopez (2010) found technology to have specific benefits for English learners. Cheng (2007) found that language learners who used simulation-based approaches in genre analysis improved their writing ability and enhanced their awareness of features of different genres. Hegelheimer and Fisher (2006) found that English language learners benefited from explicit grammar instruction and interactivity when using an online writing tool.

Benefits to Students with Different Learning Styles: Mayer (2001, 2005), a leading researcher in the field of multimedia learning, argues that student learning is increased in multimedia environments because information can be presented in multiple formats—including words, audio, and pictures. Students are able to learn more and retain information when they can access information using these different pathways. Multimedia learning environments reach students who learn in different ways—visual learners, auditory learners, kinesthetic learners.

Benefits to Advanced Learners: For advanced learners, technology offers the opportunity to increase the pace of learning, to access additional resources and information, and to collaborate with others.

Finally, technology is important in classroom assessment in order to prepare students for the next-generation assessments they will encounter as they continue through school.

According to the Smarter Balanced Assessment Consortium (SBAC), "... employing new technologies will allow the Smarter Balanced Assessment Consortium to:

- Accurately and efficiently measure student achievement and growth through computer-adaptive testing;

- Develop innovative and real-world test items that assess the breadth of the Common Core State Standards for virtually all students, including those with disabilities and English language learners; ..." (Smarter Balanced Assessment Consortium, 2014, online).

According to the Partnership for Assessment of Readiness for College and Careers (PARCC®), the PARCC assessments will be much more interactive and engaging than traditional, on-demand assessments; "PARCC state know that in the 21st century students need to have access to technology in the classroom throughout the year, not just at testing time. Devices used for tests should also be used for instructional purposes" (PARCC, 2013). With the benefits of technology "PARCC will give students a chance to solve real problems...[and] they'll not only have to solve complex problems, but show *how* they solved them" (PARCC, 2013).

Blended Learning

Fundamentally, blended learning is defined as the combination of face-to-face instruction with computer-enhanced instruction (Osguthorpe & Graham, 2003). The definition is both simple (physical + virtual learning) and complex—complex because of the myriad of design possibilities (Garrison & Kanuka, 2004). Whatever the specifics of the design, the advantages of blended learning formats is that they can join the best features of classroom teaching, while at the same time promoting active, flexible, self-directed learning online. Perhaps in part because blended learning teaches students through mediums and modes that engage them and fit with their daily practices and experiences, Uğur, Akkoyunlu, and Kurbanoğlu (2011) found students to have very positive views on their experiences with blended learning.

Advantages of Blended Learning: Research points to numerous benefits for teachers and students using a blended learning environment.

A Community of Learners: "What makes blended learning particularly effective is its ability to facilitate a community of inquiry" (Garrison & Kanuka, 2004, p. 97). Computer-based collaborative tools allow for online interactions that can create and strengthen a community of learners. In a study of one classroom teacher's experience, Tucker (2012) found that blended learning fostered students' communication and collaboration skills.

Personalized Learning: Blended learning allows for a personalized learning experience for students (Imbriale, 2013; Tucker, 2012), with learners driving the path and the pace of learning (Public Impact, 2013).

Active Learning: Tucker (2012) a classroom teacher who adopted a blended learning model, found that it engaged students as active participants.

Reflective Learning: Cooner (2010) found that blended learning can be designed to foster self-reflection on learning and can, thus, enhance the learning experience for students.

Increased Learning: According to the findings of Public Impact, "blended learning that combines digital instruction with live, accountable teachers holds unique promise to improve student outcomes dramatically" (2013, p. 1).

From Research to Practice

Engagement via Technology in Journeys

In *Journeys* © 2017, engagement via technology is a primary focus.

Program resources use technology smartly, for learning purposes. Research shows that when students are engaged in learning, they are motivated to persist. When they are motivated to persist, they learn more. So engagement is key to the ultimate goal of increased learning.

With the *Journeys* © 2017 enhanced **Student eBook,** new tools make access even easier. Students can access **myNotebook** and **myWriteSmart** at the point of use with links embedded in the eBook. The **myNotebook** feature allows students to personalize their learning, engaging them in learning.

Interactive Lessons tailored to instructional content are embedded at the point of use, and engage students in actively learning new content and skills.

The *Journeys* **Interactive Lessons in Listening, Speaking, and Writing** provide students with engaging tutorials on contemporary topics of interest to students—using an interactive, multimedia presentation that is designed to engage and motivate students.

Digital Resources

To support students before they start this task, use the following digital resources.

▶ Interactive Lessons: Writing to Sources. Writing Narratives: Organize Your Ideas. Writing Narratives: Dialogue and Description.

▶ Interactive Whiteboard Lesson: Narrative Writing. Text Analysis: Parts 1 and 2

Additional resources like the **HMH Decoding Power: Intensive Reading Instruction** resource purposefully employ techniques to engage students. This tool is built on gaming principles to engage students in building skills with phonemic awareness, phonics and word study, vocabulary, comprehension, and writing.

The **HMH Player** app offers offline access and functionality and collaboration, with easy-to-use interfaces and customizable options. Teachers can customize *California Journeys* lessons with simple drag and drop functions that enable them to combine their own created lessons, open source content, and *Journeys* lessons into customized plans.

Instructional Responsiveness via Technology in *Journeys*

In *Journeys* © 2017, technology is used to meet the needs of 21ˢᵗ century learners and teachers.

For students, the program's design offers multiple, varied options that support learning and allow for a personalized, adaptive learning experience.

Students can engage with content in different ways and express their understanding in varied modes. The technological tools in *Journeys* © 2017 provide multiple representations of information and content to students, differentiated ways for students to engage with the content, and varied ways for them to express what they learned. These dynamic interactions with the content lead to enhanced success and therefore, motivation to learn.

For teachers, the program supports professional learning and practice in varied ways.

· Using program tools like the **HMH Player™ App,** teachers can customize instruction by crafting unique lessons from favorite content, core program, and open-source resources.
· Teachers build skills in meeting the needs of all students through the HMH online **Professional Development** site with new author podcasts and model lessons.
· Digital assessment tools provide the information needed for data-based decision making and instruction. Together tools and resources and recording tools offer a better window into student needs, learning, and growth.

Blended Learning in *Journeys*

When offering blended learning opportunities, the challenge lies in determining the optimal blend for greatest learning. In *Journeys* © 2017, HMH integrates digital and print-based resources, offering connections at point of use, so that the blend becomes seamless and resources optimally enhance grade-level content for all learners.

The *Journeys* © 2017 program offers specific features, tools, and resources that extend the research-proven benefits of blended learning.

A Community of Learners: In *Journeys* © 2017, enhancements to **myWriteSmart** enable peer-to-peer and peer-to-teacher collaboration.

Personalized Learning: The program's **Assessment Hub** supports personalizing students' learning through data-driven instruction. Progress monitoring assessments provide ongoing information about student learning and performance.

Active Learning: Digital components of *Journeys* support interactive learning. The **myNotebook** component offers a place for students to record notes, annotate, and respond to readings—which they can then use in **myWriteSmart** when developing writing and performance tasks.

Reflective Learning: Ongoing assessments foster reflection on performance.

Increased Learning: The program's **Interactive Lessons in Listening, Speaking, and Writing** provide learners with rigorous, standards-aligned tutorials for additional practice and reinforcement.

STRAND 3: WRITING

...students who develop strong writing skills at an early age acquire a valuable tool for learning, communication, and self-expression. Such skills can be developed through effective writing instruction practices that provide adequate time for students to write.

Graham, et al., 2012, p. 6

We have long known that the amount of reading and writing children do is directly related to how well they read and write. Classrooms in which all the students learned to read and write are classrooms in which the teachers gave more than 'lip service' to the importance of actually engaging in reading and writing. They planned their time so that children did a lot of reading and writing throughout the day—not just in the 100 minutes set aside for reading and language arts.

Cunningham & Allington, 2007, p. 7

I've come to think that it's very important that writing is not only a process of recording, it is also a process of developing a story or idea...When writing begins with something that has not yet found its significance, it is more apt to become a process of growing meaning.

Calkins, 2001, p. 8

Defining the Strand

Along with teaching students to comprehend complex texts and explore a rich body of literary and informational texts, developing students' ability to communicate their thinking in writing is another important goal of the English classroom. Receptive processes—reading and listening—are only part of communication. Also crucial are the expressive processes of speaking and writing. Unless students communicate their understandings, we cannot know whether students understand. New assessments being used nationwide from SBAC and PARCC rely on writing to evaluate how much students have comprehended from texts. Moreover, there is synergy between receptive and expressive processes. When they are taught and applied together, growth in one area supports growth in the other. Finally, vocabulary and language structures that students have heard and read are only partly learned; to demonstrate full learning students must employ these in their own communication.

The ability to write well is crucial for students' social, academic, and professional advancement, in the 21st century (Partnership for 21st Century Skills, 2009). Helping students "to write clearly, logically, and coherently about ideas, knowledge, and views will expand their access to higher education, give them an edge for advancement in the workforce, and increase the likelihood that they will actively participate as citizens of a literate society" (Graham & Perin, 2007, p. 28).

Research suggests that supporting students' written language development is particularly crucial in the later elementary grades (Brisk, 2012). How best can teachers support students as writers? Time, effective models, and explicit instruction in skills and processes across varied genres are all needed and effective in improving students' communication.

Throughout *Journeys*, students have ample opportunities to write formally and informally, in varied contexts and for varied purposes. The program integrates literacy skills, emphasizing students' development across literacy skills and communicative processes. **Performance-Based Tasks** in *Journeys* provide opportunities for performance. Tools such as **myWriteSmart** support students through every stage of the writing process.

Research that Guided the Development of *Journeys*

Varied Purposes and Forms

For students to develop the writing skills they will need in their future academic and work experiences, they must learn to write for varied meaningful and useful purposes (Kiuhara, Graham, & Hawken, 2009; Applebee & Langer, 2006). Students must learn that:

...writing is used for a variety of purposes, such as conveying information, making an argument, providing a means for self-reflection, sharing an experience, enhancing understanding of reading, or providing entertainment....Teachers should begin by teaching students the different purposes for writing and how specific genres, or forms of writing defined by specific features, can help students achieve their writing goals. When students understand the connection between different genres and writing purposes, they may be more likely to use different genres and think more critically about how to structure their writing. Students must also learn to adjust their writing to be most effective for their intended readers. (Graham et al., 2012, p. 12)

Varied Genres of Writing: Researchers have identified writing to persuade, to inform, to describe, and to convey research findings as essential purposes for writing for success in school and work (ACT, 2005; National Commission on Writing, 2004, 2005). The 2011 NAEP framework (National Assessment Governing Board, 2010) highlights the need for students to produce texts for varied purposes. In NAEP, at the elementary level, students are asked to write to persuade, to explain, and to convey experience.

Distribution of Communicative Purposes by Grade 2011 NAEP Writing Framework			
Grade	To Persuade	To Explain	To Convey Experience
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

Why Writing Across Genres Is Important: The ability to think and write across disciplines is needed (Atwell, 1989) to meet 21st century demands that require that students become proficient writers able to flexibly adapt their writing to varied genres and contexts.

As students learn to write, and produce increasingly complex texts, they move from writing simple narrative sequences and explanations, to writing more in-depth, evidence-based informative essays and arguments. Involving students in varied, meaningful writing activities has been found to improve their writing skills. Applebee and Langer (2006) analyzed NAEP results and found a correlation between the quality of student writing and the types of writing they had been assigned to do in school.

Arguments specifically have been found to benefit students. Literacy in producing arguments has been shown to develop students' critical thinking skills (Riley & Reedy, 2005) and to be essential to success in higher education (ACT, 2009). In their research on deeper learning and 21st century competencies, Pellegrino, Hilton, and colleagues on the committee found substantial support for the importance of students' "ability to construct and evaluate arguments in relation to evidence" (National Research Council, 2012, p. 139).

How to Teach Writing Across Genres:

Models: There is strong evidence that "examples of good writing and techniques for writing in specific genres can help students write more effectively for different purposes and audiences" (Graham et al., 2012, p. 12). Students are not equally familiar with all genres of writing (Downing, 1995; Lenski & Johns, 2000). Students who are exposed to different genres in reading and as models are able to analyze these examples and "to emulate the critical elements, patterns, and forms embodied in the models in their own writing" (Graham & Perin, 2007, p. 20). Teachers can help students learn the features and structures of different genres by "directing attention to textual features...to help children develop 'genre awareness'..." (Chapman, 2006, p. 39). Research findings suggest that rereading a book supports students use of similar genre features in their own writing (for example, see Pappas, 1991) and that greater exposure to reading from a specific genre will lead to greater ability with those elements of writing (Duke & Kays, 1998 in Donovan & Smolkin, 2006). Crowhurst (1991) conducted an experimental study and found that the treatment group who read persuasive texts prior to producing their own outperformed students who were given other kinds of texts to read or structures for writing without text models.

Text Structures: "Genre knowledge develops, in part, from experience with text structures..." (De La Paz & McCutchen, 2011, p. 45) and, as such, exposing students to varied genres is important. To teach students to produce effective arguments, Ferretti, Andrews-Weckerly, and Lewis (2007) recommend that teachers provide clear guidelines for structure and questions to scaffold students in their production of their own texts. Taylor and Beach (1984) conducted an experimental study in which they compared students who received instruction and practice in analyzing text structure with students who answered and discussed questions after reading and with a control group who received no special instruction. They found that students who examined text structure produced higher-quality expository writing than students in the other groups.

Writing Process: In a synthesis of research on effective instructional strategies for teaching writing in the elementary grades, Chapman (2006) concluded that an emphasis on both process and product is essential for developing writers with the skills and flexibility to produce varied genres.

Connected Reading and Writing

Reading and writing together form the heart of the English Language Arts classroom. "We have long known that the amount of reading and writing children do is directly related to how well they read and write. Classrooms in which all the students learned to read and write are classrooms in which the teachers gave more than 'lip service' to the importance of actually engaging in reading and writing. They planned their time so that children did a lot of reading and writing throughout the day—not just in the 100 minutes set aside for reading and language arts" (Cunningham & Allington, 2007, p. 7).

The Connections between Reading and Writing: Reading and writing are connected—at the word level (word recognition, spelling) and at the text level (comprehension, composition) (Berninger, Abbott, Abbott, Graham, & Richards, 2002). Reading and writing share a bidirectional relationship—writing instruction improves reading comprehension and reading instruction improves composition (Shanahan, 2006). To be effective readers and writers, students must employ similar strategies—setting a purpose, activating relevant prior knowledge, constructing meaning, and revising hypotheses or understandings (Pearson & Tierney, 1984). Fitzgerald and Shanahan (2000) identified four types of knowledge essential to success in both reading and writing: (1) *Metaknowledge* about the processes involved in reading and writing; (2) *Domain knowledge,* or prior knowledge of a topic and vocabulary; (3) *Knowledge of text attributes,* from the word level to the larger genre or format level; and (4) *Procedural knowledge and skill to negotiate reading and writing*, or the ability to apply knowledge to practice.

The Benefits of Connecting Reading and Writing in the Classroom: Students who write about what they read show more evidence of critical thinking, and students who read show improved composition (Biancarosa & Snow, 2006). Integrating reading and writing has been shown to increase word learning (Baker, Simmons, & Kame'enui, 1995b; Klesius & Searls, 1991); support English learners (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006a); improve revision (MacArthur, 2007); and positively impact students' independent writing quality (Corden, 2007). Engaging in deep reading and research builds students' content knowledge. In his research with students in grades 4, 6, and 8, McCutchen (1986) found that students with greater content knowledge of the subject of the writing produced more clearly organized and better-supported essays than did those with lower content knowledge. Reading and writing together improves achievement, enhances communication skills, and builds critical-thinking ability (Cooper, 2000). Tierney, Soter, O'Flahavan, and McGinley (1989) found that students who both read and wrote significantly outperformed those in read-only or write-only groups and concluded that "the present data support the view that reading and writing in combination have the potential to contribute in powerful ways to thinking" (p. 166).

In *Writing to Read: Evidence for How Writing Can Improve Reading,* Graham and Hebert (2010) describe the findings of a meta-analysis of research on reading and writing. They conclude that "the evidence is clear: writing can be a vehicle for improving reading. In particular, having students write about a text they are reading enhances how well they comprehend it" (p. 6).

Connecting Reading and Writing in the Classroom: Teachers can connect reading and writing in the classroom in multiple ways.

Writing to Sources: Students should be expected to support their oral and written communications with clear textual evidence. A body of research looks into the ways that students respond to texts and use evidence from texts to support those responses. In their study on students composing from sources, Spivey and King (1989) examined students in grades 6, 8, and 10 as they wrote informational reports from source texts. They found that "general reading ability and success at synthesizing overlap to a great extent" (p. 7). In her study that looked at how college students wrote from sources, Kennedy (1985) found that more fluent readers engaged in more rereading, notetaking, and planning prior to writing than did less-fluent readers—who planned mostly at the sentence level and referred back to the text during writing. Her findings suggest that less-fluent writers will be served by explicit instruction in thinking about and extracting information from source texts. To develop students' skills with using textual evidence, technology has been shown to improve students' ability to use source information. Britt and Aglinskas (2002) found that students who used the computer-based tutorial referenced more text-based evidence than did the group who engaged in more regular classroom activity.

Writing to Learn: Studies on the connection between reading and writing suggest that writing helps students more deeply understand what they read. In fact, "writing about a text proved to be better than just reading it, reading and rereading it, reading and studying it, reading and discussing it, and receiving reading instruction" (Graham & Hebert, 2010, p. 22). For their Carnegie report entitled *Writing to Read: Evidence for How Writing Can Improve Reading,* Graham and Hebert (2010) conducted a meta-analysis of existing research on the relationship between writing and reading and concluded that teachers should "have students write about the texts they read." Research support for this is clear; "Students' comprehension of science, social studies, and language arts texts is improved when they write about what they read, specifically when they respond to a text in writing..., write summaries of a text, write notes about a text, [and] answer questions about a text in writing or create and answer written questions about a text" (p. 5).

Research: Students learn best when they are actively engaged in learning—investigating topics and analyzing their findings. By researching, students become actively engaged in learning and build content knowledge—both of which have been shown to improve writing.

Performance-Based Assessments: Employing performance-based assessments, like those in the Smarter Balanced Assessment Consortium's end-of-year summative assessments (Smarter Balanced, n.d.), or the PARCC assessments, is another way teachers can connect reading and writing in the classroom—and gain valuable insights into students' learning and skills.

Research suggests that the time spent writing is important and that beginning in kindergarten, students benefit from short and frequent practice with specific writing skills (Graham et al., 2012; Puranik, Al Otaiba, Sidler, & Greulich, 2014). Instruction in the writing process has a strong level of research evidence supporting its use (Graham et al., 2012).

Collaborative Writing

"Teacher-student and peer conferences are at the heart of teaching writing. Through them students learn to interact with their own writing" (Calkins, 1994, p. 223). Learning together in cooperative learning group was one of the nine most effective instruction strategies identified by Marzano in his meta-analysis (2003). Research and cognitive theory suggest that when students work in groups toward a common goal, they support one another, model strategies, and provide context-appropriate explanations and immediate feedback (Slavin, 2002). Research has shown benefits to applying collaborative and cooperative learning practices to the writing process.

Collaborative Writing: According to Graham and colleagues (2012), after a review of research on how best to improve students' writing skills in the elementary grades, there is evidence to suggest that creating an engaged community of writers will improve students writing outcomes.

> Students and teachers also should have regular and structured opportunities to interact through giving and receiving feedback as well as collaborating on writing activities. Collaboration can increase the sense of community in a classroom, as well as encourage students to become engaged in the writing process with their peers. When students feel connected to one another and to the teacher, they may feel safe participating in the writing process and sharing their writing with peers. (p. 34)

> Teachers can encourage students to collaborate throughout the writing process by brainstorming ideas about a topic, responding to drafts in a writing group, or helping peers edit or revise their work. Collaboration also can take the form of collaborative writing, whereby students jointly develop a single text. (p. 37)

In a study conducted by MacArthur, Schwartz, and Graham (1991) elementary school students with learning disabilities worked in pairs to support each other during the editing and revising stages of writing. Students in the experimental, collaborative-writing pairs made more revisions and demonstrated higher-quality writing performances than those in the control group. In their research, Yarrow and Topping (2001) employed a system of Paired Writing to examine whether more skilled writers could effectively tutor their less-skilled peers. Students in the paired groups showed greater gains from pre-testing to post-testing than did those who worked individually. Saddler and Graham (2005) looked at whether peer-assisted strategies would enhance instruction on sentence-combining techniques and found that 4th-grade students who participated in the experimental, peer-assisted group demonstrated (1) improved story writing and (2) improved use of grammatical structures as a result of sentence combining.

Skill-Based Instruction

While regular writing improves overall writing ability (Ball, 2006), instruction in the varied elements of quality writing, including grammar, must take place if students are going to be competent and effective communicators. Such instruction is most beneficial and effective when presented as part of writing assignments and activities that are meaningful to students (Fearn & Farnan, 2005; Hillocks, 1986; Polette, 2008; Weaver, 1997). According to Graham and colleagues (2012), who reviewed research on how best to develop students as writers in the elementary grades:

> When basic writing skills become relatively effortless for students, they can focus less on these basic writing skills and more on developing and communicating their ideas. However, younger writers must typically devote considerable attention to acquiring and polishing these skills before they become proficient...(p. 27).

Basic Writing Skills: As writers develop, they work to convey increasingly complex ideas, employ different genres and structures, and meet the needs of their purposes and audiences more attentively. At the beginning, though, writers need a foundation of basic skills.

> Handwriting, spelling, and sentence construction are all basic writing skills that students must draw upon to translate their thoughts and ideas into writing. Students also draw on typing and word processing skills when composing electronically (Graham, et al., 2012, p. 27).

Students who understand grammar understand the varied ways that they can combine words to make meaningful, effective sentences. Grammar and other basic skills of writing are important. When they follow conventions and rules of language and mechanics, writers "ensure understanding and avoid distractions...allowing the reader to focus on the writer's thoughts and ideas" (ACT, 2007, p. 46-47).

The Benefits of Instruction in Basic Writing Skills: In their review of research, Graham and colleagues (2012) found that explicit instruction in basic skills has positive effects on the student outcomes, including improved spelling, handwriting, sentence structures, quantity of writing, and overall quality.

Grammar is the structure of language and the rules for making meaning in a language, but perhaps more importantly is a resource for meaning making; when students have skills with and knowledge of grammar, they can better communicate their ideas.

Teaching Basic Writing Skills: For all of these basic skills, teachers should connect explicit instruction into meaningful contexts of writing and communicating.

> **Spelling:** Explicit instruction in spelling—through instruction in phonological awareness, phonics, and morphology—benefits students (Troia & Graham, 2003), as does teaching spelling in the context of writing, teaching directly the spelling of common words, and teaching students to use resources, such as dictionaries (Graham et al., 2012, p. 29-30).

> **Grammar:** Teaching students to "construct sentences for fluency, meaning, and style" improves their grammar (Graham et al., 2012, p. 30). In *Writing Next*, Graham and Perin (2007) identified sentence combining as one of the 11 effective, research-based elements or strategies. The sentence-combining approach has been shown to be effective with elementary school students (Saddler & Graham, 2005) and English language learners (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006b).

> Grammar and language instruction is most beneficial and effective when it is presented in relevant and meaningful contexts (Fearn & Farnan, 2005; Hillocks, 1986; Polette, 2008; Weaver, 1997). Students who are taught grammar when working on a specific piece of writing show a greater application than do those students taught grammar as a separate activity (Calkins, 1994; Spandel, 2001).

> Grammar is important but should not be the primary focus of writing instruction. Several studies have found that grammar instruction is less effective in improving writing than other writing interventions (see, for example, Graham, McKeown, Kiuhara, & Harris, 2012). Teachers' primary focus should always remain on language as a way to make meaning and achieve specific and powerful purposes.

From Research to Practice

Varied Purposes and Forms in Journeys

In *Journeys* © 2017, students learn to write for varied purposes and in varied writing forms. Carefully selected models provide exemplars for students, so that they can focus on the specific elements that help to make writing effective in specific genres.

In *Journeys,* students study the elements that create high-quality texts in different genres. They use this knowledge to create their own products across varied genres. For example, in grade 4, **Unit Performance Tasks** include the following genres:

Grade 4 Unit Performance Tasks – By Writing Genre	
Unit 1	Write a Story
Unit 2	Write a Literary Analysis Essay
Unit 3	Write an Opinion Essay
Unit 4	Write a Response to Literature
Unit 5	Write a Research Report

The program's **Interactive Lessons** include lessons specific to different writing genres, presented at the point of use.

Across each Unit, students develop their written products using a process approach that is fully supported with instruction, culminating in the development of a final product that implements all steps in the process: pre-writing/planning, drafting, revising, editing, and publishing.

Research and Media Performance Tasks at the start of each unit in the Teacher's Edition provide multiple opportunities to develop and publish both short and long research projects.

Collaborative Projects three times per year provide groups of students the opportunity to research a topic over time, and develop, publish, and present their results.

Connected Reading and Writing in Journeys

Students gain skill and practice in using textual evidence to support their ideas in writing through *Journeys*. In *Journeys,* students learn to write to sources.

In *Journeys* reading and writing are presented as interconnected literacy processes.

As students read through texts for their **First Read** and **Second Read,** they are given text-dependent questions to answer or specific prompts to focus their reading and evidence collection. See this example from grade 4 of one way that evidence collection and recording is promoted and discussed in the Teacher's Edition:

2 Guided Practice/Apply

Analyze the Text **READ FOR TEXT EVIDENCE** Begin a second read of *Because of Winn-Dixie* with students. Use the stopping points and instructional support to guide students to analyze the text:

- Point of View, p. T21 ELA RL.4.6 ELD ELD.PI.4.6a
- Flashback, p. T23 ELA RL.4.3 ELD ELD.PI.4.6a
- Story Structure, p. T29 ELA RL.4.3 ELD ELD.PI.4.6a
- Text Cohesion, p. T25 ELA RL.4.1 ELD ELD.PI.4.7, ELD.PII.4.2a

Directed Note Taking The graphic organizer will be completed with students during the second read on p. T29.
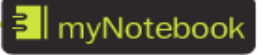
Reading as a Writer

What makes Vanessa's details vivid? Where can you add clear and colorful details in your description?

When they study model texts, students are reminded of the connection between reading and writing with the **Reading as a Writer** reminders, such as this one from grade 4:

The *Journeys* **Performance Tasks** require students to write about what they read and use texts as models for writing. With each **Performance Task,** students must synthesize information from texts and cite textual evidence.

Digital tools, such as *my*Notebook, enable students to capture their annotations and textual evidence, as well as their oral and written responses to prompts in the Student eBooks. Afterward, students can import their responses as needed, to their online **Performance Tasks,** which they can develop using *my*WriteSmart.

Text annotation teaching routines in *Journeys* teach students how and why to mark complex texts during reading—and allow students to capture notes and evidence that they can access later when writing about and responding to texts. When students are given the **Performance Task,** they are also reminded to use the source evidence they have collected, such as in this example from grade 4:

myNotebook

Use the annotation tools in your eBook to find evidence to support your ideas.

Cite Text Evidence

Constant reminders to cite evidence are provided with the **Cite Text Evidence** icon.

Collaborative Writing in Journeys

Students have ample opportunities to collaborate throughout *Journeys* © 2017. Students engage in peer review for writing and collaborative conversations about texts that help them to generate evidence for writing about texts.

When students complete their **Performance Tasks,** they are guided through a process of collaboration to review, revise, and improve their writing. Suggestions in the Teacher's Edition help teachers walk students through a structured process of peer review and revision, such as in this example from grade 4:

Revise

Review Your Draft Read the top of p. 168 with students.

- Have partners think about the checklist questions as they take turns reading each other's story aloud. Both partners should pay special attention to whether the writing is interesting to the reader and how it can be made more interesting.

- Remind partners to ask questions to clear up any confusion about events in the story. Encourage partners to brainstorm ways to revise.

ENGLISH LANGUAGE SUPPORT Model a conversation to help students with the peer review.

Think Aloud *I like your choice of Thailand as the setting for your story. I would like to know what happens to the elephant team members when they try to deliver books to the children.*

Provide sentence frames as needed, such as *I like that you chose (country name). I like the part where _____. I understand the part about _____, but I want to know what happens _____.*

- As students revise, remind them to make their writing more interesting by elaborating. Have them review the photos from *My Librarian Is a Camel* to generate clear, concrete descriptions.

- If students are having difficulty elaborating, have them add adjectives to describe the way things look, smell, sound, and feel to expand their sentences.

my WriteSmart

Have your partner review your story in *my*WriteSmart and note where the order of events is not clear.

myWriteSmart enhancements in *Journeys* © 2017 enable peer-to-peer and teacher-to-student collaboration.

Finally, three times per year, *California Journeys* provides students the opportunity to work collaboratively on a meaningful, topic-based project tied to a full-length trade book. Through these **Collaborative Projects,** students develop and build 21st-century skills, applying reading, writing, speaking, listening, research, and technology skills in the process.

The project is initiated with a launch, followed by discussion and preparation, during which the project is developed. Students present their projects to an audience, are assessed with a project rubric, celebrate, and, finally, reflect on the outcome of this interactive and engaging learning experience.

Skill-Based Instruction in Journeys

Developing students' grammar and language skills in the meaningful context of their own writing is a focus of the *Journeys* © 2017 program.

Each lesson has a grammar focus, presented in the context of the lesson's writing focus, such as these for a set of lessons in grade 4:

Lesson	Grammar	Writing
1	Sentences	Descriptive Paragraph
2	Kinds of Sentences	Story
3	Quotations	Dialogue
4	Sentence Fragments	Fictional Narrative
5	Proper Nouns	Fictional Narrative

Within the writing process, students are prompted to **Connect Grammar to Writing** by applying a specific grammar concept to their own writing through the revision process. This example is from grade 4:

Connect Grammar to Writing

As you revise your descriptive paragraph, make sure each sentence has a subject and a predicate. Add descriptive words to simple subjects to make them complete subjects.

The *Journeys* Teacher's Edition offers instruction in specific skills, like this example of spelling instruction from grade 4, which shows Day 1 and Day 2 of a five-day sequence of instruction that include teaching, guided practice, application, and assessment:

Spelling instruction in *Journeys* is grounded in a focus on learning spelling patterns and word parts, rather than on rote memorization of unrelated words. This is because once students learn a spelling pattern, they can generalize and apply it to create numerous words.

Because encoding, decoding, and knowledge of word morphologies are interrelated processes, instruction in spelling also systematically connects to the decoding/word study and vocabulary strands in *Journeys*. In the primary grades for example, when students are learning to decode short /a/ words, short /a/ is also the spelling pattern on which they focus. As students progress, instruction and guided practice launch into increasingly challenging patterns, such as spelling common morphemes and then less common morphemes, or the spellings at syllable junctures and then multi-syllabic words. As vocabulary and spelling connections become stronger, the focus shifts to word derivations, because words related in meaning are also related in spelling.

Spelling *Short a and Long a*

SHARE OBJECTIVES
- Spell words that have the /ā/ sound and words that have the /a/ sound.
- Spell grade-appropriate words correctly.
- Sort words based on vowel sound and spelling pattern.

Spelling Words

Basic

blade	drain	raft
✪ gray	maybe	jail
past	break	crayon
✪ afraid	sale	fact
magic	hang	stale
delay	stain	steak
amaze	glass	

Review

skate, plan, chain, ✪ today, erase

Challenge

fraction, trait, champion, activity, graceful

✪ Forms of these words appear in "Because of Winn-Dixie."

ENGLISH LANGUAGE SUPPORT

Preteach

Spanish Cognates Write and discuss these Spanish cognates for Spanish-speaking students.

gray • *gris*

magic • *magia*

Transfer Support In Cantonese and Mandarin, the short *a* sound does not exist, so students may use the short *e* sound as a substitute. Model the difference by naming pairs for students to repeat, such as *pan/pen, man/men,* and *tan/ten*. **ELD** ELD.PIII.4

Word Meanings Use Day 5 sentences to preview the meanings of spelling words.

DAY 1

1 TEACH THE PRINCIPLE
- Administer the **Pretest**. Use the Day 5 sentences.
- Explain that each spelling word has either the short *a* sound or long *a* sound. Explain the following spelling principles for each sound.

Connect to Phonics	
These sounds...	Can be spelled...
/ā/	*a* + consonant: *magic, past*
/ā/	ai afraid ay delay ea break a+c+e sale

2 GUIDED PRACTICE

Guide students to identify the sounds/spellings in the remaining spelling words.

Model a Word Sort Model sorting words based on whether the *a* stands for the long or short vowel sound. Present the Model the Sort lesson on page 56 of the **Literacy and Language Guide**.

3 APPLY

Distribute Reader's Notebook page 4 ⤴ and have students complete it independently.

DAY 2

1 TEACH WORD SORT
- Set up two rows as shown. Model adding a spelling word to each row.
- Have students copy the chart. Guide students to write each spelling word in the correct row.

/ā/	past, fact
/ā/	drain, amaze

2 GUIDED PRACTICE
- Have students add words from "Because of Winn-Dixie" to their charts.

Guided Word Sort Guide students to sort words based on their spelling pattern. Present the Guess My Category lesson on page 56 of the **Literacy and Language Guide**.

3 APPLY

Distribute Reader's Notebook page 5 ⤴ and have students complete it independently.

STRAND 4: FOUNDATIONS OF READING

Learning to read is a complex task for beginners. They must coordinate many cognitive processes to read accurately and fluently, including recognizing words, constructing the meanings of sentences and text, and retaining the information read in memory.

Report of the National Reading Panel: Teaching Children to Read, Reports of the Subgroups, 2000, p. 2-80

Defining the Strand

The goal of reading instruction is to develop students' skills so they can comprehend and analyze increasingly difficult texts. Meeting this goal is a complex task. As the National Reading Panel (2000) concluded in its seminal findings, learning to read requires developing multiple skills.

Comprehension—The primary goal of a reading program is to develop students' abilities to comprehend texts of varied genres and increasing complexity. Focusing on textual content, and asking students to make critical responses to that content, has been shown to be particularly effective in enhancing students' comprehension (Duffy, 2009; McKeown, Beck, & Blake, 2009).

Phonological Awareness and Phonics—Students' ability to comprehend is dependent on their ability to quickly and automatically decode words. Without sufficient skills in phonological awareness and phonics, students cannot read. Decoding must be included in any effective early reading program (Kendeou, van den Broek, White, & Lynch, 2009) and is essential in meeting the needs of older, struggling readers (Chard, Pikulski, & McDonagh, 2006; Moats, 2001).

Fluency—"Working to develop fluent reading is important for fostering more thoughtful literacy performances" (Allington, 2001, p. 14). The ability to read fluently involves the automatic recognition of words, ease of reading, appropriate rate, and expression that demonstrates comprehension. Because they spend less energy on decoding, fluent readers focus more energy on comprehension (Allington, 2001).

Vocabulary—Vocabulary knowledge and reading comprehension are closely connected (Baumann & Kame-enui, 1991; Stahl & Fairbanks, 1986, Stahl & Nagy, 2006). Vocabulary is essential to early reading development (National Reading Panel, 2000) and in later grades, as the demands of content-area reading require high-level vocabulary skills.

Journeys develops students' skills in each of these areas, providing students with the building blocks for success. In *Journeys,* effectively sequenced, systematic, coordinated instruction develops students' foundational reading skills—in comprehension, phonological awareness and phonics, fluency, and vocabulary.

Research that Guided the Development of *Journeys*

Comprehension

Comprehension is a complex process. While some students learn to read—and continue to comprehend texts with greater difficulty—without explicit instruction, most students benefit from instruction in reading comprehension processes and strategies.

The Importance of Comprehension: Readers must use a variety of strategies—such as making inferences, asking and answering questions, visualizing, determining main ideas and details, and so on—in order to make sense of the text. The high literacy demands placed on today's students mean that basic comprehension is insufficient; readers must engage in higher-order thinking.

How to Teach Comprehension: As with each of these building blocks for early reading, comprehension is impacted by the other building blocks. For students to comprehend, they must possess phonological and phonemic awareness, know phonics, demonstrate fluency, and, perhaps most importantly, have knowledge of a large vocabulary and of the strategies to understand unknown words. Results of the 2009 and 2011 NAEP Reading Assessments demonstrated that "at all three grades, students who scored higher on vocabulary questions also scored higher in reading comprehension" (National Center for Education Statistics, 2012a). So improving students' skills across the elements of early reading will improve their comprehension.

How else can students be taught to comprehend what they read? The Report of the National Reading Panel (2000) agreed with what reading teachers have known for years, offering "enthusiastic advocacy of instruction of reading strategies" (p. 4-46). Research shows that to be most effective, reading comprehension instruction must support students, directly and explicitly, with how to use the strategies needed to comprehend a text (Cantrell, Almasi, Carter, Rintamaa, & Madden, 2010; National Reading Panel, 2000; Hollingsworth & Woodward, 1993). Teaching students specific strategies provides them with tools to use when they do not comprehend. This focus on comprehension must begin with the youngest readers. According to Shanahan and colleagues (2010) this focus on making meaning must begin with the earliest readers: "students who read with understanding at an early age gain access to a broader range of texts, knowledge, and educational opportunities, making early reading comprehension particularly critical" (online).

Asking students good questions—and teaching students how to ask their own good questions—promotes deeper comprehension (Craig, Sullins, Witherspoon, & Gholson, 2006; Graesser & Person, 1994; King, 1994; Pressley et al., 1992; Rosenshine, Meister, & Chapman, 1996). Writing about reading and making connections led to higher student performance than a control group in Connor-Greene's 2000 study. Biancarosa and Snow (2006) concluded that students who write about what they read show more evidence of critical thinking.

Struggling readers often have trouble using strategies to comprehend (Dole, Duffy, Roehler, & Pearson, 1991). For these students, explicit instruction is particularly important (Nelson & Manset-Williamson, 2006). However, all students benefit from explicit instruction, modeling, and practice using reading comprehension strategies—poor and high achievers alike, as well as native speakers and non-native speakers of English (Alfassi, 2004; Baumann, 1984; Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006a, 2006b; Klingner & Vaughn, 2004: Nokes & Dole, 2004; Rosenshine, Meister, & Chapman, 1996; Van Keer & Verhaeghe, 2005).

Phonological Awareness and Phonics

Phonological awareness—including phonemic awareness—and phonics together form the basic building blocks of learning to read. Phonological awareness is the ability to hear the sounds that are used in spoken language to make words. This includes the ability to recognize when two words rhyme or to decide when two words share the same beginning or ending sound. The term *phonemes* refers to the smallest unit of spoken language. Phonemic awareness is the ability to focus on and manipulate these sounds in words.

Possessing phonemic awareness is a precursor to decoding. Students who can isolate individual sounds in spoken words can better connect these sounds with specific letters. (The relationship is also recursive, however; phonemic awareness supports decoding, and reading helps to develop phonemic awareness.) *Phonics* refers to the correlation between sounds and the letters or groups of letter that represent those sounds. In phonics instruction, the focus is on printed language—initially on the correspondences between letters and sounds/phonemes, and then on applications to reading and spelling.

The Importance of Phonemic Awareness and Phonics: We know that instruction in phonemic awareness and phonics is important. After examining close to 100 studies, the National Reading Panel (2000) concluded that instruction in phonemic awareness and in phonics yields positive gains in early reading development, confirming the findings of earlier studies by Marilyn Adams (1990) and Jeanne Chall (1967).

The National Reading Panel (2000) meta-analysis found that phonemic awareness instruction was effective at improving the phonics, reading, and spelling skills of varied populations of learners at different grade levels. Results of the meta-analysis showed that teaching children to manipulate the sounds in language helps them learn to read. Phonemic awareness instruction helped all types of children improve their reading, including normally developing readers, children at risk for future reading problems, disabled readers, preschoolers, kindergartners, 1st graders, children in 2nd through 6th grades (most of whom were disabled readers), children across various SES levels, and children learning to read in English as well as in other languages (Report of the National Reading Panel: Teaching Children to Read, Reports of the Subgroups, 2000, p. 2-5).

How to Teach Phonemic Awareness and Phonics: What does research suggest are particularly effective strategies for teaching phonemic awareness? Activities to teach phonemic awareness should include varied tasks, such as identifying words that share the same beginning sounds (*cat* and *car*), blending sounds to make words (/f/ /u/ /n/ into *fun*), or isolating sounds in words (/d/-og) (Phillips, Clancy-Menchetti, & Lonigan, 2008). Studies also point to the benefits of small-group instruction. Focusing on specific skills, fewer rather than more at a time, is also effective. Teaching phonemic awareness with graphemes, or symbols such as letter cards for sounds, has also been shown to be particularly effective. Effective phonemic awareness instruction can take a short amount of time (Reading & VanDeuren, 2007), but should be presented in a meaningful context, so that students can see the application and value of the skill (Cunningham, 1989). In terms of timing, phonemic awareness instruction should be included in kindergarten and grade 1 (National Reading Panel, 2000), and any needed intervention should be provided before students fall too far behind their peers (Schuele & Boudreau, 2008).

Research suggests that instruction in phonics is an important element in a balanced reading program. As described previously, phonics instruction involves teaching students letter-sound correspondences and spelling patterns, and providing practice on applying this knowledge to reading and spelling. Because phonics is the relationship between letters and sounds, beginning readers need systematic instructional experiences with letters and sounds (Pikulski, 2012).

A systematic approach to teaching phonics involves specifying a sequence of phonics elements, teaching these explicitly, and providing students with opportunities to practice decoding words. In its examination of 38 studies on instruction in phonics, the National Reading Panel (2000) concluded that students who were explicitly and systematically taught phonics progressed more quickly and made greater achievements in reading; "The conclusion supported by these findings is that various types of systematic phonics approaches are significantly more effective than non-phonics approaches in promoting substantial growth in reading" (2-93). Numerous independent studies, too, have supported explicit phonics instruction as an essential element of an effective early reading program (see, for example, Beverly, Giles, and Bruck, 2009, on benefits of explicit phonics instruction with grade 1 students; Foorman, Francis, Novy, and Libermann, 1991, on grade 1 classrooms with greater letter-sound instruction; Juel and Minden-Cupp, 2000, on specific benefits of direct phonics instruction for grade 1 students with low literacy).

Phonics instruction is most beneficial when it is provided in a systematic, sequential manner. In their 2009 study comparing systematic phonics instruction with a nonsystematic approach, de Graaff, Bosman, Hasselman, and Verhoeven found that systematic phonics instruction showed greater effects in kindergarten students' phonemic awareness, spelling, and reading comprehension than did instruction in phonics that was nonsystematic. In terms of timing, research suggests that the teaching of phonics is most important in grades K through 2, but instruction in these skills is also important for poor readers in the intermediate and upper grades (Moats, 2001).

Fluency

When learning to read fluently, readers move from laboriously attending to each letter-sound association to decoding automatically and purposefully.

The Importance of Fluency: How well students recognize words connects to how well students understand words (Allington, 2001; Pulido, 2007) because "fast, accurate word recognition frees cognitive resources for reading comprehension" (Klauda & Guthrie, p. 23-24). The connection between fluency and comprehension is well documented (Allington, 2001). Researchers found that grade 5 students who had the highest performances in comprehension also were able to quickly recognize isolated words, process phrases and sentences as units while reading silently, and use appropriate expression when reading text aloud (Klauda & Guthrie, 2008). In a 2002 study, researchers found a close connection between fluency and comprehension—students who read more quickly and with greater accuracy also scored higher on the National Assessment for Educational Progress (NAEP) reading assessment (Daane, Campbell, Grigg, Goodman, & Oranje, 2005).

How to Teach Fluency: Research suggests that instruction in fluency should be part of a complete reading program for all readers (Shanahan, 2006; Chard, Pikulski, & McDonagh, 2006). To gain fluency, readers must "move beyond accuracy to automaticity—and automaticity is achieved only with practice" (Samuels, Schermer, & Reinking, 1992, p. 136). Thus, fluency development requires repeated practice (Keehn, 2003). Effective instruction in fluency, therefore, will likely involve increasing the amount of reading students do (Samuels, 2002) and engaging in repeated oral readings (National Research Panel, 2000; Pressley, Gaskins, & Fingeret, 2006; Samuels, 2002). Repeated reading has been shown to impact students' word recognition, reading speed, and comprehension (National Reading Panel, 2000). Repeated exposure to words leads to gains in fluency (Jenkins, Stein, & Wysocki, 1984; Topping & Paul, 1999).

For struggling readers, particularly, explicit and systematic instruction in fluency is important. According to Chard, Pikulski, and McDonagh (2006) "...research and theory suggest ... [an] eight-step program for struggling readers [that] ...

1. Builds the graphophonic foundations for fluency, including phonological awareness, letter familiarity, and phonics.
2. Builds and extends vocabulary and oral language skills.
3. Provides expert instruction and practice in the recognition of high-frequency vocabulary.
4. Teaches common word parts and spelling patterns.
5. Teaches, models, and provides practice in the application of a decoding strategy.
6. Uses appropriate texts to coach strategic behaviors and to build reading speed.
7. Uses repeated reading procedures as an intervention approach for struggling readers.
8. Monitors fluency development through appropriate assessment procedures" (p. 48-49).

Vocabulary

A student's vocabulary is the body of words that the students knows and can use. When discussing vocabulary for instruction, researchers often categorize vocabulary, distinguishing between words that are frequently used in conversational language and those that are used for more specific academic or content-area purposes. Education researchers and practitioners often refer to these categories as tiers, with Tier 1 being words from everyday speech; Tier 2 academic words; and Tier 3 content-area vocabulary.

The Importance of Vocabulary: Because of the documented connection between vocabulary and comprehension, building students' vocabularies is an important instructional goal. As Marzano and Pickering (2005) state, "given the importance of academic background knowledge and the fact that vocabulary is such an essential part of it, one of the most crucial services that teachers can provide, particularly for students who do not come from academically advantaged backgrounds, is systematic instruction in important academic terms" (p. 3).

Research has documented the disparity between the vocabularies of disadvantaged students and those of socioeconomically advantaged student populations (Chall, Jacobs, & Baldwin, 1990; Hart & Risley, 1995; Snow, Burns, & Griffin, 1998). Without intentional and meaningful intervention, the disparity in vocabulary knowledge between these groups only increases over time (Baker, Simmons, & Kame'enui, 1995b). English language learners also benefit a great deal from explicit vocabulary instruction.

How to Teach Vocabulary: Effective instruction in vocabulary must help students acquire the depth and breadth of vocabulary knowledge required for access to the texts they will encounter and must teach students both the words themselves, as well as strategies to learn new words. Research establishes the following as essential elements of effective vocabulary instruction:

- Direct and indirect instruction (Baumann & Kame'enui, 1991; Baumann & Kame'enui, 2004; Graves, 2006; Nagy, 1988; National Reading Panel, 2000; Stahl, 1986);
- Multiple and varied exposures to words (Baumann & Kame-enui, 1991; Beck, McKeown, & Kucan, 2002, 2008; Blachowicz & Fisher, 2000; Fisher, Blachowicz, & Watts-Taffe, 2011; Graves, 2006; Kolich, 1988; National Reading Panel, 2000; Stahl, 1986; Stahl & Fairbanks, 1986; Stahl & Nagy, 2006);
- Frequent instruction (Beck, McKeown, & Kucan, 2002; National Reading Panel, 2000; Stahl & Fairbanks, 1986; Stahl & Nagy, 2006; Topping & Paul, 1999);
- Instruction in word morphology, or structure (Aronoff, 1994; Bowers & Kirby, 2010; Kieffer & Lesaux, 2007; Nunes & Bryant, 2006; Templeton, 1989, 2004, 2012).

Research shows that while words can be learned incidentally, explicit instruction plays an important role in achievement (McKeown & Beck, 1988; National Reading Panel, 2000). Students benefit, too, from opportunities to use the words they have learned. Flanigan, Templeton, and Hayes (2012) suggest that generative vocabulary instruction, which focuses on word roots and affixes, can help students to use their current vocabulary base to build a more extensive academic and content-area vocabulary. Because most of the unfamiliar words students encounter are morphologically related to familiar words (Aronoff, 1994), morphology instruction helps students build vocabulary and comprehend complex texts (Carlisle, 2010; Kieffer & Lesaux, 2007). A recent meta-analysis found morphology instruction to be "particularly effective for children with reading, learning, or speech and language disabilities, English language learners, and struggling readers" (Goodwin & Ahn, 2010, p. 183).

While English language learners tend to acquire social or conversational language vocabulary and skills through incidental social interactions and conversations, the acquisition of an academic vocabulary requires explicit vocabulary instruction (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006a). Struggling readers benefit from explicit instruction, making larger and faster achievement gains with the help of explicit vocabulary instruction (Sedita, 2005).

Choosing the right words is important as well. For students who struggle or who are learning English, instruction in academic vocabulary, and exposure through text reading, is important. Knowledge of these academic words open doors for students academically; As Nagy and Townsend (2012) put it, "words are tools; academic words are tools for communicating and thinking about disciplinary content" (p. 105).

From Research to Practice
Comprehension in Journeys

In *Journeys* © 2017, students build their comprehension skills through:

- Explicit strategy instruction
- Text-dependent questioning
- Varied instructional supports

Journeys was designed to build the critical thinking skills needed for success in school and, later, in college, careers, and life. Students at work in *Journeys* are able to answer literal and inferential comprehension questions—*who, what, where, when*—as well as questions at higher-depth-of-knowledge levels that call for analysis and speculation questions—*how, why, what-if*.

In *Journeys,* students further develop their critical thinking by discussing texts and writing about what they have read, using textual evidence to support their ideas and claims.

In addition, the program provides scaffolded reading support with each lesson to support all readers in comprehending what they read. For English learners and others struggling with reading on-level or more challenging texts, the program offers scaffolds so that all students wrestle with the same high-quality texts and ultimately build comprehension skills for future independent reading.

Comprehension strategies are explicitly taught in *Journeys* in the context of meaningful reading situations. The program offers explicit strategy instruction and practice with comprehension strategies with the **Target Strategy** focus, such as in this example from grade 4:

☑ **TARGET STRATEGY**

Summarize When you **summarize** a story, you tell who the characters are and briefly retell the main events. Summarizing can help you understand and remember a story. As you read "Because of Winn-Dixie," pause at the end of each page to summarize briefly what you have just read to make sure you understand it.

Comprehension Strategies call-outs in the Teacher's Edition offer additional support for teachers, as in this grade 4 example:

COMPREHENSION STRATEGIES

Use the following strategies flexibly as you read with students by modeling how they can be used to improve comprehension. See scaffolded support for the strategy shown in boldface during this week's reading.

- Monitor/Clarify
- **Summarize**
- Infer/Predict
- Visualize
- Analyze/Evaluate
- Question

Use the Strategy Projectables, S1–S8 ☑, for additional support.

To facilitate students' comprehension, readings are presented with a clear **First Read / Second Read** instruction design.

Before they read, students are prompted to be a **Reading Detective—**and find evidence, draw inferences, and ask questions.

Tools to help them are provided, with point of use links:

myNotebook

As you read, mark up the text. Save your work to **myNotebook.**
- Highlight details.
- Add notes and questions.
- Add new words to **myWordList.**

After their **First Read**, students engage in **Collaborative Discussion.**

During their **Second Read**, students **Dig Deeper** into the text, to study specific elements of the text.

Throughout each phase of the close reading process, the Teacher's Edition provides suggestions for teacher **Think Alouds,** so that teachers can be modeling the practices of successful readers.

The *Journeys* **Read and Comprehend** feature prompts students to discuss the topic collaboratively with peers and share what they know.

For English learners, multiple program features offer explicit instruction and scaffolded support towards comprehension. The program's **English Language Support** notes offer integrated support. **Sentence Frames** provide a scaffolded structure for students. The **Text X-Ray** tool gives teachers critical information about the Anchor Text's potential language-related challenges; for example, pointing out idioms, highlighting academic language challenges, noting genre features, and identifying cultural references.

The program's **HMH Decoding Power: Intensive Reading Instruction** resource provides additional, targeted instruction in comprehension and practice activities for comprehension.

Phonological Awareness and Phonics in Journeys

The *Journeys* © 2017 program reflects a legacy of effective pedagogy, already demonstrated by earlier versions of the program, and evidenced by efficacy reports on the program. *Journeys* provides systematic, sequenced instruction in phonemic awareness and phonics for early readers, and suggestions for supporting the needs of older readers as well.

New to the © 2017 program are quicker pacing for K students and a stronger foundational skills emphasis so that all students reach the outcomes needed for continued study beyond elementary.

At the early grades, students develop their foundational reading skills through activities that include:

- **Daily Phonemic Awareness**
- A weekly **Phonics** focus

A purposeful sequence of **Phonics** skills are introduced, with a five-day plan for instruction of each new skill.

As an added program resources, the *Journeys* **HMH Decoding Power: Intensive Reading Instruction** resource for struggling students provides explicit instruction and practice relevant to students' needs in phonemic awareness, phonics, and word study.

Fluency in Journeys

Shanahan (2006a) points out that "fluency instruction works best when it is part of a more complete regimen of reading and writing instruction" (p. 35-36). In *Journeys,* fluency is built into a comprehensive and integrated program for literacy.

In *Journeys,* students' fluency is built through instruction in decoding and word recognition, models of fluent reading, and regular opportunities for guided reading fluency practice—with support and feedback. Distributed practice for specific elements of fluency is given at each grade, and progresses in complexity as students move up the grade levels.

In the **Whole Group Teacher Read Aloud** sections in the Teacher's Edition, teachers are provided with specific suggestions for how to **Model Fluency,** as in this example from grade 4:

Model Fluency

Accuracy and Self-Correction Explain that when good readers read aloud, they try to read each word accurately, or correctly. If they read a word incorrectly, they pause briefly to correct themselves.

- Display Projectable 1.1 ☑. Read aloud the second paragraph, mispronouncing the word *consisted* as *consistent*. Model pausing to self-correct.
- Tell students that if they incorrectly read a word when they are reading aloud, they should pause to correct themselves; this will help both them and their listeners understand the text.
- Reread the sentences together with students, pausing to guide them to self-correct as needed.

Vocabulary in Journeys

For a reading program to be comprehensive and effective at developing students' vocabulary skills and knowledge, it must take a systematic, purposeful, and engaging approach. *Journeys* focuses on three major purposes for teaching vocabulary:

1. To facilitate comprehension
2. To build academic vocabulary
3. To teach *about* words

To accomplish these goals, the program supports students through multiple exposures, explicit vocabulary instruction, strategies for acquiring new vocabulary, and instruction in morphology. By reading complex texts, students build academic language and domain-specific vocabulary. Through strategy and morphology instruction, students learn new strategies for unlocking unknown word meanings. By participating in collaborative conversations and text-based responses, students use new academic and domain-specific conversations in speaking and writing.

At the early grades, students develop their foundational reading skills through activities that include:

· **Daily High-Frequency Words**

· **Daily Vocabulary Boost**

As they move up the grade levels, they take additional responsibility for their own word learning. The *Journeys* **myNotebook** feature provides a place for students to track and record new words they have learned, using **myWordList.**

The program's **Vocabulary in Context** feature in the Student Books provides critical vocabulary and context sentences, along with activities for students to learn and apply the vocabulary that is critical to comprehending the Anchor Texts. In these activities, students are prompted to use the words for a purpose, reinforcing their meaning and use in the students' active, working vocabulary, as in this example from grade 4, where words from *Because of Winn-Dixie* are previewed for students before reading:

In the Teacher's Edition, this same **Target Vocabulary** is supported with explicit instruction that begins with the use of the words in an **Instructional Read Aloud.**

In addition, suggestions for instruction on **Domain-Specific Vocabulary** are provided, along with ideas for **English Language Support** and ways to **Interact with the Words.**

The Teacher's Edition also includes suggested instruction around specific **Vocabulary Strategies** with specific suggestions and activities to:

· **Teach/Model** the strategy

· Offer **Guided Practice** with the strategy

· Provide the opportunity for students to **Apply** the strategy

The lessons in the Teacher's Edition also provide corresponding, aligned suggestions for:

· **Interactive Whiteboard Lessons**

· **Formative Assessment** opportunities

· **Integrated English Language Support**

· Differentiating instruction

· Links to point-of-use digital resources

This grade 4 example shows the initial core instruction on teaching a set of specific prefixes:

Further in-depth teaching support for planning, scaffolding, and supporting vocabulary instruction is found in the **Text X-Ray** in the Teacher's Edition. This time-saving tool offers suggestions for how to **Zoom In on...Academic Language** in each Anchor Text by calling out terms that may cause difficulty for students and by providing up-front supports, such as in this example from grade 4:

The program's **HMH Decoding Power: Intensive Reading Instruction** resource provides additional instruction and practice relevant to students' needs in vocabulary.

In addition, the **Literacy and Language Guide** offers additional practice related to vocabulary as well.

For additional practice with the lesson's Target Vocabulary, use the activities on pages 116–117 of the **Literacy and Language Guide.**

- "Because" Sentences
- Endings -*ed*, -*s*
- Write About Literature
- Vocabulary Web

Researchers have identified instructional strategies that show positive, measurable effects on student achievement.

"Effective Instructional Strategies," 2005, p. 68

Defining the Strand

Good teaching matters. Effective teachers use effective instructional approaches and techniques to support all students in learning and skill-development. Studies show that classroom teachers' instructional strategies have a direct impact on students' reading proficiency (Pennington Whitaker, Gambrell, & Morrow, 2004). To be effective, teachers must select strategies for instruction that accomplish their instructional goals and best meet the learning needs of their students.

A large body of research has focused on identifying the most effective instructional strategies. The research of the RAND Reading Study Group (Snow, 2002) identified elements of effective instruction in the reading classroom. Among their findings were that cooperative learning and graphic organizers were two of the instructional strategies with a solid scientific basis; that motivation is essential to reading comprehension; and that successful reading depends on students' capacity with written and oral language. Studies like that of the RAND study group have identified a number of approaches that show positive and measurable effects on student learning and performance. Some of these approaches include use of and focus on:

- Scaffolding
- Integrating Speaking and Listening
- Fostering Collaboration across Whole- and Small-Group Settings
- Graphic Organizers
- Predictable Routines
- Engagement and Motivation

An effective instructional program uses approaches that have been proven effective by research. The *Journeys* © 2017 program was designed to support students as they develop as readers and writers. Lessons are organized in a systematic way and suggestions are given for providing instruction to the whole group and small groups for working together collaboratively. Ideas are presented visually to support students' connections. Throughout the program, scaffolds exist to help students solidify what they know in order to build on it. The types and topics of the texts—and the activities that students do around them—have all been designed for maximum student engagement and motivation.

Research that Guided the Development of *Journeys*

Scaffolding

Scaffolding is an instructional technique that involves providing support to students as they learn and reach competence, and gradually decreasing the amount of support provided until students are able to work independently. According to Vygotsky, scaffolding can be defined as the "role of teachers and others in supporting the learner's development and providing support structures to get to that next stage or level" (Raymond, 2000, p. 176).

The Importance of Scaffolding: Providing embedded scaffolds is an essential part of transitioning students to independence and "has repeatedly been identified as one of the most effective instructional techniques available" (Graves & Avery, 1997, p. 138). Numerous studies have shown that scaffolding can lead to improved student outcomes—including enhanced inquiry and higher achievement (Kim & White, 2008; Simons & Klein, 2007; Fretz, Wu, Zhang, Davis, Krajcik, & Soloway, 2002; Rosenshine & Meister, 1992) and improved reading comprehension (Clark & Graves, 2008; Lutz, Guthrie, & Davis, 2006). Scaffolding students' reading can "make the difference between a frustrating reading experience and one that is meaningful to students" (Graves & Avery, 1997, p. 138).

How to Scaffold: "Effective scaffolding aligned with the standards should result in the reader encountering the text on its own terms, with instruction providing helpful directions that focus students on the text. Follow-up support should guide the reader when encountering places in the text where he or she might struggle" (Coleman & Pimentel, 2011, p. 7-8).

Instruction that scaffolds students' learning includes these elements: a logical structure, carefully sequenced models and examples that reveal essential characteristics, progression from easier to more difficult content and from easier to more difficult tasks, additional information/elaboration as needed, peer-mediated instruction, and materials that guide students, such as key words, think sheets, and graphic organizers (Hillocks, 1993). The final element of scaffolding is independent work—scaffolding is removed and students apply what they have learned to new situations.

Scaffolding encompasses many different instructional strategies. Varying scaffolds can be used; what is important is that they consistently provide adequate support as needed. Research (Schunk, Pintrich, & Meece, 2008; Stone, 1998) suggests that scaffolds such as the following will support student independence: activating prior knowledge; reviewing previously learned material; modeling and thinking aloud; providing models and different representations; questioning; using cues or tools; and providing useful feedback. Anderson, Mitchell, Thompson, and Trefz (2014) found that digital technologies and tools for teaching writing (including online instructional presentations for use as needed, model texts, and links to academic vocabulary) helped to scaffold student learning.

In their discussion of scaffolds for English learners, Hammond and Gibbons (2005) distinguish between scaffolding at the macro level and scaffolding at the micro level, arguing that as lessons unfold, having an intentional macro-level structure (including carefully organized participation structures, sequenced tasks, and so on) enables on-the-spot, micro-scaffolding (prompting, cueing, connecting, and so on) to occur during instruction. To plan macro-level scaffolds, educators must consider the instructional goals, the sequence of tasks, structures of grouping and collaboration, opportunities to reinforce learning and, for ELs, ongoing support of both content and language learning.

Integrating Speaking and Listening into Collaborative, Whole- and Small-Group Learning

Learning together in collaborative and cooperative groups benefits students (Cotton, 1995; Johnson & Johnson, 1990) and was one of the nine most effective instructional strategies identified by Marzano in his meta-analysis (2003). Integrating speaking and listening is particularly important in English language arts classrooms because of the interconnectedness of reading and writing, speaking and listening, and viewing. Each of these elements of literacy is more readily learned and retained when skills are integrated, allowing students to create pathways of learning and remembering in their minds.

Research suggests that a balanced literacy program will include many varied reading, writing, speaking, listening, and viewing activities (Snow, Burns, & Griffin, 1998; Lyon & Moats, 1997).

General Benefits of Collaboration and Discussion: Among the benefits of collaborative learning for students are an increase in the following:

· Understanding and application of concepts
· Use of critical thinking
· Sense of self-efficacy, or confidence in their ability to learn
· Positive attitudes towards others (Vermette, 1988)

Fostering small-group discussions and collaboration have been shown to support deeper learning—and are important 21st century skills (National Research Council, 2012). How does collaborative learning increase learning? Learning is "profoundly influenced by the nature of the social relationships within which people find themselves" (Caine & Caine, 1997a, p. 105). Research and cognitive theory suggest that when students work in groups toward a common goal, they support one another, model strategies, and provide context-appropriate explanations and immediate feedback (Slavin, 2002).

Benefits of Collaborative Activities and Discussion in the Reading Classroom: Discussing ideas together in the reading classroom has been shown to deepen comprehension. "Discussion can be defined…as the open-ended collaborative exchange of ideas among a teacher and students or among students for the purpose of furthering students' thinking, understanding, learning, or appreciation of text" (Wilkinson & Nelson, 2013, p. 299). After researching the most effective ways to improve early reading comprehension, Shanahan and colleagues (2010) recommend that:

> …teachers lead their students through focused, high-quality discussions in order to help them develop a deeper understanding of what they read. Such discussions among students or between the students and the teacher go beyond simply asking and answering surface-level questions to a more thoughtful exploration of the text. Through this type of exploration, students learn how to argue for or against points raised in the discussion, resolve ambiguities in the text, and draw conclusions or inferences about the text. (p. 23)

Kamil and colleagues (2008) identified extended discussion of text and textual analysis as one of five research-based, best practices for improving adolescent literacy. Langer (1995, 2000, 2001), too, identified discussion—when used to develop students' understandings rather than as an assessment of recall—as a particularly important element of effective English language arts classrooms. Nystrand (2006) found that "A number of studies show that reading comprehension is enhanced by the classroom interaction of students with their teachers and peers, including both small-group work and whole-class discussion" (p. 398). Murphy and colleagues conducted a meta-analysis of 42 studies on the effects of classroom discussion and concluded that "many of the approaches were highly effective at promoting students' literal and inferential comprehension" (Murphy, Wilkinson, Soter, Hennessey, & Alexander, 2009, p. 759). Applebee, Langer, Nystrand, and Gamoran (2003) found that discussion-based approaches enhanced students' understanding of complex texts, and were effective for low-and high-achieving students. Open discussion provides "spontaneous scaffolding or support for developing ideas" (Applebee, Langer, Nystrand, & Gamoran, 2003, p. 722).

Graphic Organizers

In its review of the literature on effective strategies for teaching reading comprehension, the National Reading Panel found graphic organizers an important strategy for improving students' comprehension (National Reading Panel, 2000). Numerous studies have come to this same conclusion (Dickson, Simmons, & Kame'enui, 1996; Pearson & Fielding, 1991) and have found positive effects with all students, including those with learning disabilities (Kim, Vaughn, Wanzek, & Wei, 2004).

What makes graphic organizers so effective? Combining text with visuals engages students' multiple pathways to learning, as described in Paivio's (1979, 1983, 1986) dual-coding theory. A number of studies have demonstrated that students learn better when both pictures and words are used, than with text alone (Mayer, 2001; Mayer & Gallini, 1990; Levin, Anglin, & Carney, 1987; Levie & Lentz, 1982). Nonlinguistic representations are one of the nine most effective instructional strategies identified by Marzano (2003) and have been shown to help students better understand informational text (Center for Improvement of Early Reading, 2003).

Graphic organizers are particularly effective at helping students to focus on the structure of text and the relationship of ideas within text (Center for the Improvement of Early Reading, 2003; Robinson & Kiewra, 1995). The use of graphic organizers to graphically depict the relationships of ideas in texts has been shown to improve both students' comprehension of the text— and their recall of key ideas (Snow, 2002; National Reading Panel, 2000).

Predictable Routines

Predictability in well-organized, consistent classroom routines facilitates learning in a number of ways. Regular routines with consistent cues help smooth the transitions between one activity to another (Mace, Shapiro, & Mace, 1998) and reduce problem behaviors. When students can predict the routines of their school day, they develop a sense of security (Holdaway, 1984). Not only does student behavior improve, but students also show greater engagement with learning and achieve at higher levels (Kern & Clemens, 2007). Simonsen and colleagues (2008) reviewed evidence-based practices for classroom management and found well-structured, predictable routines to be a research-based best practice.

Teachers can increase predictability in their classrooms in many ways. Providing information about the content and duration of events and activities and visually displaying schedules have been shown to be effective (Kern & Clemens, 2007). Alternating the interactive settings— whole class, small group, individual—in a predictable way to best meet students' needs has been shown to be particularly effective (Reutzel, 2003).

This type of predictability in the instructional routine has been demonstrated to be particularly effective for struggling students and those with learning disabilities (Flannery & O'Neill, 1995; Tustin, 1995). Cartledge, Singh, and Gibson (2008) found that creating an orderly classroom helped to close gaps for culturally and linguistically diverse students.

Engagement and Motivation

Learning is an active process of engagement. If students are interested in what they are learning, they will persist in spending the time and energy needed for learning to occur (Hidi & Boscolo, 2006; Guthrie & Humenick, 2004; Eccles, Wigfield, & Schiefele, 1998). In this way, engagement leads to motivation leads to learning.

Engagement and motivation are particularly important in teaching reading (Stipek, 2002). Student engagement is a "powerful determinant of the effectiveness of any given literacy approach" (Strangman & Dalton, 2006, p. 559). Guthrie, Hoa, Wigfield, Tonks, Humenick, and Littles (2007) found a connection between student interest and increased comprehension and recall. Taylor, Pearson, Peterson, and Rodriguez (2003), too, found a connection between engaged learning and reading comprehension growth in low SES schools. Guthrie and Wigfield (2000) found that engaging reading instruction must:

· Teach and encourage use of strategies
· Increase students' conceptual knowledge
· Foster social interaction
· Foster student motivation

Motivation is the process by which a student engages in a task and persists towards completion. Research in cognitive science shows that humans are innately motivated to search for meaning (Caine & Caine, 1997b). The most effective instructional approaches are those that harness this natural inclination, and are motivating and engaging to the learners.

The level of a student's motivation to read has been shown to predict growth in reading comprehension (Guthrie, Hoa, Wigfield, Tonks, Humenick, & Littles, 2007).

To motivate their students, reading teachers should construct lessons that are interesting, match activities to students' abilities, and connect reading and writing and content-area learning (Bohn, Roehrig, & Pressley, 2004) In addition, the use of strategies also increases students' motivation to learn—because successful strategy use helps students to see that they have the ability to learn (Schunk, Pintrich, & Meece, 2008).

From Research to Practice

Scaffolding in Journeys

To help all students reach independence and gain mastery of skills and content, the *Journeys* © 2017 program integrates scaffolding into the program design, and offers multiple, varied scaffolds as supports for student learning and mastery.

The program's **Text X-Ray** feature highlights the scaffolds that teachers can use to support students' reading of the complex texts in *Journeys* by breaking down the challenging structural and language features of every **Anchor Text**.

Suggestions in the Teacher's Edition offer guidance for teachers in how to **Teach** material and then give students the opportunity to **Apply** new skills and knowledge.

Essential to the success of scaffolds in the classroom is that they are provided, and then gradually removed, so that students learn to work independently. In *Journeys,* in small-group instruction for grades 3 through 5, suggestions are provided for this kind of a gradual release model of support through the form of activities organized by:

- **I Do It**
- **WE Do It**
- **YOU Do It**

In the Teacher's Edition, scaffolds for specific populations are seamlessly integrated into instruction, as in these examples for English learners from grade 4:

Speaking and Listening in Collaborative, Whole- and Small-Groups in Journeys

In the *Journeys* © 2017 program, reading, writing, speaking, listening, viewing, and presenting are all connected. Students read to comprehend and make meaning—and then they communicate new understandings through meaningful performances and opportunities for **Collaborative Discussion**.

In *Journeys,* talking about texts is an important, recurring activity.

A previous section of this report discussed some of the many ways that the *Journeys* © 2017 program supports collaborative writing and peer review and revision, with digital supports like those offered through **myWriteSmart.**

In further support of collaborative practices, *Journeys* students are continually working together to share ideas about what they read:

- Features in the Student Book such as **Your Turn** invite students to **Turn and Talk** and engage in **Classroom Conversation** around specific focused questions and activities.
- **Collaborative Discussion** prompts in the Student Book appear after students' **First Read** of a text and guide students in how to:
  - o Participate in collaborative conversations
  - o Support their positions with textual evidence
  - o Use good practices in discussing and sharing ideas
- The *Journeys* **Performance Tasks** provide opportunities for students to integrate reading, listening, writing, and speaking in authentic performances.

All of these opportunities for collaboration help students work together to better comprehend and collect and recall text.

Finally, three times per year, *California Journeys* provides students the opportunity to work collaboratively on a meaningful, topic-based project tied to a full-length trade book. Through these **Collaborative Projects,** students develop and build 21st-century skills, applying reading, writing, speaking, listening, research, and technology skills in the process.

The project is initiated with a launch, followed by discussion and preparation, during which the project is developed. Students present their projects to an audience, are assessed with a project rubric, celebrate, and, finally, reflect on the outcome of this interactive and engaging learning experience.

Graphic Organizers in Journeys

Graphic organizers are used throughout *Journeys* to provide a framework for students' understanding of text structures, to improve their comprehension, and to help students structure their own writing during the planning stage of writing.

PLAN

In grade 4, for example, students use a graphic organizer to plan for a **Performance Task.**

Gather Information Where do the children live? How will the books be carried? Revisit the texts as necessary. Which ideas can you use as you write your story?

Characters	Setting
Event Details	

In addition, in *Journeys,* students are provided with opportunities to analyze the graphic features they encounter in texts. Considering how model texts employ graphics can help students reflect on the value of graphical and visual presentations of information.

Teachers are provided with additional graphic organizers for use to support learning in each lesson, such as in this grade 4 example of a graphic organizer used to help students **Access Prior Knowledge** on the Unit's theme.

Predictable Routines in Journeys

Journeys provides the predictable structure that research shows learners need. Research has identified establishing predictable routines from the beginning of the year as one of the characteristics of highly effective teachers (Bohn, Roehrig, & Pressley, 2004), and the consistent structure of *Journeys* allows teachers to do just that— establish effective, predictable routines from Day 1.

The work of Rosenshine and Stevens (1986) revealed that effective teachers in well-organized classrooms tend to follow similar predictable routines, including these:

· Begin with a short review and statement of goals
· Present new material in small steps
· Give clear and detailed instructions and explanations
· Provide time for guided and independent practice
· Ask questions
· Provide systematic feedback

Each of these steps is clearly supported by the organization and components of *Journeys.*

After reading the **Anchor Text** in each lesson, students respond to the text through the **Your Turn** writing and discussion activities so that they are regularly given a chance to apply their skills, ask questions, and reflect on their learning.

The program's well-designed, comprehensive assessment system—which includes the use of consistent rubrics for scoring students' writing—means that the predictable routines of instruction are punctuated by detailed feedback. So students learning with *Journeys* know what to expect instructionally—and know how they are performing.

Engagement and Motivation in Journeys

Journeys © 2017 is designed to engage and motivate learners.

Journeys engages and motivates students by including high-interest texts on relevant topics and themes and ample supports in the form of peer collaboration and other scaffolds to ensure that students feel that they can be successful in learning with *Journeys.*

Research supports the fact that highly effective teachers focus on supporting students' engagement and motivation in reading (Dolezal, Welsh, Pressley, & Vincent, 2003).

The many program features described in detail throughout this report contribute to students' engagement and motivation. Differentiated instruction; scaffolding; explicit strategies instruction; the combination of whole- and small-group learning activities; opportunities for collaboration and discussion; and the **Leveled Readers** all work together to ensure that students build a sense of independence and experience success as they work through the activities in the program. This sense of confidence ensures that students have the motivation to persist in learning.

High-interest and engaging texts throughout each level of *Journeys* draw readers in. The organization of multiple texts around topics/themes helps students to build knowledge of a topic over time and supports their continued interest in learning.

The organization by topics/themes, which spiral across the grade levels but are filtered through grade-appropriate lesson topics, provides a continuity and a meaningful progression as students build content knowledge through engaging complex texts.

Research also suggests the benefits of active learning for engagement and motivation. Tools like those in **myNotebook** and **myWriteSmart** invite students to actively engage in their learning by taking notes, annotating, organizing ideas, and tracking new vocabulary words.

Additionally, the *Journeys* **Interactive Lessons in Listening, Speaking, and Writing** provide students with engaging tutorials on contemporary topics of interest to students—using an interactive, multimedia presentation that is designed to engage and motivate students.

Research suggests that digital-based learning offers an increased opportunity for student engagement and motivation. The digital systems used with *Journeys,* such as with the **HMH Player App,** allow HMH to provide teachers and students with 24/7 access on any device, online or offline. Students can interact with content and stay motivated with the program's reward system.

Video clips provided through the HMH partnership with **Channel One** provide access to current events connections in Social Studies and Science. These kinds of multi-media, visual presentations of content will help to engage students and deepen their content knowledge. The opening pages to the unit in the Teacher's Edition provide suggestions for teachers to use videos, questions, and other approaches to engage students in the Unit's topic.

Motivate and Engage

Have students open to **Student Book p. 15** and read aloud the unit title, Reaching Out. Play the <u>Stream to Start media</u> to spark curiosity about the unit topic and discuss it. Ask questions such as these: **ELA** SL.4.1a **ELD** ELD.PI.4.1

- *Why is reaching out to others important?*
- *How can reaching out to someone lead to friendship?*

STRAND 6: ASSESSMENT

Assessment...refers to all those activities undertaken by teachers—and by their students in assessing themselves—that provide information to be used as feedback to modify teaching and learning activities...
Black & Wiliam, 1998a, p. 140

Effective instruction depends on sound instructional decision-making, which, in turn, depends on reliable data regarding students' strengths, weaknesses, and progress in learning content and developing literacy.
Afflerbach, 2004, in National Institute for Literacy, 2007

Defining the Strand

To best meet the needs of all students, teachers must have a deep and clear understanding of the needs of each. In successful classrooms, teachers use effective tools to collect data about students' knowledge and skills so that they can understand what is working instructionally—and what is not—and take precise, swift, and effective action in meeting the specific needs of students. In a data-driven system, clear and shared standards are important, so that students and teachers know the intended outcomes of instruction. Assessments aligned to the standards are essential, so that teachers can analyze how well students meet the goals for learning. Finally, aligned instruction is crucial, so that teachers have the instructional materials they need to address students' needs.

As noted by numerous research studies, the regular use of assessment to monitor student progress can improve student learning (Fuchs, 2004). Research attests to the positive effects that formative assessment has on learning (Black & Wiliam, 1998b; Cotton, 1995; Jerald, 2001). And in early reading, assessment is especially crucial; because the early literacy skills of children in kindergarten, first, and second grade are foundational for the development of subsequent comprehension and literacy skills, accurate and reliable assessment and effective instruction and intervention are imperative. As Coyne and Harn (2006) state, "By completing the link between assessment and instruction, schools can dramatically increase the number of students who become successful readers in the primary grades."

The *Journeys* © 2017 program offers varied and effective assessment tools and resources to support teaching and learning. The program's formative assessments and performance-based tasks provide teachers with regular and complete information about student learning and performance. *Journeys* uses technology to support data-driven instruction. Features like the program's **Assessment Hub** facilitate a cycle of regular, computer-based assessment and feedback.

Research that Guided the Development of *Journeys*

Formative Assessment

The phrase *formative assessment* encompasses the wide variety of activities—formal and informal—that teachers employ throughout the learning process to gather instructional data to assess student understanding and to make and adapt instructional decisions. Formative assessment is not an end in itself; the goal is not to assign a grade, for example; but rather, its purpose is to guide instruction. Formative assessment moves testing from the end into the middle of instruction, to guide teaching and learning as it occurs (Heritage, 2007). Effective teachers use formal tools (such as quizzes or homework assignments) and informal tools (such as discussion and observation) to regularly monitor student learning and check student progress (Cotton, 1995; Christenson, Ysseldyke, & Thurlow, 1989). When the Committee on Defining Deeper Learning and 21st Century Skills sought to identify the central instructional approaches needed to ensure that students achieve 21st century competencies, the group identified formative assessment as one of these key elements (National Research Council, 2012). Curriculum designed and developed for 21st-century learning should use formative assessment to "(a) make learning goals clear to students; (b) continuously monitor, provide feedback, and respond to students' learning progress; and (c) involve students in self- and peer assessment" (National Research Council, 2012, p. 182).

The Impact of Formative Assessment on Student Learning: Educators agree on the benefits of ongoing assessment in the classroom. "Well-designed assessment can have tremendous impact on students' learning . . . if conducted regularly and used by teachers to alter and improve instruction" (National Research Council, 2007, p. 344). In a study of student learning in a multimedia environment, Johnson and Mayer (2009) found that students who took a practice test after studying multimedia material outperformed students who studied the material again (without the assessment). Stecker, Fuchs, and Fuchs (2005) examined research on curriculum-based measurement, in which teachers used outcomes-based assessments regularly to monitor student progress, and found that the use of these assessments produced significant gains—when teachers used the data to make appropriate adjustments to instruction. Research shows that regularly assessing and providing feedback to students on their performance is a highly effective tool for teachers to produce significant—and often substantial—gains in student learning and performance (Black & Wiliam, 1998a, 1998b).

Research suggests that formative assessment is especially beneficial for lower-performing students, and, as a result, helps to lower achievement gaps and reduce overall achievement (Black & Wiliam, 1998b). After reviewing the body of research on strategies most effective with students with mild learning disabilities, researchers found regular formative assessment to be a shared element of effective interventions with this population (Christenson, Ysseldyke, & Thurlow, 1989).

The Importance of Formative Assessment for Foundational Reading: Formative assessment is particularly important in early reading instruction. Regular assessment and subsequent tailored instruction is necessary for foundational skills because of the interconnected and sequential nature of learning: "Because the ability to obtain meaning from print depends so strongly on the development of word recognition accuracy and reading fluency, both of the latter should be regularly assessed in the classroom, permitting timely and effective instructional response where difficulty or delay is apparent" (Snow, Burns, & Griffin, 1998, 7).

How Formative Assessment Helps Teachers: Formative assessment provides teachers with the information they need to make instructional decisions. "Effective instruction depends on sound instructional decision-making, which in turn, depends on reliable data regarding students' strengths, weaknesses, and progress in learning content . . . " (National Institute for Literacy, 2007, p. 27). An effective system of formative assessment increases teachers' sense of self-efficacy; as Coyne and Horn (2006) argue, "Data from ongoing formative assessments reinforce teachers' efforts as they see tangible evidence of student progress and, as a result, increase the social validity and perceived importance of systematic reading instruction and intervention" (p. 43).

Performance-Based Assessment

Performance-based assessments connect to the important content and process skills emphasized in instruction, and offer the opportunity for students to show how well they can use what they know to classify, compare, analyze, or evaluate (Hibbard, 1996) and create a response or product. Performance-based tasks may take different forms, require different types of performances, and be used for different purposes (formative or summative) but they are typically couched in an authentic or real-life scenario and require high-level thinking. Darling-Hammond (2010) studied the characteristics of assessment systems in high-performing nations and found that "they emphasize deep knowledge of core concepts within and across the disciplines, problem solving, collaboration, analysis, synthesis, and critical thinking. As a large and increasing part of their examination systems, high-achieving nations use open-ended performance tasks ...to give students opportunities to develop and demonstrate higher order thinking skills..." (p. 3)

The Benefits of Performance-Based Assessment: Their review of classroom assessment (CA) practices in an age of high-stakes testing led Schneider, Egan, and Julian (2013) to conclude that "the value of high quality performance tasks should not be diminished and should be encouraged as an important tool in CA" (p. 66). Performance-based assessments are beneficial in that they:

Reflect Authentic, Real-World Tasks: Performance-based assessments are positive because they look like what we want students to do in the classroom (Fox, 2004)—and, as a result, can inform classroom practice in positive ways. Performance tasks allow teachers to engage students in real-world activities; they "emulate the context or conditions in which the intended knowledge or skills are actually applied" (American Educational Research Association [AERA], American Psychological Association [APA], and National Council on Measurement in Education [NCME], 1999, p. 137). They model "what is important to teach and ... what is important to learn" (Lane, 2013, p. 313).

Provide a Complete Picture: As Krebs notes in his 2005 article, using too narrow an assessment data point may lead to incomplete or inaccurate conclusions about student performance. Performance-based assessment allows for a fuller picture of what students' know and can do. Marzano, Pickering, and McTighe (1993) see performance-based assessment as providing an opportunity to assess multiple dimensions of learning. Yang and Plakans (2012) agree, finding that integrated performance tasks assess comprehension and production, as well as regulation skills for managing, interactions between reading, listening, and writing.

Align with Standards: In defining the elements of an effective student assessment system, Darling-Hammond (2010) said that such a system must "address the depth and breadth of standards as well as all areas of the curriculum, not just those that are easy to measure" (p. 1). This calls for performance on challenging tasks. According to the Smarter Balanced Assessment Consortium, "performance tasks measure a student's ability to integrate knowledge and skills across multiple standards—a key component in college and career readiness."

Encourage Retention: Researchers comparing student performance on assessments that include open-ended written responses with performance on multiple-choice tests found that students who wrote responses retained information better than those who responded to multiple-choice items (Roediger & Karpicke, 2006; McDaniel, Roediger, & McDermott (2007).

From Research to Practice

Formative Assessment in Journeys

Journeys provides teachers and students with ongoing assessment opportunities so that learners have constant feedback about where they are and how far along they are towards meeting year-end learning goals.

In *Journeys* the program provides more formal, structured formative assessment options and also calls out more informal, classroom opportunities for assessment. Ongoing opportunities for **Formative Assessment** are called out in the *Journeys* Teacher's Edition, as in this example from grade 4:

Technology: The *Journeys* **Assessment Hub** offers technological tools in support of data-driven instruction. The hub provides technology-enhanced assessment items, screening and diagnostic assessments, formative and progress-monitoring assessments, and summative assessments. Online interactivity allows for a direct feed to a teacher hub for ease in scoring and reporting—providing the kind of immediate, regular feedback that research suggests is such an important component of a successful formative assessment system.

In addition, the computer-based assessments offered through the *Journeys* **Assessment Hub** provide practice for students who will encounter these types of items and **Performance Tasks** on the assessments developed by the Smarter Balanced Assessment Consortium (SBAC) and Partnership for Assessment of Readiness for College and Careers (PARCC).

The **Common Core Practice and Assessment App** delivered via HMH Player provides additional, standards-based practice for students.

Response to Intervention: *Journeys* offers embedded intervention as well as supplemental intervention. Clear labeling of Response to Intervention (RtI) and a clearly defined use of the **Write-In Reader** means that teachers can approach intervention in a purposeful and systematic way.

The new tier 3 intervention system, **HMH Decoding Power,** and other enhancements from previous editions have strengthened the *Journeys* © 2017 **Response to Intervention** (RtI) tools and resources even more. Tier 3 intervention includes a stronger connection to *Journeys* and more support for managing delivery of the interventions in conjunction with the core program.

Differentiation: Throughout *Journeys,* the program provides small-group and reteaching suggestions to meet the needs of specific learners. The formative assessments throughout *Journeys* are presented with an **If...Then...** format for results, to respond with tailored instruction for learners across the spectrum, from struggling to advancing to excelling. For advanced learners, additional challenges are offered at the point-of-use in the formative assessments.

For example, see this **If...Then... Formative Assessment** response from grade 4:

Performance-Based Assessment in Journeys

In *Journeys* © 2017 students will encounter the kinds of performance-based assessment tasks that will require them to process content and communicate knowledge at high levels. Performance-based tasks throughout *Journeys* require students to study models, connect reading and writing, and use textual evidence when writing to sources.

Throughout *Journeys*, students will encounter **Performance Tasks.** With each task, students must synthesize information from texts and cite evidence in their writing.

Unit **Performance Tasks** provide performance-based assessments related to the content of each *Journeys* unit. Each **Performance Task** is organized around a specific writing genre that has been the focus of modeling and instruction throughout the unit:

Grade 4 Unit Performance Tasks – By Writing Genre	
Unit 1	Write a Story
Unit 2	Write a Literary Analysis Essay
Unit 3	Write an Opinion Essay
Unit 4	Write a Response to Literature Essay
Unit 5	Write a Research Report

Performance Tasks, independent of *Journeys* content, are offered to provide students preparation for actual testing conditions in formats like those that included in the Smarter Balanced Assessment Consortium (SBAC) and Partnership for Assessment of Readiness for College and Careers (PARCC) tests. These in-depth exercises that serve as demonstrations of higher-level performance skills will benefit students—giving them practice and feedback about their skills and performance.

STRAND 7: MEETING THE NEEDS OF ALL STUDENTS

Optimal learning takes place within students' "zones of proximal development"—when teachers assess students' current understanding and teach new concepts, skills, and strategies at an according level.
Vygtosky, 1978, p. 86

Today's schools are becoming increasingly diverse. Many teachers find that their classrooms are populated by English language learners, gifted students, students with disabilities, and students who are culturally diverse. Nearly half of all students in U.S. public schools (42 percent) are students of color, approximately 20 percent of students speak a language other than English at home, and approximately 14 percent of students have an identified disability ... To add to this diversity, approximately 12 percent of students in public schools are labeled as gifted and talented ... Like their peers with disabilities, gifted and talented students are also integrated into general education classrooms. All of these differences make teaching more interesting and exciting as well as more complex.
Voltz, Sims, & Nelson, 2010

Defining the Strand

Huebner (2010) concurs with Voltz, Sims, & Nelson (above): "today's classrooms are filled with diverse learners who differ not only culturally and linguistically but also in their cognitive abilities, background knowledge, and learning preferences" (p. 79).

Despite this "wide range of student differences—or perhaps because of it—there is an increased emphasis to have all students reach the same academic goals and standards...This [standards-based reform] movement holds many promises, such as:

· Helping educators focus on critical knowledge and skills.
· Enhancing the coherence and continuity of instruction...
· Addressing the soft bigotry associated with lower expectations for poor and minority students...." (Voltz, Sims, & Nelson, 2010)

Groups of students—English learners, struggling readers, advanced students—have specific needs. When teachers understand the needs of these groups, and tailor instruction accordingly, teachers better help these students reach high levels of achievement.

Journeys supports teachers and meets the needs of *all* students by providing specific suggestions for differentiation and intervention, and for meeting the needs of specific populations, including struggling readers, advanced learners, and English learners.

Research that Guided the Development of *Journeys*

Intervention and Response to Intervention (RtI)

Effective intervention begins with high-quality instruction in the core program. With this strong foundation, instructional programs can offer support for differentiation and intervention that will enable teachers to help all students achieve at high levels. Curricular materials that align with rigorous standards, offer clear pathways for instruction and provide suggestions, tools, and resources for differentiation and intervention will meet the needs of all students.

The Response to Intervention (RtI) Model: Both differentiated instruction and Response to Intervention (RtI) "share a central goal: to modify instruction until it meets the needs of all learners" (Demirsky, Allan & Goddard, 2010). According to Demirsky, Allan and Goddard (2010), these two instructional approaches are complementary and share the premises that all students have different academic needs and that teachers must teach accordingly to meet these needs and to ensure student success. While differentiation is generally used to respond to the needs of diverse learners in the classroom, RtI is envisioned as a prevention system with multiple layers—a structured way to help students who are struggling before they fall behind their peers—and so it focuses on early, and ongoing, identification of needs and tiers of responses. In the elementary reading classroom, "RTI is integrally linked to the concept of providing intensive early intervention to prevent later reading failure" (Gersten & Dimino, 2006, p. 101).

Response to Intervention (RtI) is a model that integrates instruction, intervention, and assessment to create a more cohesive program of instruction that can result in higher student achievement (Mellard & Johnson, 2008). RtI is most commonly depicted as a three-tier model where:

- **Tier 1** (primary intervention) represents general instruction and constitutes primary prevention. Students at this level respond well to the general curriculum and learn reasonably well without additional support.

- **Tier 2** (secondary intervention) represents a level of intervention for students who are at moderate risk. Students at Tier 2 receive some supplementary support in addition to Tier 1 instruction.

- **Tier 3** (teriary intervention) typically represents students who need more extensive, intensive, and specialized intervention, sometimes including special education services (Smith & Johnson, 2011).

In implementing RtI in the early reading classroom, the use of effective assessments is essential. As the International Reading Association (IRA) statement (2010) on RtI advises, "An RtI approach demands assessment that can inform language and literacy instruction meaningfully. Assessment should reflect the multidimensional nature of language and literacy. . . . " According to Griffiths, VanDerHeyden, Parson, and Burns (2006), an effective RtI model should include three elements:

1. Systematic assessment and collection of data to identify students' needs
2. The use of effective interventions in response to the data
3. Continued assessment of students to determine the effectiveness of interventions—and the need for any additional intervention

The Benefits of RtI: Burns, Appleton, and Stehouwer (2005) conducted a meta-analysis to examine the relationship between Response-to-Intervention (RtI) and students' achievement. From the existing research on large-scale models and research-context models, twenty-four effect sizes were computed. The researchers found strong positive effectives for student achievement across studies.

In an analysis of the findings of the first-grade longitudinal reading study of the National Research Center on Learning Disabilities, Fuchs and colleagues (2008) evaluated data from a large-scale, longitudinal, experimental study of RtI in reading for elementary school students. The findings demonstrated the effectiveness of RtI.

...students in our tutoring program out-performed controls on both a progress monitoring measure and several standardized reading tests. Findings extend the extant literature...in three ways: first, because our young students were both initially low-performing and non-responsive to primary intervention; second, because their gains during spring semester of first grade maintained throughout their second year; third...our results may be seen as support of the use of a standard treatment protocol during secondary intervention. (p. 434)

Meeting the Needs of English Learners

English learners (ELs) are one of the fastest-growing groups of students in the United States (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006b). For English learners, the challenge is that they must learn the content of instruction, while simultaneously learning the language of instruction. Generally speaking, effective instruction for native English speakers is similarly effective for ELs (Fitzgerald, 1995a), but some specific approaches are particularly effective for ELs. According to Huebner:

Research shows that instruction in the key components of reading identified by the National Literacy Panel—phonemic awareness, phonics, fluency, vocabulary, and text comprehension—has clear benefits for ELLs as well as for other students (August & Shanahan, 2006). However, there is a growing consensus that ELLs are less likely to struggle with the basic skills—phonemic awareness and phonics—than with the last three components—fluency, vocabulary, and comprehension. These are the areas that cause many students, especially ELLs, to falter in mid-elementary school when they are expected to make the transition from "learning to read" to "reading to learn" (Francis et al., 2006a). When working with ELLs to improve their literacy, it is important that teachers choose interventions that target the specific difficulties each student is experiencing. (p. 90)

Effective Instruction for English Learners: In reviewing the research on effective English language instruction in order to generate a set of recommendations for practitioners, Baker and his panel colleagues (2014) concluded that to enable English learners to be successful in school, educators should focus on academic vocabulary; integrate oral and written English language instruction; provide regular and structured opportunities for writing; and offer small-group, targeted interventions. These, and other specific research-based approaches for ELs are discussed here.

Vocabulary Instruction for ELs: "Many English learners lack opportunities to develop the sophisticated, abstract, academic vocabulary necessary to support reading, writing, and discussion of the academic topics covered in school" (Baker et al., 2014, p. 13). Explicit instruction in academic and content-area vocabulary may be necessary for students to succeed in school (Fitzgerald, 1995b).

Academic Language Instruction for ELs: One way we can look at conversational and academic English is with the image of a continuum: "Because conversational and academic language use can be seen as opposite ends of a continuum, from informal to formal, and from highly contextualized to highly academic, a key question...is *How can we use the conversational skills of English language learners to help them build the academic skills that they will increasingly need to be successful in school?*" (Walqui & van Lier, 2010, p. 49). While the development of conversational English may take place naturally, through social interactions, English learners "will need support in learning academic language" (Schleppegrell, 2012, p. 413). Academic language is like a "third" language that takes students much more time to master than social English (DeLuca, 2010). According to Francis, Rivera, Lesaux, Kieffer, and Rivera (2006b), "mastery of academic language is arguably the single most important determinant of academic success for individual students" (p. 5). Teachers must provide instruction in academic language through direct, varied, frequent, and systematic instruction in words and word-learning strategies (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006b).

Comprehension Instruction for ELs: Their synthesis of research on the specific needs of English learners led Francis, Rivera, Lesaux, Kieffer, and Rivera (2006b) to conclude that explicit strategy instruction, teacher modeling, and practice opportunities benefited students' comprehension.

Genre Instruction for ELs: In studying the written products of English learners in grades 3 through 5, Brisk found that students lacked full understanding of the expected genres and the connection of audience, voice, and genres (as seen through the use of grammatical person) (Brisk, 2012). Her findings suggest that explicit study in genre, including the focus on the purpose, audience, and voice, can particularly benefit English learners. Similarly, close reading of discipline-specific uses of language appear to support English learners in comprehending academic texts (Fang & Schleppegrell, 2010). His synthesis of EL research led Fitzgerald (1995b) to conclude that explicit instruction on informational text structures facilitates content-area learning among ELs.

Speaking and Writing Instruction for ELs: Rigorous state standards have "increased expectations for students' oral and written academic communications…" (Baker et al., 2014, p. 31). For English learners, several instructional strategies can help to develop their speaking and writing. These include anchoring instruction with visuals and graphics to help students make sense out of content; providing regular opportunities for discussion and for writing; and including regular assessments with constructive feedback into the instructional cycle (Baker et al., 2014). Francis, Rivera, Lesaux, Kieffer, and Rivera (2006b) emphasize that ELs must receive intensive academic writing instruction through meaningful writing assignments with opportunities to see models and receive feedback.

High-Quality Interactions for ELs: Research suggests that incorporating ample opportunities for interacting supports language learning (Walqui & van Lier, 2010).

High Standards for ELs: In their research on how best to scaffold the academic success of English learners, Walqui and van Lier conclude that rather than meeting the needs of English learners with simplified instruction and lower expectations, it is imperative that educators sustain academic rigor and hold high expectations (p. 81). To enable ELs to learn in this "challenge zone" (Gibbons, 2009) teachers must provide adequate, targeted supports.

Technology for ELs: Using technology to deliver instruction to ELs can be particularly effective. In a study with 66 urban ELs, Silver and Repa (1993) found that students who used a word processor showed higher-quality writing than those who used a pen-and-paper. Lopez (2010) found benefits to using interactive whiteboard technology, finding that use helped to close the achievement gap between ELs and native speakers in the study. Another potential benefit of technology is the power to embed scaffolds at the point-of-use.

Meeting the Needs of Struggling Readers

Although students have made some gains in recent decades, results of the National Assessment of Educational Progress (NAEP) show that we still have far to go to meet the instructional needs of these students. In 2013, just 35% of students in grade 4 performed at or above the proficient level on NAEP and 36% of students in grade 8 performed at or above proficient (U.S. Department of Education, 2013).

Effective Instruction for Struggling Readers: Not all struggling readers struggle for the same reasons. They differ in their needs for instruction (Valencia, 2010). Some need additional instruction in phonics, decoding and word recognition. Others need instruction focused more closely on comprehension strategies (Pressley, Gaskins, & Fingeret, 2006). What these students do not need is slowed-down instruction, which will ensure that they remain behind their peers (Allington & Walmsley, 1995).

Vocabulary Instruction for Struggling Readers: As discussed in the section above, language exists on a continuum, with conversational language at one end and academic language at the other. Like ELs, struggling readers benefit from explicit instruction in academic language and academic and content-area vocabulary. Sedita (2005) found that struggling readers who received explicit vocabulary instruction made larger and faster literacy gains.

Strategy Instruction for Struggling Readers: Readers who struggle with comprehension struggle with using reading comprehension strategies, such as summarizing, making inferences, or monitoring their comprehension (Dole, Duffy, Roehler, & Pearson, 1991). Explicit strategy instruction can help. For students who need to develop strategic reading, demonstrations of effective strategy use and continued opportunities to apply strategies learned are essential components of effective instruction (Cunningham & Allington, 2007; Allington, 2001; Fielding & Pearson, 1994; Armbruster, Anderson, & Ostertag, 1987; Raphael & Pearson, 1985; Baumann, 1984; Pikulski, 1994). When students become more successful at using strategies, their motivation to learn increases because they see they have the ability to learn (Schunk, Pintrich, & Meece, 2008).

Intensive Skills Instruction for Struggling Readers: Struggling readers benefit from the same instructional strategies from which all learners benefit, but also benefit from more intensive instruction on skills (Au, 2002).

Graphic Organizers for Struggling Readers: Supporting students with more visual ways of accessing content can be effective with struggling readers. Graphic organizers have been shown to be effective with struggling learners (Collins, 1998; Cunningham & Allington, 2007).

Opportunities for Interaction for Struggling Readers: Providing ample opportunities for students to interact and discuss the content being learned can also benefit struggling readers (Strickland & Alvermann, 2004; Wigfield, 2004).

Engagement and Motivation for Struggling Readers: Increasing the motivation of struggling readers is particularly important because of the close connection between motivation and reading achievement. When students are interested and engaged, they will be motivated to persist in learning (Hidi & Boscolo, 2006; Guthrie & Humenick, 2004; Eccles, Wigfield, & Schiefele, 1998). Engagement and motivation are particularly important in reading instruction (Stipek, 2002). Guthrie and colleagues found student interest correlated with increased comprehension and recall (Guthrie, Hoa, Wigfield, Tonks, Humeneck, & Littles, 2007). Engagement connected with increased reading comprehension with low SES students in a study by Taylor, Pearson, Peterson, and Rodriguez (2003). Increasing conceptual knowledge increases engagement (Guthrie & Wigfield, 2000) as does setting authentic purposes for literacy activities (Cunningham & Allington, 2007). Finally, Wigfield (2004) argues that clear goals and expectations for performance increase motivation among this population.

Meeting the Needs of Advanced Learners

In almost any classroom, there will be a group of students who are ready to advance at an accelerated pace and face increased academic challenges.

Effective Instruction for Advanced Learners: Like English language learners and struggling learners, advanced learners require differentiation in their instruction as well.

Variable Pacing for Advanced Learners: Advanced learners benefit from opportunities to move at a different pace than other learners (Tomlinson, 1995) and to work independently (Rogers, 2007). Research suggests that "gifted learners are significantly more likely to prefer independent study, independent projects, and self-instructional materials" (Rogers, 2002).

Flexible Grouping for Advanced Learners: Employing flexible grouping practices has been shown to be effective for meeting the needs of advanced learners (Tomlinson, 1995). Rogers (2007) also emphasizes the importance of providing opportunities to work with peers and to work independently.

Engagement for Advanced Learners: Differentiation in activities and delivery can help to engage advanced learners (Rogers, 2007; Tomlinson, 1995, 1997; VanTassel-Baska & Brown, 2007), as can centering activities around issues, problems, and themes that are of interest and relevant to these students (VanTassel-Baska & Brown, 2007).

The Importance of Assessment for Advanced Learners: Tomlinson (1995) argues for the importance of ongoing assessment of advanced learners. She argues that providing ongoing assessments in varied modes is most likely to give students the most opportunity to demonstrate their knowledge and skill.

From Research to Practice

Intervention and Response to Intervention (RtI) in Journeys

Effective intervention begins with excellent instruction. *Journeys* © 2017 provides a high-quality core program that is the foundation for high-quality teaching. *Journeys* offers teachers clear curricular pathways, rigorous expectations for all students, ongoing instructional supports, and flexible options for differentiation. In these multi-faceted ways the program ensures learning for all.

Tier 1: Core Program: The *Journeys* © 2017 program gives all students the opportunity to learn. The program offers varied presentations of information and content; differentiated opportunities for students; and diverse approaches designed to stimulate student interest and motivation. Throughout *Journeys* lessons, teachers will find scaffolds, differentiated instruction, and options for reteaching so that learners at many levels can meet with success.

Journeys is customizable. The **Quick Start Pacing Guide** provides teachers with guidance on how best to deliver instruction based on teaching preferences and time frames. Digital tools allow for further customization.

The program's **Small Group Planner** provides guidance for differentiating instruction for **Struggling Readers, On-Level** readers**,** and **Advanced** students (as in this example from grade 4, showing plans for Days 1 through 3).

Tier 2: Core Program + Strategic Intervention: The program's intervention components link to the core instruction, with **Strategic Intervention** activities provided at point-of-use.

Strategic Intervention activities support students who are struggling with the core content and incorporate the use of the *Journeys* **Write-In Readers.** Selections in the **Write-In Readers** match the topics of the *Journeys* lessons and help students build the foundational and strategic skills for reading more complex texts.

Stop, Think, Write activities in the **Write-In Readers** are designed to support and reinforce the key skill or strategy. **Look Back and Respond** pages offer hints that help students search the text for key information. **Reading Detective** pages scaffold students in reading increasingly complex text by putting students in the role of reading detectives as they ask questions, look for clues, and write to demonstrate evidence-based comprehension of the **Anchor Text** in the Student Book.

The program's ongoing assessment system supports targeted intervention and is linked to intervention resources.

Tier 3: Core Program + Strategic Intervention + Intensive Intervention: Used in conjunction with Tier 1 and Tier 2 resources and tools, the *Journeys* Tier 3 resources offer targeted intensive intervention in specific skills.

The program's **HMH Decoding Power: Intensive Reading Instruction** resource supplements the scope and sequence in *Journeys* © 2017, as well as functioning as a stand-along resource, offering teachers multiple options for use. This tool provides targeted intervention for students who need Reteaching and practice in one or more key foundational skills. The five "systems" of HMH Decoding Power provide explicit, sequential, and systematic instruction as well as practice and review in the critical areas of:

· Print concepts
· Letter knowledge
· Phonological Awareness
· Phonemic Awareness
· Phonics
· Word Recognition
· Fluency

The systems include instruction at multiple grade levels, enabling teachers to bring struggling readers up to grade level.

Meeting the Needs of English Learners in Journeys

Journeys © 2017 supports English learners every step of the way.

The program recognizes that English learners "may require additional time, appropriate instructional support, and aligned assessments as they acquire both English language proficiency and content-area knowledge" (NGA/CCSSO, 2010, Application of the Standards for English Language Learners). To this end, the program provides:

- Integrated English Language Development (ELD) support, such as with the **English Language Support** suggestions in the Teacher's Edition, as in this example from grade 4

- Specialized instructional support to develop academic English and content-area knowledge

- Scaffolds at the point of use in lessons

- Enhanced intervention instruction and labeling

- Supports to allow English Learners (ELs) to interact with complex texts, such as a **Text X-Ray** with every lesson which breaks down the structural and language features of every **Anchor Text,** such as in this example from grade 4 where teachers are given suggestions for how to **Zoom In on Academic Language**

ENGLISH LANGUAGE SUPPORT
Use Visuals
All Proficiencies To assist students with accessing the content and topic of the Teacher Read Aloud, discuss the High-Utility Words on the Lesson 1 Language Support Card.

Zoom In on Academic Language
Guide students at different proficiencies and skill levels to understand the structure and language of this text.

Focus: Text Level | p. 22
Students should recognize that Opal is the narrator and that the story she is telling is about her own experiences. Draw students' attention to the **pronouns** *I* and *me*. Tell them that these pronouns are clues that the story is being told from a **first-person point of view**.

Focus: Word Level | pp. 24, 26
Support English learners and others in understanding **idiomatic expressions**, such as "has a large heart" and "miss-smarty-pants." Elicit from students that "has a large heart" means that someone is friendly and caring and that "miss-smarty-pants" refers to a girl who acts smart (whether she actually is or not). Use these frames.
- *Natalia has a large heart. She cares about everyone.*
- *Debbie is a miss-smarty-pants. She thinks she knows everything.*

Focus: Text Level | p. 24
Lead a discussion about the author's use of **flashback** in the story. Have students point out the words on page 24 that signal a flashback is about to occur. *back when*

Focus: Sentence Level | p. 26
Point out the pattern of **repeated words** on page 26: *It was wild. There were wild men and wild woman and wild animals.* Tell students that in the second sentence, the word *wild* is used to modify the nouns *men, women,* and *animals*. Discuss how the repetition of words can signal an emphasis the author wants to make.

- An extra hour of instruction for ELs

- Varied levels of EL materials, resources, and tools (for Emerging, Expanding, and Bridging levels), with substantial, moderate, and light support, in recognition of the diversity of this population

- Language awareness activities and purposeful, meaningful language-based activities

- Opportunities for meaningful interactions with peers, teachers, and texts

- Vocabulary and academic language instruction through the program's **Words to Know** and **Vocabulary in Context** features, which appear along with activities for supporting English learners and the **Practice Vocabulary** opportunities to apply vocabulary knowledge

- Comprehension strategy instruction

- Opportunities for collaboration

In addition, *Journeys* offers a supplemental intervention program for long-term English learners, called **Escalate English,** which is thematically related to core *Journeys unit topics* and features:

· Extensive language modeling through audio, video, texts, and student writing models
· A variety of high-interest texts in multiple formats
· Clearly articulated diagnostic and progress monitoring assessments to ensure student mastery

Journeys provides supports for English Learners to reach learning targets. With these supports, the program is able to hold *all* learners to the same high expectations.

Meeting the Needs of Struggling Readers in Journeys

Students who struggle with reading, and their teachers, will find ample support throughout *Journeys* © 2017.

Journeys © 2017 does not slow down instruction for these students. Instead, the program supports students in meeting the same high expectations for reading, writing, speaking, and listening as their peers, in part, by providing accessible, just-in-time scaffolds within the program's overall design, and at point of reference in the lessons.

With *Journeys,* teachers know how to help students **Prepare for Complex Texts.**

The **Text X-Ray** feature offers supports that call out and scaffold the most complex and challenging key ideas and academic language in each Anchor Text, so teachers have support for all potential stumbling blocks.

For students who benefit from the use of visuals, many activities are supported by **Graphic Organizers,** such as Story Maps and others, that help students organize ideas using a visual as support.

The program offers explicit strategy instruction and practice with comprehension strategies with the **Target Strategy** focus, such as in this example from grade 4:

And, with the **Comprehension Strategies** call-outs in the Teacher's Edition, as in this grade 4 example:

Meeting the Needs of Advanced Learners in Journeys

Throughout, the *Journeys* © 2017 program provides suggestions to differentiate instruction to meet the needs of advanced learners.

Built-in program features offer additional opportunities for advanced learners. At the point-of-use in lessons and formative assessments, additional challenges are provided. Small-group lessons always differentiate for advanced learners.

Formative Assessment call-outs in the Teacher's Edition provide **If…Then…** suggestions and recommended tools and resources for meeting the needs of specific populations, including students who excel.

For example, see this **If…Then…** chart from grade 4:

References

Achugar, M., Schleppegrell, M., & Oteiza, T. (2007). Engaging teachers in language analysis: A functional linguistics approach to reflective literacy. *English Teaching: Practice and Critique, 6* (2), 8–24.

ACT. (2006). *Reading between the lines: What the ACT reveals about college readiness in reading.* Iowa City, IA: Author.

ACT. (2006). *Reading between the lines: What the ACT reveals about college readiness in reading. Executive summary.* Iowa City, IA: Author. Retrieved December 15, 2014 from http://www.act.org/research/policymakers/pdf/reading_summary.pdf

ACT. (2007). *Writing framework for the 2011 National Assessment for Educational Progress, pre-publication edition.* Washington, D.C.: National Assessment Governing Board.

ACT. (2009). *The condition of college readiness 2009.* Iowa City, IA: Author.

Adams, M.J. (2010-2011). Advancing our students' language and literacy. *American Educator,* Winter, 3-11, 53.

Adams, M.J. (1990). *Beginning to read: Thinking and learning about print.* Urbana-Champaign, IL: University of Illinois, Reading Research and Education Center.

Afflerbach, P. (1986). The influence of prior knowledge on expert readers' importance assignment processes. In J. A. Niles & R. V. Lalik (Eds.), *National reading conference yearbook. Vol. 35: Solving problems in literacy: Learners, teachers, and researchers*. Rochester, NY: National Reading Conference.

Ainley, M. (2012). Students' interest and engagement in classroom activities. In S.L. Christenson, A.L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 283-302). New York: Springer.

Alexander, P.A., & Mayer, R.E. (2010). Introduction to research on instruction. In R.E. Mayer and P.A. Alexander (eds.), *Handbook of research on learning and instruction* (pp. 245-248). New York: Routledge.

Alfassi, M. (2004) Reading to learn: Effects of combined strategy instruction on high school students. *The Journal of Educational Research, 97*(4), 171-184.

Allington, R. (2001). *What really matters for struggling readers: Designing research-based programs.* New York: Addison-Wesley.

Allington, R.L., & Walmsley, S.A. (Eds.) (1995). *No quick fix: Rethinking literacy programs in America's schools.* New York: Teachers College Press.

Almasi, J.F., & Palmer, B.M. (2013). Reading. In J. Hattie and E.M. Anderman (eds.), *Educational psychology handbook: International guide to student achievement* (pp. 342-344). New York: Routledge.

Alvermann, D.E. (2007). Multiliterate youth in the time of scientific reading instruction. In K. Beers, R.E. Probst, & L. Rief (Eds.), *Adolescent literacy: Turning promise into practice* (pp. 19-26). Portsmouth, NH: Heinemann.

American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME]. (1999). *Standards for educational and psychological testing.* Washington, DC: American Educational Research Association.

Anderson, R.S., Mitchell, J.S., Thompson, R.F., & Trefz, K.D. (2014). Supporting young writers through the writing process in a paperless classroom. In R.S. Anderson & C. Mims (Eds.), *Advances in educational technologies and instructional design: Handbook of research on digital tools for writing instruction in K-12 settings* (pp. 337-362). Hershey, PA: IGI Global.

Anderson, V. (1992). A teacher development project in transactional strategy instruction for teachers of severely reading-disabled adolescents. *Teaching and Teacher Education, 8,* 391–403.

Applebee, A., & Langer, J. (2006). *The state of writing instruction: What existing data tell us.* Albany, NY: Center on English Learning and Achievement.

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Education Research Journal, 40*(3), 685–730.

Aronoff, M. (1994). Morphology. In A.C. Purves, L. Papa, & S. Jordan (Eds.), *Encyclopedia of English studies and language arts*, Vol. 2 (pp. 820-821). New York: Scholastic.

Atwell, N. (1989). *Coming to know: Writing to learn in the intermediate grades*. Portsmouth, NH: Heinemann.

Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning*. Portsmouth, NH: Heinemann.

Au, K. H. (2002). Multicultural factors and the effective instruction of students of diverse backgrounds. In A. E. Farstrup & S. J. Samuels (Eds.) *What Research Has to Say About Reading Instruction* (pp. 392–413). Newark, Delaware: International Reading Association.

Baker, S., Geva, E., Kieffer, M.J., Lesaux, N., Linan-Thompson, S., Morris, J., Proctor, C.P., & Russell, R. (2014). *Teaching academic content and literacy to English learners in elementary and middle school: A practice guide* (NCEE 2014-4012). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved January 20, 2015 from http://ies.ed.gov/ncee/wwc/pdf/practice_guides/english_learners_pg_040114.pdf

Baker, S. K., Simmons, D. C., & Kame'enui, E. J. (1995a). *Vocabulary acquisition: Curricular and instructional implications for diverse learners, Technical report no. 13.* University of Oregon: National Center to Improve Tools for Educators.

Baker, S. K., Simmons, D. C., & Kame'enui, E. J. (1995b). *Vocabulary acquisition: Synthesis of the research, Technical report no. 13.* University of Oregon: National Center to Improve Tools for Educators.

Ball, A. F. (2006). Teaching writing in culturally diverse classrooms. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 293-310). New York: The Guilford Press.

Baumann, J. F. (1984). The effectiveness of a direct instruction paradigm for teaching main idea comprehension. *Reading Research Quarterly, 20*(1), 93-115.

Baumann, J.F., & Graves, M.F. (2010). What is academic vocabulary? *Journal of Adolescent and Adult Literacy, 54*(1), 4-12.

Baumann, J. F., & Kame'enui, E. J. (1991). Research on vocabulary instruction: Ode to Voltaire. In J. Flood, J. Jensen, D. Lapp, & J. R. Squire (Eds.), *Handbook of research on teaching the English language arts* (pp. 604-632). New York: Macmillan.

Baumann, J. F., & Kame'enui, E. J. (Eds.). (2004). Vocabulary instruction: Research to practice. New York: Guilford Press.

Baumann, J.F., Kame'enui, E.J., & Ash, G.E. (2003). Research on vocabulary instruction: Voltaire redux. In J. Flood, D. Lapp, J.R. Squire, & J.M. Jensen (Eds.), *Handbook of research on teaching the English language arts* (2nd ed., pp. 752–785). Mahwah, NJ: Erlbaum.

Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: robust vocabulary instruction.* New York: Guilford Press.

Beck, I. L., McKeown, M. G., & Kucan, L. (2008). *Creating robust vocabulary: Frequently asked questions.* New York: Guilford Press.

Beecher, M., & Sweeny, S. (2008). Closing the achievement gap with curriculum enrichment and differentiation: One school's story. *Journal of Advanced Academics, 19*(3), 502–530.

Bennett, S., Maton, K., & Kervin, L. (2008). The "digital natives" debate: A critical review of the evidence. *British Journal of Educational Technology, 39*(5), 775-786.

Berninger, V. W., Abbott, R. D., Abbott, S. P., Graham, S., & Richards, T. (2002). Writing and reading: Connections between language by hand and language by eye. *Journal of Learning Disabilities, 35*(1), 39–56.

Best, R. M., Floyd, R. G., & McNamara, D. S. (2008). Differential competencies contributing to children's comprehension of narrative and expository texts. *Reading Psychology, 29*(2), 137– 164.

Beverly, B.L., Giles, R.M., & Buck, K.L. (2009). First-grade reading gains following enrichment: Phonics plus decodable texts compared to authentic literature read aloud. *Reading Improvement, 46*(4), 191-205.

Biancarosa, G., & Snow, C. (2004). *Reading next—A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellence in Education.

Biancarosa, G., & 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 15, 2015 from http://carnegie.org/fileadmin/Media/Publications/PDF/ReadingNext.pdf

Biemiller, A., & Boote, C. (2006). An effective method for building meaning vocabulary in primary grades. *Journal of Educational Psychology*, *98*(1), 44-62.

Bischoff, A. (2000). The elements of effective online teaching: Overcoming the barriers to success. In K. White & B. H. Weight (Eds.), *The online teaching guide: A handbook of attitudes, strategies, and techniques for the virtual classroom* (pp. 57–72). Boston: Allyn and Bacon.

Blachowicz, C. L., & Fisher, P. (2000). Vocabulary instruction. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.) *Handbook of reading research, Vol. 2* (pp. 789-814). White Plains, NY: Longman.

Black, P., & Wiliam, D. (1998a). Assessment and classroom learning. *Assessment in Education: Principles, Policy, & Practice, 5*(1), 7–74.

Black, P., & Wiliam, D. (1998b). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan, 80,* 139–144.

Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *Elementary School Journal, 104*, 269-287.

Bowers, P. N., & Kirby, J. R. (2010). Effects of morphological instruction on vocabulary acquisition. *Reading and Writing: An Interdisciplinary Journal, 23*(5), 515-537.

Brimijoin, K. (2001). *Expertise in differentiation: A preservice and inservice teacher make their way.* A dissertation presented to the Curry School of Education, University of Virginia. Charlottesville, 5.

Brisk, M.E. (2012). Young bilingual writers' control of grammatical person in different genres. *Elementary School Journal, 112*(3), 445-468.

Britt, M.A., & Aglinskas, C. (2002). Improving students' ability to identify and use source information. *Cognition and Instruction, 20*(4), 485-522.

Bunch, G.C., Walqui, A., & Pearson, P.D. (2014). Complex text and new common standards in the United States: Pedagogical implications for English learners. *TESOL Quarterly, 48*(3), 533-559.

Burke, K., & Dunn, R. (1998). *Learning style: The clue to you!* Jamaica, NY: St. John's University, Center for the Study of Learning and Teaching Styles.

Burns, M.K., Appleton, J.J., & Stehouwer, J.D. (2005). Meta-analytic review of Responsiveness-to-Intervention research: Examining field-based and research implemented models. *Journal of Psychoeducational Assessment, 23*(4), 381-394.

Caine, R. N., & Caine, G. (1997a). *Education on the edge of possibility*. Alexandria, VA: Association for Supervision and Curriculum Development.

Caine, R. N., & Caine, G. (1997b). *Unleashing the power of perceptual change: The potential of brain-based teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

Calkins, L.M. (2001). *The art of teaching reading.* New York, NY: Addison-Wesley.

Calkins, L.M. (1994). *The art of teaching writing* (2nd ed.). Portsmouth, NH: Heinemann.

Cantrell, S. C., Almasi, J. F., Carter, J. C., Rintamaa, M., & Madden, A. (2010). The impact of a strategy-based intervention on the comprehension and strategy use of struggling adolescent readers. *Journal of Educational Psychology, 102*(2), 257–280.

Carlisle, J. F. (2010). Effects of instruction in morphological awareness on literacy achievement: An integrative review. *Reading Research Quarterly*, *45*(4), 464–487.

Carnegie Council on Advancing Adolescent Literacy. (2010). *Time to act: An agenda for advancing adolescent literacy for college and career success.* New York: Carnegie Corporation of New York.

Cartledge, G., Singh, A., & Gibson, L. (2008). Practical behavior-management techniques to close the accessibility gap for students who are culturally and linguistically diverse. *Preventing School Failure, 52*(3), 29–38.

Caswell, L.J., & Duke, N.K. (1998). Non-narrative as a catalyst for literacy development. *Language Arts, 75*(2), 108-117.

CDW. (2011). *2011 CDW-G 21st-century classroom report.* Retrieved January 15, 2015 from http://webobjects.cdw.com/webobjects/media/pdf/newsroom/CDWG-21st-Century-Classroom-Report-0611.pdf

Center for the Improvement of Early Reading (CIERA). (2003). *Put reading first: The research building blocks for teaching children to read.* Ann Arbor, MI.

CEO Forum on Education and Technology. (2001). *The CEO Forum school technology and readiness report: Key building blocks for student achievement in the 21st century.* Retrieved January 15, 2015 from http://schoolnet.org.za/CoL/ACE/course/ukzncore1b/documents/core1b_CEO_Forum_Report4.pdf

Cervetti, G.N., Bravo, M.A., Hiebert, E.H., Pearson, P.D., & Jaynes, C.A. (2009). Text genre and science content: Ease of reading, comprehension, and reader preference. *Reading Psychology, 30*(6), 487-511.

Chall, J. (1967). *Learning to read: The great debate; an inquiry into the science, art, and ideology of old and new methods of teaching children to read, 1910-1965.* Columbus, OH: McGraw-Hill.

Chall, J., Jacobs, Jacobs, V.A., & Baldwin, L.E. (1990). *The reading crisis: Why poor children fall behind.* Cambridge, MA: Harvard University Press.

Chambliss, M. J., & Murphy, P. K. (2002). Fourth and fifth graders representing the argument structure in written texts. *Discourse Processes*, *34*, 91– 115.

Chapman, M. (2006). Preschool through elementary writing. In P. Smagorinsky (Ed.), *Research on composition: Multiple perspectives on two decades of change* (pp. 15-47). New York: Teachers College Press.

Chard, D. J., Pikulski, J. J., & McDonagh, S. H. (2006). Fluency: The link between decoding and comprehension for struggling readers. In T. Rasinski, C. Blachowicz, & K. Lems (Eds.), *Fluency instruction: Research-based best practices* (pp. 39-61). New York: Guilford Press.

Chen, P.S.D., Lambert, A.D., & Guidry, K.R. (2010). Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers & Education, 54*(4), 1222-1232.

Cheng, A. (2007). Simulation-based L2 writing instruction: Enhancement through genre analysis. *Simulation and Gaming, 38*(1), 67-82.

Cheung, A., & Slavin, R. E. (2012a). *The effectiveness of educational technology applications for enhancing reading achievement*

in K-12 classrooms: A meta-analysis. Baltimore, MD: Johns Hopkins University, Center for Research and Reform in Education. Retrieved January 15, 2015 from http://www.bestevidence.org/word/tech_read_April_25_2012.pdf

Cheung, A., & Slavin, R.E. (2012b). *Effects of educational technology applications on reading outcomes for struggling readers: A best evidence synthesis.* Baltimore, MD: Johns Hopkins University, Center for Research and Reform in Education. Retrieved January 15, 2015 from http://www.bestevidence.org/word/tech_strug_read_Jul_18_2012.pdf

Christenson, S.L., Ysseldyke, J.E., & Thurlow, M.L. (1989). Critical instructional factors for students with mild handicaps: An integrative review. *Remedial and Special Education, 10*(5), 21–31.

Clark, K. F., & Graves, M. F. (2008). Open and directed text mediation in literature instruction: Effects on comprehension and attitudes. *Australian Journal of Language and Literacy, 31*(1), 9-29.

Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Portsmouth, NH: Heinemann.

Coleman, D., & Pimental, S. (2012). *Revised publishers' criteria for the Common Core State Standards in English Language Arts and Literacy, grades 3-12.* Retrieved January 15, 2015 from http://www.corestandards.org/assets/Publishers_Criteria_for_3-12.pdf

Coleman, D., & Pimentel, S. (2011). *Publishers' criteria for the Common Core State Standards in English Language Arts and Literacy, grades 3-12*. Washington, DC: Council of Chief State School Officers. Retrieved January 31, 2015 from http://www.isbe.net/common_core/pls/level1/pdf/publishers-crit-3-12.pdf

Collins, J. L. (1998). *Strategies for struggling writers.* New York: Guilford.

Commander, N.E., & Stanwyck, D.J. (1997). Illusion of knowing in adult readers: Effects of reading skill and passage length. *Contemporary Educational Psychology, 22*, 39-52.

Connor-Greene, P. A. (2000). Making connections: Evaluating the effectiveness of journal writing in enhancing student learning. *Teaching of Psychology*, *27*, 44-46.

Cooner, T.S. (2010). Creating opportunities for students in large cohorts to reflect in and on practice: Lessons learnt from a formative evaluation of students' experiences of a technology-enhanced blended learning design. *British Journal of Educational Technology, 41*(2), 271-286.

Cooper, J.D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.

Corden, R. (2007). Developing reading-writing connections: The impact of explicit instruction of literary devices on the quality of children's narrative writing. *Journal of Research in Childhood Education, 21*(3), 269–289.

Cotton, K. (1995). *Effective schooling practices: A research synthesis 1995 update.* Portland, OR: Northwest Regional Educational Laboratory. Retrieved January 15, 2015 from http://capone.mtsu.edu/jhausler/Effective_Schooling_Practices.htm

Council of Chief State School Officers (CCSSO) and National Governors Association (NGA). (2012). *Supplemental information for Appendix A of the Common Core State Standards for English Language Arts and Literacy: New research on text complexity.* Washington, DC: Authors. Retrieved January 15, 2015 from http://www.corestandards.org/assets/E0813_Appendix_A_New_Research_on_Text_Complexity.pdf

Coyne, M.D., & Harn, B.A. (2006). Promoting beginning reading success through meaningful assessment of early literacy skills. *Psychology in the Schools, 43*(1), 33-43.

Craig, S. D., Sullins, J., Witherspoon, A., & Gholson, B. (2006). The deep-level reasoning effect: The role of dialogue and deep-level reasoning questions during vicarious learning. *Cognition and Instruction, 24,* 565-591.

Crowhurst, M. (1991). Interrelationships between reading and writing persuasive discourse. *Research in the Teaching of English*, *25*(3), 314–338.

Cummins, S. (2013). *Close reading of informational texts: Assessment-driven instruction in grades 3-8.* New York: The Guilford Press.

Cunningham, A.E. (1989). Phonemic awareness: The development of early reading competency. *Reading Research Quarterly, 24*, 471-472.

Cunningham, P.M. & Allington, R.L. (2007). *Classrooms that work: They can all read and write* (3rd ed.). Boston: Allyn & Bacon.

Daane, M.C., Campbell, J.R., Grigg, W.S., Goodman, M.J., & Oranje, A. (2005). *Fourth-grade students reading aloud: NAEP 2002 special study of oral reading.* National Center for Education Statistics: NCES 2006469. Retrieved January 31, 2015 from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006469

Darling-Hammond, L. (2010). *Performance counts: Assessment systems that support high-quality learning.* Washington, DC: Council of Chief State School Officers.

Darling-Hammond, L., Wise, A., & Klein, S. (1995). *A license to teach: Raising standards for teaching.* Boulder, CO: Westview Press.

De Graaff, S., Bosman, A.M.T., Hasselman, F., & Verhoeven, L. (2009). Benefits of systematic phonics instruction. *Scientific Studies of Reading, 13*(4), 318-333.

De La Paz, S., & Graham, S. (2002). Explicitly teaching strategies, skills, and knowledge: Writing instruction in middle school classrooms. *Journal of Educational Psychology, 94,* 687–698.

De La Paz, S., & McCutchen, D. (2011). Learning to write. In R.E. Mayer and P.A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 32-54). New York: Routledge.

DeLuca, E. (2010). Unlocking academic vocabulary. *Science Teacher, 77*(3), 27–32.

Demirsky Allan, S., & Goddard, Y.L. (2010). Differentiated instruction and RtI: A natural fit. *Interventions that Work, 68*(2).

Dickson, S., Simmons, D., & Kameenui, E. (1996). Text organization and its relation to reading comprehension: A synthesis of the research. Oregon: University of Oregon.

District Administration. (2005). Effective instructional strategies. *District Administration, 41*(9), 68.

Dixon-Krauss, L. (2001/2002). Using literature as a context for teaching vocabulary. *Journal of Adolescent & Adult Literacy, 45*(4), 310-318.

Dole, J. A., Duffy, G. G., Roehler, L. R., & Pearson, P. D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research, 61,* 239-264.

Donovan, C.A., & Smolkin, L.B. (2006). Children's understanding of genre and writing development. In C.A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 131–143). New York: The Guilford Press.

Downing, S.O. (1995). Teaching writing for today's demands. *Language Arts, 72*, 200-205.

Duffy, G. G. (2009). *Explaining reading: A resource for teaching concepts, skills, and strategies* (2nd ed.). New York: Guilford.

Duke, N.K. (2004). What research says about reading. *Educational Leadership, 61*(6), 40–44.

Duke, N.K. & Kays, J. (1998). "Can I say 'once upon a time?': Kindergarten children developing knowledge of information book language. *Early Childhood Research Quarterly, 13,* 295–318.

Dunn, R., Beaudry, J.S., & Klavas, A. (1989). Survey of research on learning styles. *Educational Leadership, 46*(6), 50–58.

Eccles, J.S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In N. Eisenberg (Ed.), *Handbook of child psychology:*

Volume 3 – Social, emotional, and personality development (5th ed.). New York: Wiley.

Edmonds, M. S., Vaughn, S. Wexler, J., Reutebuch, C., Tackett, K. K., & Schnakenberg, J. W. (2009). A synthesis of reading interventions and effects on reading comprehension outcomes for older struggling readers. Review of Educational Research, *79*(1), 262– 300.

Fang, Z., & Schleppegrell, M.J. (2010). Disciplinary literacies across content areas: Supporting secondary reading through functional language analysis. *Journal of Adolescent and Adult Literacy, 53*(7), 587-597.

Fearn, L., & Farnan, N. (2005, April). *An investigation of the influence of teaching grammar in writing to accomplish an influence on writing.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Fearn, L., & Farnan, N. (2007). When is a verb? Using functional grammar to teach writing. *Journal of Basic Writing, 26*(1), 63-87.

Ferretti, R., Andrews-Weckerly, S., & Lewis, W. (2007). Improving the argumentative writing of students with learning disabilities: Descriptive and normative considerations. *Reading & Writing Quarterly*, *23*, 267– 285.

Fisher, D., & Frey, N. (2012). Close reading in elementary schools. *The Reading Teacher, 66*(3), 179-188.

Fisher, D., Frey, N., & Lapp, D. (2012). *Text complexity: Raising rigor in reading.* Newark, DE: International Reading Association.

Fisher, D., Frey, N., & Rothenberg, C. (2008). *Content-area conversations.* Alexandria, VA: ASCD. Retrieved January 4, 2015 from http://www.ascd.org/publications/books/108035/chapters/Why-Talk-Is-Important-in-Classrooms.aspx

Fisher, P.J., Blachowicz, C.L.Z., & Watts-Taffe, S. (2011). Vocabulary instruction: Three contemporary issues. In D. Lapp & D. Fisher (Eds.), *Handbook of research on teaching the English language arts* (3rd ed.) (pp. 252-257). Mahwah, NJ: Lawrence Erlbaum.

Fitzgerald, J. (1995a). English-as-a-Second-Language learners' cognitive reading processes: A review of research in the United States. *Review of Educational Research, 65*(2), 145-190.

Fitzgerald, J. (1995b). English-as-a-Second-Language reading instruction in the United States: A research review. *Journal of Literacy Research, 27*(2), 115-152.

Fitzgerald, J., & Shanahan, T. (2000). Reading and writing relations and their development. *Educational Psychologist*, *35*(1), 39–51.

Flanigan, K., Templeton, S., & Hayes, L. (2012). What's in a word? Using content vocabulary to generate growth in general academic vocabulary knowledge. *Journal of Adolescent and Adult Literacy, 56*(2), 132-141.

Flannery, K. B., & O'Neill, R. E. (1995). Including predictability in functional assessment and individual program development. *Education & Treatment of Gifted Children, 18*(4), 499-500.

Foorman, B.R., Francis, D.J., Novy, D.M., & Liberman, D. (1991). How letter-sound instruction mediates the progress in first-grade reading and spelling. *Journal of Educational Psychology, 83,* 456-469.

Fountas, I.C., & Pinnell, G.S. (1996). *Guided reading: Good first teaching for all children.* Portsmouth, NH: Heinemann.

Fountas, I.C., & Pinnell, G.S. (2001). *Guiding readers and writers: Teaching comprehension, genre, and content literacy.* Portsmouth, NH: Heinemann.

Fountas, I.C., & Pinnell, G.S. (2006). *Teaching for comprehending and fluency: thinking, talking, and writing about reading.* Portsmouth, NH: Heinemann.

Fox, J. (2004). Test decisions over time: Tracking validity. *Language Testing, 21*, 437-465.

Fox, E., & Alexander, P.A. (2011). Learning to read. In R.E. Mayer and P.A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 7-31). New York: Routledge.

Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006a). *Practical guidelines for the education of English language learners: Research-based recommendations for instruction and academic interventions.* Houston: University of Houston Center on Instruction.

Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006b). *Practical guidelines for the education of English language learners: Research-based recommendations for serving adolescent newcomers.* Houston: University of Houston Center on Instruction.

Fretz, E. B., Wu, H. K., Zhang, B., Davis, E. A., Krajcik, J. S., & Soloway, E. (2002). An investigation of software scaffolds supporting modeling practices. *Research in Science Education, 32*, 567-589.

Fromkin, V., Rodman, R., & Hyams, N.M. (2007). *An introduction to language* (8th edition). Boston, MA: Thomson Wadsworth.

Fuchs, L.S. (2004). The past, present, and future of curriculum-based measurement research. *School Psychology Review, 33,* 188-192.

Fuchs, D., Compton, D.L., Fuchs, L.S., Bryant, J., & Davis, N. (2008). Making "secondary intervention" work in a three-tier responsiveness-to-intervention model: Findings from the first-grade longitudinal reading study of the National Research Center on Learning Disabilities. *Reading and Writing: An Interdisciplinary Journal, 21*(4), 413-436.

Fuchs, L.S., & Fuchs, D. (1986). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children, 53*(3), 199–208.

Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Garrison, D.R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education, 7*(2), 95-105.

Gersten, R., & Dimino, J.A. (2006). RTI (Response to Intervention): Rethinking special education for students with reading difficulties (yet again). *Reading Research Quarterly, 41*(1), 99-108.

Gibbons, P. (2009). *English learners, academic literacy, and thinking: Learning in the challenge zone.* Portsmouth, NH: Heinemann.

Goldberg, A., Russell, M., & Cook, A. (2003). The effect of computers on student writing: A meta-analysis of studies from 1992– 2002. *Journal of Technology, Learning, and Assessment, 2*(1), 3– 51.

Goodwin, A. P., & Ahn, S. (2010). A meta-analysis of morphological interventions: effects on literacy achievement of children with literacy difficulty. *Annals of Dyslexia, 60*(2)*,* 183-208.

Goodwin, B., & Miller, K. (2013). Evidence on flipped classrooms is still coming in. *Educational Leadership, 70*(6), 78-80.

Graesser, A. C., & Person, N. K. (1994). Question asking during tutoring. *American Educational Research Journal, 31,* 104-137.

Graham, S. (2006). Strategy instruction and the teaching of writing: A meta-analysis. In C.A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 187–207). New York: The Guilford Press.

Graham, S., Bollinger, A., Booth Olson, C., D'Aoust, C., MacArthur, C., McCutchen, D., & Ollinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012-4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved January 4, 2015 from http://ies.ed.gov/ncee/wwc/practiceguide.aspx?sid=17

Graham, S., & Hebert, M. A. (2010). *Writing to read: Evidence for how writing can improve reading. A Carnegie Corporation Time to Act Report.* Washington, DC: Alliance for Excellent Education. Retrieved January 15, 2015 from http://carnegie.org/fileadmin/Media/Publications/WritingToRead_01.pdf

Graham, S., McKeown, D., Kiuhara, S., & Harris, K.R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology, 104*(4), 879-896.

Graham, S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools—A report to Carnegie Corporation of New York.* Washington, DC: Alliance for Excellent Education.

Graves, M. F. (2006). *The vocabulary book: Learning and instruction.* New York: Teachers College Press

Graves, M. F., & Avery, P. G. (1997). Scaffolding students' reading of history. *Social Studies, 88*(3), 134–139.

Graves, M.F., Cooke, C.L., & LaBerge, M.J. (1983). Effects of previewing difficult short stories on low ability junior high school students' comprehension, recall, and attitudes. *Reading Research Quarterly, 18*(3), 263-276.

Graves, M. F., Juel, C., & Graves, B. B. (2004). *Teaching reading in the 21st century.* Boston, MA: Allyn and Bacon.

Griffiths, A., VanDerHeyden, A.M., Parson, L.B., & Burns, M.K. (2006). Practical applications of Response-to-Intervention research. *Assessment for Effective Intervention, 32*(1), 50-57.

Grigorenko, E. (1997). Are cognitive styles still in style? *American Psychologist, 52,* 700–712.

Guthrie, J. T., Hoa, A. L. W., Wigfield, A., Tonks, S. M., Humenick, N. M., & Littles, E. (2007). Reading motivation and reading comprehension growth in the later elementary years. *Contemporary Educational Psychology, 32*(3), 383-313.

Guthrie, J. T., Hoa, L. W., Wigfield, A., Tonks, S. M., & Perencevich, K. C. (2006). From spark to fire: Can situational reading interest lead to long-term reading motivation? *Reading Research and Instruction, 45*, 91-117.

Guthrie, J. T., & Humenick, N. M. (2004). Motivating students to read: Evidence for classroom practices that increase reading motivation and achievement. In P. McCardle, & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 329-354). Baltimore, MD: Paul H Brookes Publishing.

Hammond, J., & Gibbons, P. (2005). Putting scaffolding to work: The contribution of scaffolding in articulating ESL education. *Prospect Special Issue, 20*(1), 6-30.

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of American children.* Baltimore: Paul C. Brookes.

Hattie, J. (1992). *Self-concept.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Hawkins, J., Ginty, E., Kurzman, K.L., Leddy, D., & Miller, J. (The Vermont Writing Collaborative). (2008). *Writing for understanding: Using backward design to help all students write effectively.* South Strafford, VT: The Vermont Writing Collaborative.

Hegelheimer, V., & Fisher, D. (2006). Grammar, writing, and technology: A sample technology-supported approach to teaching grammar and improving writing for ESL learners. *CALICO Journal, 23*(2), 257-279.

Helsper, E.J., & Eynon, R. (2010). Digital natives: Where is the evidence? *British Educational Research Journal, 36*(3), 503-520.

Heritage, M. (2007). Formative assessment: What do teachers need to know and do? *Phi Delta Kappan, 89*(2), 140-145.

Hibbard, M. (1996). *A teacher's guide to performance-based learning and assessment.* Alexandria, VA: ASCD.

Hidi, S., & Boscolo, P. (2006). Motivation and writing. In C.A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 144-157). New York: The Guilford Press.

Hillocks, G., Jr. (2010). Teaching argument for critical thinking and writing: An introduction. *English Journal, 99*(6), 24–32.

Hillocks, G., Jr. (1993). Environments for active learning. In L. Odell (Ed.), *Theory and practice in the teaching of writing* (pp. 244-270). Carbondale, IL: Southern Illinois University Press.

Hillocks, G., Jr. (1986). *Research on written composition: New directions for teaching.* Urbana, IL. ERIC Clearinghouse on Reading and Communication Skills.

Hogan, T.P. (2013). Constructed-response approaches for classroom assessment. In J.H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. 275-292). Thousand Oaks, CA: Sage.

Holdaway, D. (1984). *Stability and change in literacy learning.* Portsmouth, NH: Heinemann.

Hollingsworth, M., & Woodward, J. (1993). Integrated learning: explicit strategies and their role in problem-solving instruction for students with learning disabilities. *Exceptional Children, 59*(5), 444-455.

Hougen, M., & Smartt, S. (Eds.) (2012). *Fundamentals of literacy instruction and assessment, PreK-6.* Baltimore, MD: Paul H. Brookes Publishing Co.

Huebner, T.A. (2009). Supporting English language learners. *Educational Leadership, 66*(7), 90-91.

Huebner, T.A. (2010). What research says about ... Differentiated learning. *Educational Leadership, 67*(5), 79-81.

Imbriale, R. (2013). Blended learning. *Principal Leadership, 13*(6), 30-34.

International Reading Association. (2009). *New literacies and 21st century technologies.* Newark, DE: Author.

International Reading Association (IRA). (2010). *Response to Intervention: Guiding principles for educators from the International Reading Association.* Newark, DE: Author. Retrieved January 31, 2015 from http://www.reading.org/Libraries/resources/RTI_brochure_web.pdf

Jackson, A., & Davis, G. (2000). *Turning points 2000: Educating adolescents in the 21st century.* A report of the Carnegie Corporation. New York: Teachers College Press.

Jago, C. (2002). *Cohesive writing: Why concept is not enough.* Portsmouth, NH: Heinemann.

Jago, C. (2004). *Classics in the classroom: Designing accessible literature lessons.* Portsmouth, NH: Heinemann.

Jago, C. (2011). *With rigor for all: Meeting common core standards for reading literature* (2nd ed.). Portsmouth, NH: Heinemann.

Jeffery, J.V., & Wilcox, K. (2014). 'How do I do it if I don't like writing?': Adolescents' stances toward writing across disciplines. *Reading and Writing: An Interdisciplinary Journal, 27*(6), 1095-1117.

Jenkins, J., Stein, M., & Wysocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal, 21*, 767-788.

Jerald, C. D. (2001). *Dispelling the myth revisited.* Washington DC: Education Trust.

Jobe, R., & Dayton-Sakari, M. (2002). *Infokids: How to use nonfiction to turn reluctant readers into enthusiastic learners.* Markham, Ontario Canada: Pembroke.

Johnson, D. W., & Johnson, R. T. (1990). Cooperative learning and achievement. In S. Shlomo (Ed.), *Cooperative learning: Theory and research* (pp. 23-27). New York: Praeger.

Johnson, C.I., & Mayer, R.E. (2009). A testing effect with multimedia learning. *Journal of Educational Psychology, 101*(3), 621-629.

Jones, B., Chang, S., Heritage, M., & Tobiason, G. (2014). *Supporting students in close reading.* The National Center for Research on Evaluation, Standards, and Student Testing (CRESST). U.S. Department of Education and WestEd. Los Angeles, CA: The Regents of the University of California. Retrieved January 31, 2015 from http://csai-online.org/sites/default/files/resource/38/Supporting%20Students%20in%20Close%20Reading.pdf

Joyce, B., Weil, M. with Calhoun, E. (2000). *Models of teaching* (6th ed.). Needham Heights, MA: Allyn & Bacon.

Juel, C., & Minden-Cupp, C. (2000). Learning to read words: Linguistic units and instructional strategies. *Reading Research Quarterly, 35*(4), 458-492.

Kalea, H. (2007). Why use a virtual learning environment? *Teaching Business and Economics, 11*(2), 27–30.

Kamil, M.L., Borman, G.D., Dole, J., Kral, C.C., Salinger, T., & Torgeson, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A practice guide* (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved January 4, 2015 from http://ies.ed.gov/ncee/wwc/PracticeGuide.aspx?sid=8

Kapusnick, R. A., & Hauslein, C. M. (2001). *The "silver cup" of differentiated instruction. Kappa Delta Pi Record, 37*(4), 156–159.

Kellough, R. D., & Kellough, N.G. (2003). *Secondary school teaching: A guide to methods and resources* (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Kendeou, P., van den Broek, P., White, M. J., & Lynch, J. S. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psychology, 101*(4), 765–778.

Kennedy, M.L. (1985). The composing process of college students writing from sources. *Written Communication, 2*(4), 434-456.

Kern, L., & Clemens, N. H. (2007). Antecedent strategies to promote appropriate classroom behavior. *Psychology in the Schools, 44*(1), 65-75.

Kieffer, M.J., & Lesaux, N.K. (2007). Breaking down words to build meaning: Morphology, vocabulary, and reading comprehension in the urban classroom. *The Reading Teacher, 61*(2), 134-144.

Kim, A., Vaughn, S., Wanzek, J., & Wei, S. (2004). Graphic organizers and their effects on the reading comprehension of students with LD: A synthesis of research. *Journal of Learning Disabilities, 37*(2), 105-118.

Kim, J. S., & White, T. G. (2008). Scaffolding voluntary summer reading for children in grades 3 to 5: An experimental study. *Scientific Studies of Reading, 12*(1), 1-23.

King, A. (1994). Guiding knowledge construction in the classroom: Effects of teaching children how to question and how to explain. *American Educational Research Journal, 31,* 338-368.

Kiuhara, S. A., Graham, S., & Hawken, L. S. (2009). Teaching writing to high school students: A national survey. *Journal of Educational Psychology, 101*, 136–160.

Klauda, S. L., & Guthrie, J. T. (2008). Relationships of three components of reading fluency to reading comprehension. *Journal of Educational Psychology, 100*, 310-321.

Klesius, J., & Searls, E. (1991). Vocabulary instruction. *The Journal of Educational Research, 84,* 177–182.

Klingner, J.K., & Vaughn, S. (2004). Strategies for struggling second-language readers. In T.L. Jetton and J.A. Dole (Eds.), *Adolescent Literacy Research and Practice* (pp. 183–209). New York: The Guilford Press.

Klingner, J.K., Vaughn, S., & Boardman, A. (2007). *Teaching reading comprehension to students with learning difficulties.* New York: The Guilford Press.

Knipper, K.J., & Duggan, T.J. (2006). Writing to learn across the curriculum: Tools for comprehension in content area classes. *The Reading Teacher, 59*(5), 462–470.

Kolich, E. M. (1988). Vocabulary learning – what works? Perspectives from the research literature. *Reading Improvement, 25*, 117-124.

Lane, S. (2013). Performance assessment. In J.H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. 313-329). Thousand Oaks, CA: Sage.

Langer, J.A. (1995). *Envisioning literature: Literary understanding and literature instruction.* New York: Teachers College Press.

Langer, J. A. (2000). Excellence in English in middle and high school: How teachers' professional lives support student achievement. *American Educational Research Journal, 37*(2), 397-439.

Langer, J. A. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal, 38*(4), 837-880.

Langer, J.A., & Applebee, A.N. (1987). *How writing shapes thinking: A study of teaching and learning.* Urbana, IL: National Council of Teachers of English.

Lattimer, H. (2010). *Reading for learning: Using discipline-based texts to build content knowledge.* Urbana, IL: National Council of Teachers of English (NCTE).

Lenski, S.D., & Johns, J. (2000). *Improving writing: Resources, strategies, and assessments.* Dubuque, IA: Kendall/Hunt.

Levie, H. W., & Lentz, R. (1982). Effects of text illustrations: A review of research. *Educational Communication and Technology Journal, 30*(4), 195-232.

Levin, J. R., Anglin, G. J., & Carney, R. N. (1987). On empirically validating functions of pictures in prose. In D.M. Willows & H.A. Houghton (Eds.), *The psychology of illustration. Vol. 1.* (pp. 51-86). New York: Springer

Lewin, L. (1992). Integrating reading and writing strategies using an alternative teacher-led/ student-selected instructional pattern. *The Reading Teacher, 53,* 332–334.

Lopez, O. (2010). The digital learning classroom: Improving English language learners' academic success in mathematics and reading using interactive whiteboard technology. *Computers and Education, 54*(4), 901-915.

Lutz, S. L., Guthrie, J. T., & Davis, M. H. (2006). Scaffolding for engagement in learning: An observational study of elementary school reading instruction. *Journal of Educational Research, 100,* 3 - 20.

Lyon, G.R. & Moats, L.C. (1997). Critical conceptual and methodological considerations in reading intervention research. *Journal of Learning Disabilities, 30,* 578-588.

MacArthur, C.A. (2009). Reflections on research on writing and technology for struggling writers. *Learning Disabilities Research and Practice, 24*(2), 93-103.

MacArthur, C.A. (2007). Best practices in teaching evaluation and revision. In S. Graham, C.A. MacArthur, & J. Fitzgerald (Eds.), *Best practices in writing instruction* (pp. 141–162). New York: The Guilford Press.

MacArthur, C., Schwartz, S., & Graham, S. (1991). Effects of a reciprocal peer revision strategy in special education classrooms. *Learning Disabilities Research and Practice, 6*(4), 201–210.

Macaruso, P., & Rodman, A. (2011). Benefits of computer-assisted instruction to support reading acquisition in English language learners. *Bilingual Research Journal: The Journal of the National Association for Bilingual Education, 34*(3), 301-315.

Mace, A. B., Shapiro, E. S., & Mace, F. C. (1998). Effects of warning stimuli for reinforced withdrawal and task onset on self-injury. *Journal of Applied Behavior Analysis, 31,* 679-682.

Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R.J., & Pickering, D.J. (2005). *Building academic vocabulary: Teacher's manual.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R.J., Pickering, D., & McTighe, J. (1993). *Assessing student outcomes: Performance assessment using the dimensions of learning model.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R.J., Pickering, D.J., & Pollock, J.E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano Research Laboratory (2009). *Meta-analysis database.* Retrieved January 5, 2015 from http://www.marzanoresearch.com/research/meta_analysis_database.aspx

Mayer, R. E. (2001). *Multimedia learning.* Cambridge: Cambridge University Press.

Mayer, R. E. (2005). Principles for managing essential processing in multimedia learning. In R.E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 169-182). New York: Cambridge University Press.

Mayer, R.E. (2013). Multimedia learning. In J. Hattie and E.M. Anderman (Eds.), *Educational psychology handbook: International guide to student achievement* (pp. 396-398). New York: Routledge.

Mayer, R. E., & Gallini, J. K. (1990). When is an illustration worth ten thousand words? *Journal of Educational Psychology, 82*(4), 715- 726.

McDaniel, M.A., Roediger, H.L., & McDermott, K.B. (2007). Generalizing test-enhanced learning from the laboratory to the classroom. *Psychonomic Bulletin & Review, 14*(2), 200-206.

McKeown, M. G., & Beck, I. L. (1988). Learning vocabulary: Different ways for different goals. *Remedial and Special Education (RASE), 9*(1), 42–46.

McKeown, M.G., Beck, I.L., & Blake, R.G.K. (2009). Rethinking reading comprehension instruction: A comparison of instruction for strategies and content approaches. *Reading Research Quarterly, 44*(3), 218-252.

McLaughlin, M. & Talbert, J. (1993). *Contexts that matter for teaching and learning: Strategic opportunities for meeting the nation's educational goals.* Stanford, CA: Center for Research on the Context of Secondary School Teaching.

McMillan, J.H. (2013). Why we need research on classroom assessment. In J.H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. 3-16). Thousand Oaks, CA: Sage.

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.* Washington, DC: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service. Retrieved January 5, 2015 from http://www2.ed.gov/rschstat/eval/tech/ evidence-based-practices/finalreport.pdf.

Mellard, D.F., & Johnson, E.S. (2008). *RTI: A practitioner's guide to implementing response to intervention*. Thousand Oaks, CA: Corwin Press.

Metcalfe, J., & Kornell, N. (2005). A region or proximal of learning model of study time allocation. *Journal of Memory and Language, 52*, 463-477.

Mid-Continent Research for Education and Learning (McREL). (2000). *Noteworthy Perspectives on Implementing Standards-Based Education.* Aurora, CO: Author.

Moats, L. C. (2001) When older students can't read. *Educational Leadership, 58*(6), 36-40.

Morris, D., Blanton, L., Blanton, W. E., Nowacek, J., & Perney, J. (1995). Teaching low-achieving spellers at their "instructional level." *Elementary School Journal, 96*(2), 163-177.

Murphy, P.K., Wilkinson, I.A.G., & Soter, A.O. (2010). Instruction based on discussion. In R.E. Mayer and P.A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 382-407). New York: Routledge.

Murphy, P. K., Wilkinson, I. A. G., Soter, A. O., Hennessey, M. N., & Alexander, J. F. (2009). Examining the effects of classroom discussion on students' high-level comprehension of text: A meta-analysis. Journal of Educational Psychology, *101*, 740– 764.

Myers, M., & Pearson, P.D. (1996). Performance assessment and the literacy unit of the new standards project. *Assessing Writing, 3*(1), 5-29.

Nagy, W. (2007). Metalinguistic awareness and the vocabulary-comprehension connection. In R.K. Wagner, A.E. Muse, and K.R. Tannenbaum (Eds.). *Vocabulary acquisition: Implications for reading comprehension* (pp. 52-77). New York: Guilford.

Nagy, W. (1988). *Teaching vocabulary to improve reading comprehension*. Newark, DE: International Reading Association.

Nagy, W., & Townsend, D. (2012). Words as tools: Learning academic vocabulary as language acquisition. *Reading Research Quarterly, 47*(1), 91-108.

National Assessment Governing Board. (2008). *Reading framework for the 2009 National Assessment for Educational Progress.* U.S. Department of Education. Washington, DC: Author. Retrieved April 22, 2013 from http://www.nagb.org/content/nagb/assets/documents/publications/frameworks/reading09.pdf

National Center for Education Statistics (2012a). *The Nation's Report Card: Vocabulary results from the 2009 and 2011 NAEP Reading Assessments* (NCES 2013 452). Institute of Education Sciences, U.S. Department of Education, Washington, D.C.

National Center for Education Statistics (2012b). *The Nation's Report Card: Writing 2011* (NCES 2012–470). Institute of Education Sciences, U.S. Department of Education, Washington, D.C.

National Center on Universal Design for Learning. (2012). *What is UDL?* Wakefield, MA: Author.

National Commission on Writing. (2003). *The neglected R: The need for a writing revolution*. Retrieved January 31, 2015 from http://www.collegeboard.com/prod_downloads/writingcom/neglectedr.pdf

National Commission on Writing. (2004). *Writing: A ticket to work...or a ticket out: A survey of business leaders*. Retrieved January 31, 2015, from http://www.collegeboard.com/prod_downloads/writingcom/writing-ticket-to-work.pdf

National Commission on Writing. (2005). *Writing: A powerful message from state government*. Retrieved January 31, 2015, from http://www.collegeboard.com/prod_downloads/writingcom/powerful-message-from-state.pdf

National Commission on Writing for America's Families, Schools, and Colleges. (2006). *Writing and school reform.* New York, NY: The College Board. Retrieved January 25, 2015 from http://www.collegeboard.com/prod_downloads/writingcom/writing-school-reform-natl-comm-writing.pdf

National Governors Association Center for Best Practices (NGA) and Council of Chief State School Officers (CCSSO). (2010a). *Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects.* Washington, DC: Authors. Retrieved January 15, 2015 from http://www.corestandards.org/ELA-Literacy

National Governors Association Center for Best Practices (NGA) and Council of Chief State School Officers (CCSSO). (2010b). *Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects. Appendix A: Research supporting key elements of the standards.* Washington, DC: Authors. Retrieved January 15, 2015 from http://www.corestandards. org/ELA-Literacy

National Governors Association Center for Best Practices (NGA) and Council of Chief State School Officers (CCSSO). (2010c). *Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects. Appendix B: Text exemplars and sample performance tasks.* Washington, DC: Authors. Retrieved January 15, 2015 from http://www.corestandards.org/assets/ Appendix_B.pdf

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.

National Institute for Literacy. (2007). *What content-area teachers should know about adolescent literacy.* Retrieved January 15, 2015 from http://lincs.ed.gov/publications/pdf/adolescent_literacy07.pdf

National Research Council. (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century.* Committee on Defining Deeper Learning and 21st Century Skills, J.W. Pellegrino & M.L. Hilton, Eds. Board of Testing and Assessment and Board on Science Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Nelson, J. M., & Manset-Williamson, G. (2006). The impact of explicit, self-regulatory reading comprehension strategy instruction on the reading-specific self-efficacy, attributions, and affect of students with reading disabilities. *Learning Disability Quarterly, 29*(3), 213-230.

Nippold, M. A., Ward-Londergan, J.M., & Fanning, J.L. (2005). Persuasive writing in children, adolescents, and adults: a study of syntactic, semantic, and pragmatic development. *Language, Speech, and Hearing Services in Schools, 36*(2), 125–38.

Nokes, J., & Dole, J. (2004). Helping adolescents read through explicit strategy instruction. In T. Jetton & J. Dole (Eds.),

Adolescent literacy research and practice (pp. 162-182). New York: The Guilford Press.

Nunes, T., & Bryant, P. (2006). *Improving literacy by teaching morphemes.* London: Routledge.

Nystrand, M. (2006). Research on the role of classroom discourse as it affects reading comprehension. *Research in the Teaching of English, 40*(4), 392-412.

Ogle, D., & Blachowicz, C. (2002). Beyond literature circles: Helping students comprehend informational texts. In C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 259-272). New York: Guilford Press.

Osguthorpe, R.T., & Graham, C.R. (2003). Blended learning environments: Definitions and directions. *The Quarterly Review of Distance Education, 4*(3), 227-233.

Overmyer, J. (2012). Flipped classrooms 101. *Principal, 92*(1), 46-47.

Paivio, A. (1986). *Mental representations: A dual coding approach.* New York: Oxford University Press.

Paivio, A. (1983). Empirical case for dual coding. In J. Yuille (Ed.), *Imagery, memory, and cognition: Essays in honor of Allan Paivio* (pp. 307-332). Hillsdale, NJ: Erlbaum.

Paivio, A. (1979). *Imagery and verbal processes.* Hillsdale, NJ: Erlbaum.

Palmer, E. (2011). *Well spoken: Teaching speaking to all students.* Portland, ME: Stenhouse Publishers.

Pappas, C.C. (1991). Young children's strategies in learning the "book language" of information books. *Discourse Processes, 14,* 203–222.

Partnership for 21st Century Skills. (2009). Framework for 21st century learning. Tucson, AZ: Author. Retrieved January 15, 2015 from http://www.p21.org/documents/P21_Framework.pdf

Partnership for Assessment of Readiness for College and Careers (PARCC). (2012). *PARCC Frequently Asked Questions* (Updated—September 2013). Retrieved January 31, 2015 from http://www.parcconline.org/sites/parcc/files/PARCCFAQ_9-18-2013.pdf

Partnership for Assessment of Readiness for College and Careers (PARCC). (2013). *Instructional technology purchases guidance.* Press release; April 25, 2012. Retrieved January 15, 2015 from http://www.parcconline.org/instructional-technology-purchases-guidance

Pearson, P. D., & Fielding, L.G. (1991). Comprehension instruction. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.) *Handbook of Reading Research: Vol. II.* New York: Longman.

Pearson, P.D., & Tierney, R.J. (1984). On becoming a thoughtful reader: Learning to read like a writer. In A.C. Purves & O. Niles (Eds.), *Becoming readers in a complex society, Eighty-third Yearbook of the National Society of the Study of Education* (pp. 144–173). Chicago, IL: University of Chicago Press.

Pellegrino, J.W., Chudowsky, N., & Glaser, R. (Eds.). (2001). *Knowing what students know: The science and design of educational assessment.* Committee on the Foundations of Assessment. Board on Testing and Assessment, Center for Education, Division of Behavioral and Social Sciences and Education, National Research Council. Washington, DC: National Academy Press. Retrieved January 15, 2015 from http://www.nap.edu/openbook.php?record_id=10019&page=R1

Pennington Whitaker, C., Gambrell, L.B., & Morrow, L.M. (2004). Reading comprehension instruction for all students. In E.R. Silliman & L.C. Wilkinson (Eds.), *Language and literacy learning in schools* (pp. 130-150). New York: The Guilford Press.

Phillips, B.M., Clancy-Menchetti, J., & Lonigan, C.J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education, 28,* 3-17.

Pikulski, J.J. (2012). *How do children learn to decode print?* In Baumann, J.F., Chard, D.J., Cooks, J., Cooper, J.D., Gersten, R., Lipson, M., Morrow, L.M., Pikulski, J.J., Rivera, H.H., Rivera, M., Templeton, S., Valencia, S.W., Valentino, C., & Vogt, M. Boston, MA: Houghton Mifflin Harcourt.

Polette, K. (2008). *Teaching grammar through writing: Activities to develop writer's craft in ALL students in grades 4–12.* Boston, MA: Pearson Education, Inc.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon,* 9(5), 1-6. Retrieved January 15, 2015 from http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

Prensky, M. (2000). *Digital game-based learning.* New York: McGraw-Hill.

Pressley, M., Gaskins. I. W., & Fingeret, L. (2006). Instruction and development of reading fluency in struggling readers. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about fluency instruction* (pp. 47-69). Newark, DE: International Reading Association.

Pressley, M., Wood, E., Woloshyn, V.E., Martin, V., King, A., & Menke, D. (1992). Encouraging mindful use of prior knowledge: Attempting to construct explanatory answers facilitates learning. *Educational Psychologist, 27*(1), 91-109.

Public Impact. (2013). *A better blend: A vision for boosting student outcomes with digital learning.* Chapel Hill, NC: Author. Retrieved January 31, 2015 from http://opportunityculture.org/wp-content/uploads/2013/04/A_Better_Blend_A_Vision_for_Boosting_Student_Outcomes_with_Digital_Learning-Public_Impact.pdf

Pulido, D. (2007). Topic familiarity and passage sight vocabulary. *Applied Linguistics, 28*(1), 66-86.

Puranik, C.S., Al Otaiba, S., Sidler, J.F., & Greulich, L. (2014). Exploring the amount and type of writing instruction during language arts instruction in kindergarten classrooms. *Reading and Writing: An Interdisciplinary Journal, 27*(2), 213-236.

Raymond, E. (2000). *Cognitive characteristics. Learners with mild disabilities.* Needham Heights, MA: Allyn & Bacon.

Reading, S., & VanDeuren, D. (2007). Phonemic awareness: When and how much to teach. *Reading Research and Instruction, 46*(3), 267-285.

Reimann, P., & Aditomo, A. (2013). Technology-supported learning and academic achievement. In J. Hattie and E.M. Anderman (Eds.), *Educational psychology handbook: International guide to student achievement* (pp. 399-401). New York: Routledge.

Reinking, D. (2001). Multimedia and engaged reading in a digital world. In L. Verhoeven & K. Snow (Eds.), *Literacy and motivation: Reading engagement in individuals and groups* (pp. 195-221). Mahwah, NJ: Erlbaum.

Reutzel, D. R. (2003). Organizing effective literacy instruction: grouping strategies and instructional routines. In L. M. Morrow, L. B. Gambrell, & M. Pressley (Eds.), *Best practices in literacy instruction,* 2nd edition (pp. 241-267). New York: The Guilford Press.

Reznitskaya, A., Anderson, R. C., Dong, T., Li, Y., Kim, I.-H., & Kim, S.-Y. (2008). Learning to think well: Applications of argument schema theory. In C. C. Block & S. Parris (Eds.), *Comprehension instruction: Research-based best practices* (pp. 196– 213). New York: Guilford.

Rhodes, J.A., & Robnolt, V.J. (2009). Digital literacies in the classroom. In L. Christenbury, R. Bomer, & P. Smagorinsky (Eds.), *Handbook of adolescent literacy research* (pp. 153-169). New York: The Guilford Press.

Rideout, V.J., Foehr, U.G., & Roberts, D.F. (2010). *Generation M2: Media in the lives of 8- to 18-year-olds: A Kaiser Family Foundation study.* Menlo Park, CA: The Henry J. Kaiser Family Foundation. Retrieved January 15, 2015 from http://www.kff.org/entmedia/upload/8010.pdf

Rieben, L., Ntamakiliro, L., Gonthier, B., & Fayol, M. (2005). Effects of various writing practices on reading and spelling. *Scientific Studies of Reading, 9,* 145-166.

Riley, J., & Reedy, D. (2005). Developing young children's thinking through learning to write argument. *Journal of Early Childhood Literacy, 5*(1), 29-51.

Robinson, D., & Kiewra, K. (1995). Visual argument: Graphic organizers are superior to outlines in improving learning from text. *Journal of Educational Psychology, 87*(3), 455-467.

Rodríguez, A.G. (2009). *CAELA Network Briefs: Teaching grammar to adult English language learners: Focus on form.* Center for Adult English Language Acquisition. Center for Applied Linguistics. Retrieved January 15, 2015 from http://www.cal.org/caelanetwork/resources/teachinggrammar.html

Roediger, H.L., & Karpicke, J.D. (2006). The power of testing memory: Basic research and implications for educational practice. *Perspectives on Psychological Science, 1*, 181-210.

Rogers, K.B. (2002). *Re-forming gifted education: Matching the program to the child.* Scottsdale, AZ: Great Potential Press.

Rogers, K.B. (2007). Lessons learned about educating the gifted and talented: A synthesis of the research on educational practice. *Gifted Child Quarterly, 51*(4), 382-396.

Rosenshine, B. & Meister, C. (1992). The use of scaffolds for teaching higher-level cognitive strategies. *Educational Leadership, 49*(7), 26-33.

Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research, 66*, 181-221.

Saddler, B., & Graham S. (2005). The effects of peer-assisted sentence-combining instruction on the writing performance of more and less skilled young writers. *Journal of Educational Psychology, 97*(1)*,* 43–54.

Salahu-Din, D., Persky, H., & Miller, J. (2008). *The Nation's Report Card: Writing 2007* (NCES 2008– 468). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Samuels, S. (2002). Reading fluency: Its development and assessment. In A. E. Farstrup & S. Samuels (Eds.), *What research has to say about reading instruction* (pp. 166-183). Newark, DE: International Reading Association.

Santa, C., Havens, L., & Harrison, S. (1989). Teaching secondary science through reading, writing, studying, and problem solving. In D. Lapp, J. Flood, & N. Farnan, (Eds.) *Content area reading and learning: Instructional strategies* (pp. 137–151). Englewood, NJ: Prentice Hall.

Santrock, J. W. (1996). *Adolescence* (6th ed.). Madison, WI: Brown & Benchmark.

Schiefele, U. (1999). Interest and learning from text. *Scientific Studies of Reading,* 3(3), 257-279.

Schleppegrell, M.J. (2012). Academic language in teaching and learning: Introduction to the special issue. *Elementary School Journal, 112*(3), 409-418.

Schneider, M.C., Egan, K.L., & Julian, M.W. (2013). Classroom assessment in the context of high-stakes testing. In J.H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. 55-70). Thousand Oaks, CA: Sage.

Schuele, M.C., & Boudreau, D. (2008). Phonological awareness intervention: Beyond the basics. *Language, Speech, and Hearing Services in the Schools, 39*, 3-20.

Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). *Motivation in education: Theory, research, and applications.* Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Schraw, G., Bruning, R., & Svoboda, C. (1995). Sources of situational interest. *Journal of Reading Behavior, 27,* 1–17.

Schraw, G., & Dennison, R. S. (1994). The effect of reader purpose on interest and recall. *Journal of Reading Behavior, 26*(1), 1–18.

Sedita, J. (2005). Effective vocabulary instruction. *Insights on Learning Disabilities, 2*(1), 33-45.

Segev-Miller, R. (2004). Writing from sources: The effect of explicit instruction on college students' processes and products. *Educational Studies in Language and Literature, 4*, 5-33.

Shanahan, T. (2006). Relations among oral language, reading, and writing development. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 171–183). New York: The Guilford Press.

Shanahan, T., Callison, K., Carriere, C., Duke, N.K., Pearson, P.D., Schatschneider, C., & Torgeson, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade* (NCEE 2010-4038). Washington D.C.: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from What Works Clearinghouse., January 23, 2015, from http://ies.ed.gov/ncee/wwc/practiceguide.aspx?sid=14

Shanahan, T., Fisher, D., & Frey, N. (2012). The challenge of challenging text. *Educational Leadership, 69*(6), 58-62.

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review, 78*(1), 40–59.

Shaw, E.J., Mattern, K.D., & Patterson, B.F. (2011). Discrepant SAT critical reading and writing scores: Implications for college performance. *Educational Assessment, 16*, 145-163.

Shepard, L.A. (2000). The role of assessment in a learning culture. *Educational Research, 29*(7), 4–14.

Shepard, L.A. (2013). Foreword. In J.H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. xix-xxii). Thousand Oaks, CA: Sage.

Short, D., & Fitzsimmons, S. (2007). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners – A report to Carnegie Corporation of New York.* Washington, DC: Alliance for Excellent Education. Retrieved January 31, 2015 from http://carnegie.org/fileadmin/Media/Publications/PDF/DoubletheWork.pdf

Silver, N.W., & Repa, J.T. (1993). The effect of word processing on the quality of writing and self-esteem of secondary school English-as-second-language students: Writing without censure. *Journal of Educational Computing Research, 9*(2), 265-283.

Simons, K. D., & Klein, J. D. (2007). The impact of scaffolding and student achievement levels in a problem-based learning environment. *Instructional Science, 35*(1), 41-72.

Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children*, *31*, 351–280.

Sjolie, D. (2006). Phrase and clause grammar tactics for the ESL/ELL writing classroom. *The English Journal, 95*(5), 35-40.

Slavin, R. E. (2002). Cooperative learning in elementary and secondary schools. In D. L. Levinson (Ed.) & P. W. Cookson & A. R. Sadovnik (Co-Eds.), *Education and sociology: An encyclopedia* (pp. 115-121). New York: RoutledgeFalmer.

Smarter Balanced Assessment Consortium. (n.d.). *Frequently asked questions.* Retrieved January 15, 2015 from http://www.smarterbalanced.org/resources-events/faqs/

Smarter Balanced Assessment Consortium. (n.d.). *Sample items and performance tasks.* Retrieved January 25, 2015 from http://www.smarterbalanced.org/sample-items-and-performance-tasks/

Smarter Balanced Assessment Consortium. (2014). *Technology.* Retrieved January 15, 2015 from http://www.smarterbalanced.org/smarter-balanced-assessments/technology/

Smith, E.S., & Johnson, L.A. (2011). Response to intervention in middle school: A case story. *Middle School Journal, 42*(3), 24-32.

Snow, C. (2002). *Reading for understanding: Toward an R&D program in reading comprehension.* Santa Monica, CA: RAND.

Snow, C., Burns, M., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, D.C.: National Academy Press.

Spandel, V. (2001). *Creating writers through 6-trait writing assessment and instruction.* (3rd ed.). Boston: Addison Wesley Longman.

Spatt, B. (1983). *Writing from sources.* New York: St. Martin's Press.

Spivey, N.N., & King, J.R. (1989). Readers as writers composing from sources. *Reading Research Quarterly, 24*(1), 7-26.

Stahl, S. A. (1986). Three principles of effective vocabulary instruction. *Journal of Reading, 29*(7), 662-668.

Stahl, S.A., & Fairbanks, M.M. (1986). The effects of vocabulary instruction: A model-based meta-analysis. *Review of educational research, 56*(1), 72-110.

Stahl, S.A., & Nagy, W.E. (2006). *Teaching word meanings*. Mahwah, NJ: Erlbaum.

Stecker, P.M., Fuchs, L.S., & Fuchs, D. (2005). Using curriculum-based measurement to improve student achievement: Review of research. *Psychology in the Schools, 42,* 795-820.

Sternberg, R.J. (1997). What does it mean to be smart? *Educational Leadership, 55*(7), 20–24.

Stipek, D. (2002). Good instruction is motivating. In A. Wigfield & J.S. Eccles (Eds.), *Development of achievement motivation* (pp. 309-332). San Diego, CA: Academic Press.

Stone, C. A. (1998). The metaphor of scaffolding: Its utility for the field of learning disabilities. *Journal of Learning Disabilities, 31*, 344-364.

Stotsky, S. (2010). Let's spread the blame for reading underachievement. *Education Week, 30*(14), 24.

Strangman, & Dalton, (2006). Improving struggling readers' comprehension through scaffolded hypertexts and other computer-based literacy program. In M. C. McKenna, L. D. Labbo, R. D. Kieffer, & D. Reinking (Eds.), *International handbook of literacy and technology, Volume II* (pp. 75-92). Mahwah, NJ: Lawrence Erlbaum Associations.

Strickland, D.S., & Alvermann, D.E. (2004). Learning and teaching literacy in grades 4-12: Issues and challenges. In D.S. Strickland and D.E. Alvermann (Eds.), *Bridging the literacy achievement gap, grades 4–12*. New York: Teachers College Press.

Stronge, J. (2002). *Qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

Su, Y. (2007). Students' changing views and the integrated-skills approach in Taiwan's EFL college classes. *Asia Pacific Education Review, 8*(1), 27-40.

Sulzby, E., & Teale, W. (1991). Emergent literacy. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of Reading Research, Vol. II* (pp. 727–757). New York: Longman.

Tamim, R. M., Bernard, R. M., Borokhosvski, E., Abrami, P. C., & Schmid, R. F. (2011). What forty years of research says about the impact of technology on learning: A second-order meta-analysis and validation study. *Review of Educational Research, 81*(1), 4– 28.

Taylor, B. M., & Beach, R. W. (1984). The effects of text structure instruction on middle-grade students' comprehension and production of expository text. *Reading Research Quarterly, 19*(2), 134–146.

Taylor, B. M., Pearson, P. D., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *Elementary School Journal, 104*(1), 3-28.

Taylor, L., & Parsons, J. (2011). Improving student engagement. *Current Issues in Education, 14*(1), 1-32.

Teh, G., & Fraser, B.J. (1994). An evaluation of computer-assisted learning in terms of achievement, attitudes and classroom environment. *Evaluation and Research in Education, 8,* 147-161.

Templeton, S. (1989). Tacit and explicit knowledge of derivational morphology: Foundations for a unified approach to spelling and vocabulary development in the intermediate grades and beyond. *Reading Psychology, 10*, 233-253.

Templeton, S. (2004). The vocabulary-spelling connection: Orthographic development and morphological knowledge at the intermediate grades and beyond. In J. F. Baumann & E. J. Kame'enui (Eds.), *Vocabulary instruction: Research to Practice* (pp.118-138). New York: Guilford Press.

Templeton, S. (2009). Spelling-meaning relationships among languages: Exploring cognates and their possibilities. In L.

Helman (Ed.), *Literacy development with English learners: Research-based instruction in Grades K-6* (pp. 196-212). New York: Guilford Press.

Templeton, S. (2012). The vocabulary-spelling connection and generative instruction: Orthographic development and morphological knowledge at the intermediate grades and beyond. In J. F. Baumann & E. J. Kame'enui (Eds.), *Vocabulary instruction: Research to Practice* (2nd ed.). New York: Guilford Press.

Templeton, S., Bear, D., Invernizzi, M., & Johnston, F. (2010). *Vocabulary their way*. Boston: Allyn & Bacon.

Tierney, R. J., & Shanahan, T. (1991). Research on the reading-writing relationship: Interactions, transactions, and outcomes. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 246–280). New York: Longman.

Tierney, R. J., Soter, A., O'Flahavan, J. F., &McGinley, W. (1989). The effects of reading and writing upon thinking critically. *Reading Research Quarterly, 24*(2), 134–173.

Tieso, C. (2002). *The effects of grouping and curricular practices on intermediate students' math achievement.* Hartford, CT: National Research Center on the Gifted and Talented, University of Connecticut.

Tomlinson, C.A. (2001). *How to differentiate instruction in mixed-ability classrooms.* (2nd ed.) Alexandria, VA: ASCD.

Tomlinson, C.A. (2004). Differentiating instruction: A synthesis of key research and guidelines. In T.L. Jetton and J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 228-248). New York: The Guilford Press.

Tomlinson, C.A. (2006). *An educator's guide to differentiating instruction*. Boston, MA: Houghton Mifflin.

Tomlinson, C. A., & Allan, S. D. (2000). *Leadership for differentiating schools and classrooms.* Alexandria, VA: ASCD.

Tomlinson, C., Brimijoin, K., & Narvaez, L. (2008). *The differentiated school: Making revolutionary changes in teaching and learning.* Alexandria, VA: Association for Supervision and Curriculum Development.

Topping, K., & Paul, T. (1999). Computer-assisted assessment of practice at reading: A large scale survey using Accelerated Reader data. *Reading and Writing Quarterly, 15*, 213-231.

Torrance, M., & Fidalgo, R. (2013). Writing achievement. In J. Hattie & E.M. Anderman (Eds.), *Educational psychology handbook: International guide to student achievement* (pp. 338-341). New York: Routledge.

Toulmin, S., Rieke, R., & Janik, A. (1979). *An introduction to reasoning.* New York: Macmillan.

Troia, G., & Graham, S. (2003). Effective writing instruction across the grades: What every educational consultant should know. *Journal of Educational & Psychological Consultation, 14,* 75-89.

Tucker, C.R. (2012). *Blended learning in grades 4-12: Leveraging the power of technology to create student-centered classrooms.* Thousand Oaks, CA: Corwin Press.

Tustin, R. D. (1995). The effects of advance notice of activity transitions on stereotypic behavior. *Journal of Applied Behavior Analysis, 28*, 91-92.

Uğur, B., Akkoyunlu, B., & Kurbanoğlu, S. (2011). Students' opinions on blended learning and its implementation in terms of their learning styles. *Education and Information Technologies, 16*(1), 5-23.

Underwood, T., & Pearson, P.D. (2004). Teaching struggling adolescent readers to comprehend what they read. In T.L. Jetton and J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 135–161). New York: The Guilford Press.

U.S. Department of Education. (2012). *Reading framework for the 2013 National Assessment of Educational Progress.* National Assessment Governing Board, under contract ED-02-R-0007 by American Institutes for Research. Washington, D.C.: Author. Retrieved January 23, 2015 from http://www.nagb.org/content/nagb/assets/documents/publications/frameworks/reading/2013-reading-framework.pdf

U.S. Department of Education. (2013). *What level of knowledge and skills have the nation's students achieved?* Washington, D.C.:

U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP). Retrieved January 5, 2015 from http://www.nationsreportcard.gov/reading_math_2013/#/what-knowledge

Valencia, S.W. (2010). Reader profiles and reading disabilities. In Allington, R., & McGill-Franzen, A. (Eds.), *Handbook of reading disability research* (pp. 25-35). New York: Routledge.

Van den Branden, K. (2000). Does negotiation of meaning promote reading comprehension? A study of multilingual primary school classes. *Reading Research Quarterly, 35*(3), 426-443.

Van Keer, H., & Verhaeghe, J. P. (2005). Effects of explicit reading strategies instruction and peer tutoring on second and fifth graders' reading comprehension and self-efficacy perceptions. *Journal of Experimental Education, 73*(4), 291-329.

VanLehn, K., Graesser, A.C., Jackson, G.T., Jordan, P., Olney, A., & Rose, C.P. (2007). When are tutorial dialogues more effective than reading? *Cognitive Science, 31*, 3-62.

VanTassel-Baska, J., & Brown, E.F. (2007). Toward best practice: An analysis of the efficacy of curriculum models in gifted education. *Gifted Child Quarterly, 51*(4), 342-358.

Voltz, D.L., Sims, M.J., & Nelson, B. (2010). *Connecting teachers, students, and standards.* Alexandria, VA: ASCD. Retrieved January 31, 2015 from http://www.ascd.org/publications/books/109011/chapters/Introduction@_Teaching_in_Diverse,_Standards-Based_Classrooms.aspx

Vygotsky, L.S. (1962). *Thought and language.* Cambridge, MA: MIT Press.

Vygotsky, L.S. (1978). Interaction between learning and development. In M. Cole (Trans.) *Mind in society* (pp. 79-91). Cambridge, MA: Harvard University Press.

Wallace, T., Stariha, W.E., & Walberg, H.J. (2004). *Teaching speaking, listening, and writing.* Brussels, Belgium: International Academic of Education. Retrieved January 24, 2015 from http://www.ibe.unesco.org/publications/EducationalPracticesSeriesPdf/PRATICE_14.pdf

Walqui, A., & van Lier, L. (2010). *Scaffolding the academic success of adolescent English language learners: A pedagogy of promise.* San Francisco, CA: WestEd. Retrieved January 15, 2015 from http://www.wested.org/resources/scaffolding-the-academic-success-of-adolescent-english-language-learners-a-pedagogy-of-promise/

Waxman, H.C., Lin, M.F., & Michko, G.M. (2003). *A meta-analysis of the effectiveness of teaching and learning with technology on student outcomes.* Sponsored under government contract number ED-01-CO-0011. Nashville, IL: Learning Point Associates.

Weaver, C. (1997). *Teaching grammar in context.* Portsmouth, NH: Heinemann.

Webb, N. (2007). Issues related to judging the alignment of curriculum standards and assessments. *Applied Measurement in Education, 20*(1), 7-25.

White, T.G., & Kim, J.S. (2008). Teacher and parent scaffolding of voluntary summer reading. *The Reading Teacher, 62*(2), 116–125.

Wigfield, A. (2004). A motivation for reading during the early adolescent and adolescent years. In D.S. Strickland and D.E. Alvermann (Eds.), *Bridging the literacy achievement gap, grades 4–12* (pp. 56–69). New York: Teachers College Press.

Wiggins, G. (1998). *Educative assessment: Designing assessments to inform and improve student performance.* San Francisco: Jossey-Bass Publishers.

Wiliam, D., Lee, C., Harrison, C., & Black, P. (2004). Teacher developing assessment for learning: Impact on student achievement. *Assessment in Education Principles Policy and Practice, 11*(1), 49-65.

Wilkinson, I.A.G., & Nelson, K. (2013). Role of discussion in reading comprehension. In J. Hattie & E.M. Anderman (Eds.), *Educational psychology handbook: International guide to student achievement* (pp. 299-302). New York: Routledge.

Williams, J. P. (2005). Instruction in reading comprehension for primary-grade students: A focus on text structure. *Journal of Special Education*, *39*, 6-18.

Wineburg, S. (2001). *Historical thinking and other unnatural acts: Charting the future of teaching the past.* Philadelphia, PA: Temple University Press.

Wolfe, M.B., Schreiner, M.E., Rehder, B., Laham, D., Foltz, P.W., Kintsch, W., & Landauer, T.K. (1998). Learning from text: Matching readers and text by Latent Semantic Analysis. *Discourse Processes, 25,* 309-336.

Yang, H-C., & Plakans, L. (2012). Second language writers' strategy use and performance on an integrated reading-listening-writing task. *TESOL Quarterly, 46*(1), 80-103.

Yarrow, F., & Topping, K. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology, 71*, 261–282.

JOURNEYS

SIGN UP
FOR A FREE TRIAL OF
JOURNEYS

hmhco.com/journeys

1 Select **SAMPLE NOW**

2 Select **National © 2017**

3 Complete the form

4 After your review, log out and bookmark the page

5 When you return, click **Evaluators Click Here** and enter your email address

Connect with us:

hmhco.com • 800.225.5425

Houghton Mifflin Harcourt™

hmhco.com/journeys