MAY 2024

Scholastic Literacy Framework

A Literature Review on Foundational Research

Scholastic

CONTACT

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INTRODUCTION

Literacy—the ability to read, write, and comprehend—is a formidable linchpin to school, work, and life success. Numerous studies provide powerful evidence that early reading achievement is strongly and positively associated with high school completion, college attendance, increased earnings, and better health:

- Kindergarten reading scores predict later earnings, higher education completion, home ownership, and retirement (Chetty et al., 2011).
- Children who do not read proficiently by third grade are four times more likely to drop out of high school by age 19 than their proficient peers (Hernandez, 2011).
- Individuals with lower literacy rates are less likely to receive regular preventative healthcare (Bennett et al., 2009).
- People who read books live almost 23 months longer than non-literate people (Bavishi et al., 2016).

Though cognitive research suggests that 95 percent of the U.S. school population can learn to read when exposed to effective curriculum and instruction (Goldenberg & Goldenberg, 2022; Moats, 2020; Vaughn & Fletcher, 2020), data from the 2022 National Assessment of Educational Progress (NAEP) indicate that only 33 percent of fourth graders and 31 percent of eighth graders performed at or above the NAEP Proficient level (U.S. Department of Education, 2022). This performance was two and three percentage points lower than in 2019—the largest drop in scores since 1990. While these declines spanned students' race, income level, school type, and location, high-poverty and high-minority districts saw a sharper score decline.

The COVID-19 pandemic had psychological and economic repercussions on families and students alike, making it harder for young people to focus on school. Erin Fahle and colleagues (2023) demonstrated that declines in reading test scores were higher in communities that had more remote learning, more restricted social activities (e.g., going out to dinner or meeting a friend in public), more reported anxiety and depression, and higher COVID death rates.

School leaders are searching for solutions to accelerate learning, even as they accept that the road to pandemic recovery and equity will be long and challenging. As Meghan Kuhfeld and Karen Lewis (2022) point out, Grades 3–8 students only recovered 10 to 25 percent of their pandemic reading loss in the 2021–22 school year. Accordingly, returning to pre-pandemic achievement levels could take at least four years (Kane & Reardon, 2023).

Scholastic Education (SE) recognizes that schools do not have time to waste as they consider paths to accelerate student learning. Teachers and students need a more carefully curated collection of evidence-based resources that effectively and efficiently targets kids where they are and gets them to where they need to be.

The Scholastic Literacy Framework identifies the core principles critical to improving student learning and presents guidelines that unite SE products and services. The framework is designed to identify our core priorities and be a blueprint to inform future work. It also serves as a resource for grounding what is most critical to SE's' collective work.

GROUNDING PRINCIPLES

The Scholastic Literacy Framework is grounded in five evidence-based principles:

1. **Evidence-Based Literacy Classroom Practices:** Literacy is Scholastic's lodestar, and we believe that an effective literacy classroom teaches reading, writing, and oral language instruction and should be based on the Science of Reading and learning science. The foundations of our solutions are based on intensive research rather than subjective case studies and untested theories. When teaching is grounded in proven, effective scientific evidence, the likelihood of students learning to read, reading to learn, and loving to read increases.
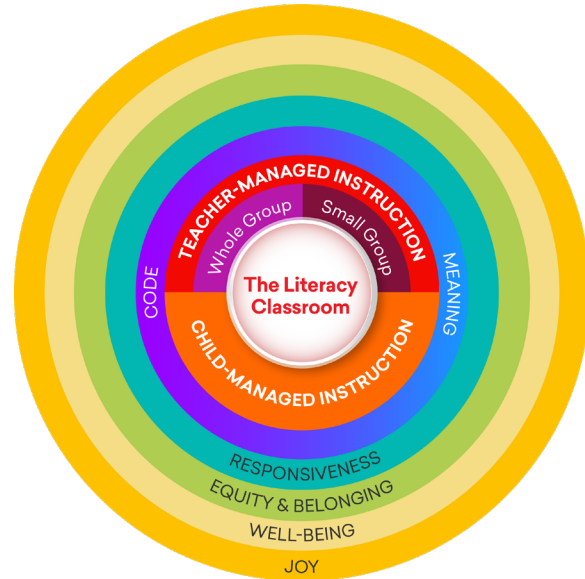
Code-focused and meaning-focused instruction are two of the largest predictors of skilled reading (Duke & Cartwright, 2021; Gough & Tunmer, 1986; Scarborough, 2001). An effective literacy classroom balances teacher-managed instruction with student-managed learning. Children who receive teacher-managed instruction (whole group or small group) tend to acquire more skills. However, research also shows that students benefit from more student-managed instruction as they move beyond initial skill acquisition (Connor et al., 2011).

SE is committed to developing products and services with well-defined goals, building background knowledge, addressing misconceptions, delivering learning in small chunks, offering a wide array of models and demonstrations, and providing smart, targeted practice opportunities.

- We are committed to guiding student thinking by strategically using questions and prompts.
- We are focused on providing students with meaningful tasks that allow them to solidify concepts and skills.
- We believe that effective instruction helps students understand their strengths and weaknesses, take ownership of their learning, and demonstrate mastery in multiple ways while helping connect learners' families, educators, and communities.
- We support teachers by offering explicit and engaging instruction.

2. **Responsiveness:** Children's literacy experience and knowledge vary greatly, and an instructional approach must be flexible enough to meet every child where they are. We believe there is a deeper transfer of learning when educators can modify the information being taught, adapt how students access and learn the information, and provide multiple methods for students to demonstrate what they know. Assessment of achievement (universal screening and summative assessment) and progress monitoring data (formative assessment) enable educators to assess students' responsiveness to instruction and make necessary adaptations to meet the needs of all students.

3. **Equity and Belonging:** SE honors every child's cultural heritage, individuality, and difference. Just as learning to read is a civil right, so is seeing oneself reflected in literature. Literacy learning provides opportunities for students to learn about their own identity alongside the identities of others, building empathy and understanding. SE also intentionally offers diverse programs and supports that create multiple ways for children to access literacy learning wherever they are on their literacy journey.

4. **Well-Being:** SE nurtures social, emotional, and mental well-being through literacy by providing products rooted in a deep understanding of the biological and physiological processes related to learning and development. SE also supports children in developing executive function, resilience, and social-emotional competencies to help them thrive.

5. **Joy:** Research shows that children who read for pleasure and are motivated to read do significantly better at school than their peers who rarely read (Wilhelm, 2014). SE believes in cultivating joy in reading, creating connections, and learning. We encourage motivation and support joyful learning at school and at home that speaks to children's hearts, sparks their curiosity, and inspires their imaginations.

THE SCHOLASTIC LITERACY FRAMEWORK

The Scholastic Literacy Framework is built on decades of peer-reviewed research from developmental psychology, educational psychology, cognitive science, and neuroscience.

1) Evidence-Based Literacy Classroom Practices

Our brains are not naturally wired to read and write (Gotlieb et al., 2022; Wolf, 2008). "Learning to read is not natural or easy for most children. Unlike spoken language, which is learned with almost any kind of contextual exposure, reading is an acquired skill. Although surrounding children with books will support reading development, and a 'literature-rich environment' is highly desirable, it is not sufficient for learning to read. Neither will exposure to print ordinarily be sufficient for learning to spell unless organized practice is provided." (Moats, 2020, p.6). Given that learning to read is not innate, providing effective instruction that aligns with a child's developmental processes is critical.

Over the past 10 years, 31 states and the District of Columbia have passed legislation that requires reading curriculum and instruction to adhere to research-based, proven principles from psychology and cognitive science for how children learn to read. The Scholastic Literacy Framework aligns with all those principles, as do our products.

In order to comprehend well, a reader must accurately and effortlessly decipher the different sounds in spoken language and connect those sounds to written letters. They must draw upon oral language, phonological awareness, phonics knowledge, decoding, and fluency. Readers also need strong language comprehension skills such as vocabulary, content knowledge, literacy knowledge, language structures, verbal reasoning, and strategies to organize and make sense of information to understand the words they read. Executive function skills can also play a role in whether students can read connected text fluently and attend to grammar, punctuation, and sentence structure (Cantor et al., 2018; Duke & Cartwright, 2021; Gough & Tunmer, 1986; Scarborough, 2001). SE believes effective reading instruction should address all these skills since any of these components can derail a reader's reading ability.

Oral Language

- Oral language is the spoken language system used to express knowledge, ideas, and feelings. It is made up of five skills (Lindsey, 2022): phonology (the ability to recognize and manipulate sounds in spoken language), vocabulary and semantics (understanding the meaning of words, phrases, and sentences and using word meanings correctly), morphology (understanding the smallest meaningful parts of words), syntax (understanding grammar and the rules of language), and pragmatics (understanding the social rules of language).

- Oral language skills set the stage for literacy instruction, and oral language competency predicts reading comprehension across a student's entire academic career (Catts et al., 2005; Fillmore & Snow, 2000; Foorman et al., 2015; Nation & Snowling, 2004; Storch & Whitehurst, 2002).
- Oral language instruction is important because students who exhibit deficits in oral language are approximately 18 times more likely to exhibit reading comprehension deficits than children with typical language skills (Werfel & Krim, 2017).
- Early literacy research across four decades, from Durkin (1966) to Bus and Pellegrini (1995) to Neuman and Celano (2006), offers convincing evidence that the interactions young children enjoy at home with their caregivers—especially conversation and hearing stories read aloud—play a significant role in academic success and beyond.

Phonological Awareness

- To build word recognition, children must first develop phonological awareness—the understanding that words are made of sounds, that these sounds are composed of letter combinations, and that sounds can be arranged to form new words. Children must then also learn to associate particular letters and phonemes to figure out (or decode) the pronunciation of a printed word. Finally, they need to be able to tie that pronunciation to a word in their vocabulary to derive meaning (Foorman et al., 2016).
- Students' phonological awareness develops from perceiving larger sound units (i.e., syllable/word awareness) to smaller (i.e., individual phonemes). It encompasses recognizing, matching, producing, and manipulating sounds (Adams, 1990; Purpaff, 2009).
- Phonological awareness (particularly the ability to recognize rhyme and alliteration, compare and contrast sounds, and blend and segment sounds) is essential because it fosters the ability to encode and decode words (Adams, 1990; Bennett et al., 2023; Ehri, 2005; Yopp, 1992) and is causally related to word recognition, reading, and spelling performance (Gillon, 2018).
- According to research, effective phonological awareness instruction should:
  - Be explicit (instruction clearly explains a concept, models its application, and allows for guided practice with frequent feedback) and systematic (follows a specified scope and sequence that begins with larger sound units and gives students practice identifying and manipulating phonemes) (Blevins, 2017; Duke & Mesmer, 2019; Lindsey, 2022; Mesmer & Griffith, 2005; Piasta et al., 2010; Roberts, 2021; Seidenberg, 2017).
  - Teach letter names and sounds at the same time (Duke & Mesmer, 2019; Piasta et al., 2010; Piasta & Hudson, 2022; Roberts, 2021; Seidenberg, 2017).
  - Spend more time on hard-to-learn letters (Jones et al., 2012).
  - Capitalize on mnemonics to teach letters (Ehri, 2022).
  - Use interactive word-building activities and multiple opportunities to manipulate sounds (Foorman et al., 2016; NICHD, 2000).

Phonics and Decoding

- Because the English language uses letters to represent sounds in words, phonics instruction (instruction that focuses on the ability to connect the sounds of spoken language to printed letters) can unlock "a large portion of the system of English orthography" (Mesmer & Griffith, 2005, p. 367).

- Decoding is the process of seeing a written symbol and being able to say what sound it represents (Adams, 1990; NICHD, 2000).

- Decades of research show that kindergarten to sixth-grade students who receive explicit, systematic phonics instruction (instruction that follows a specified scope and sequence and teaches letter identification, letter-sound correspondence, major sound spellings of consonants, short and long vowels, vowel and consonant digraphs, and blends of letter sounds) are better able to decode, spell, and read than peers who did not receive explicit, systematic phonics instruction (Foorman et al., 2016; Henbest & Apel, 2017; NELP, 2008; NICHD, 2000; Steinbrink et al., 2014; Torgesen et al., 2018).

- Teaching students how to read words systematically from left to right by blending, chunking, sounding out letter sounds, teaching high-frequency words, teaching encoding (the ability to determine the spelling of a word based on the sounds in the word) creates a learning advantage for students (Castles et al., 2018; Foorman et al., 2016; Hudson et al., 2012; NICHD, 2000).

- Children who read decodable texts apply their decoding skills more often and are more accurate, successful readers than students who do not read decodable texts (Buckingham, 2018; Cheatham & Allor, 2012; Foorman et al., 2016; Hiebert, 1999; Mesmer et al., 2012; Parker et al., 2022; Stahl, 2011).

- Reading decodable texts in a sequence that helps students progressively build upon and practice increasingly complex phonics skills is particularly important (Adams, 2009; Harmon & Wood, 2018) and can help reinforce student's alphabetic knowledge and improve skills related to word identification, phonemic awareness, spelling acumen, and reading fluency (Beverly et al., 2009; Cheatham & Allor, 2012).

- As soon as students can recognize and read most words in a decodable text with automaticity (e.g., fluency), they should move on to progressively more challenging texts (Adams, 2009; Harmon & Wood, 2018).

- While word decoding is more salient for younger readers' comprehension, oral language is more important for skilled readers. (Ouellette & Beers, 2010; Storch & Whitehurst, 2002; Vellutino et al., 2007). As a child progresses to higher grades, they rely on their reading skills for content across the curriculum, magnifying the impact of any reading difficulties. These developmental changes mean that oral language becomes increasingly essential for reading comprehension from middle childhood onward (Foorman et al., 2015).

Fluency

- Reading fluency refers to reading with accuracy, automaticity, and prosody (e.g., appropriate intonation and rhythm). Reading words accurately ensures an appropriate basic understanding of the text. At the same time, automaticity "allows readers to devote more cognitive attention to comprehension. Reading with prosody (e.g., appropriate expression, phrasing) both reflects and supports comprehension" (Duke & Cartwright, 2021; Duke, Ward, & Pearson, 2021).
- Fluency bridges decoding and reading comprehension (Pikulski & Chard, 2005).
- Children must understand how print represents speech to access the meaning of what is being read. Explicit, intentional instruction to build this skill is critical for early language learners. However, as students become more fluent readers, decoding requires less explicit focus (Carreker, 2021).

Vocabulary

- Vocabulary plays a pivotal role in reading comprehension. Not only does it directly predict word recognition (Duke & Cartwright, 2021; Tunmer & Chapman, 2012), but it is also highly correlated with later reading achievement (Grimm et al., 2018; Lee, 2011; Mesa & Yeomans-Maldonado, 2019). For example, researchers have found that a child's vocabulary size at two years old significantly predicts a child's reading skills through fifth grade (Lee, 2011).
- Research shows that relatively few words comprise the bulk of written English. Leading literacy experts Elfrieda Hiebert, Amanda Goodwin, and Gina Cervetti examined over 10,000 digitized texts written for students across grade levels and content areas. Their analysis identified a "core vocabulary" that accounts for more than 90 percent of the words in school materials (Hiebert et al., 2018).
- Effective vocabulary instruction:
  - Focuses on a small number of high-utility words, including generic academic words; provides both contextual and definitional information about the target words; teaches words in context; offers repeated exposure to novel words across a variety of contexts; and incorporates frequent opportunities for interactions in which students talk about and use academic words (Beck et al., 2002).
  - Teaches words in conceptually-linked groups, with particular benefits for teaching words in taxonomies (Hadley et al., 2018,).
  - Provides opportunities to actively process a word's meaning—through comparing/contrasting, answering questions about the word, and semantic mapping—which has a greater effect on comprehension than simply writing the definition (Wright & Cervetti, 2017)
  - Has students cluster words into categories to facilitate comprehension, accelerate learning, and enhance word retention (Neuman et al., 2011).

- Research shows that reading sets of related texts builds subject expertise and is associated with growth in vocabulary acquisition (Cervetti et al., 2016).
- A robust vocabulary is critical to becoming a confident reader (Ricketts et al., 2007; Sénéchal et al., 2006).

Content Knowledge

- To understand texts successfully, skilled readers must connect new information with pre-existing content knowledge (Adams, 2009; Cervetti & Wright, 2020; Hwang et al., 2022; Kim et al., 2021).
- Content knowledge (i.e., knowledge related to the natural and social world; Connor et al., 2018; Kim et al., 2021) helps students make inferences and sense of texts (Cabell & Hwang, 2020).
- Studies show that content knowledge predicts and contributes to vocabulary and reading comprehension (Cabell & Hwang, 2020; Recht & Leslie, 1988; Smith et al., 2020).
- Content knowledge enhances vocabulary by creating "well-structured semantic networks" that lead to "fast retrieval of word meanings" and support the effective use of words (Hwang et al., 2022, p. 147).
- Content knowledge improves reading comprehension by helping readers connect ideas across sentences and make inferences about missing information in passages (Cabell & Hwang, 2020; Recht & Leslie, 1988; Smith et al., 2020).
- Students' content knowledge on a topic can compensate for low reading comprehension ability when reading a text (Recht & Leslie, 1988) and support accurate inferences on the meanings of unknown words (Pulido, 2007).

Text Structure

- Proficient readers strategically utilize text structure (how authors organize words, pictures, and ideas within a text) for both narrative texts (e.g., setting, character, plot, theme) and expository texts (description, chronology, causation, response, comparison) to infer and gather meaning from texts (Connor et al., 2018).
- Because text structures follow a predictable format, understanding text structure can help students more quickly organize the information and details they are learning, identify the important elements in a passage, show how parts of a text relate to each other, make logical predictions, and monitor comprehension (Zimmerman et al., 2018).
- Data from three recent meta-analyses (Hebert et al., 2016; Pyle et al., 2017; Hall-Mills & Marante, 2023) confirmed that explicit instruction on text structure improves students' reading comprehension for both general education students and students with disabilities alike.

Verbal Reasoning

- Verbal reasoning—or the ability to draw conclusions from implicit information—plays a causal role in reading comprehension from kindergarten to Grade 12 (Elbro & Buch-Iversen, 2013; Elleman, 2017; Mohr et al., 2023; Oakhill & Cain, 2012).
- The ability to draw inferences is one of the main features distinguishing proficient readers from less proficient readers (Mohr et al.).
- Fortunately, a meta-analysis of over 25 studies shows that inference instruction with less-skilled readers effectively improves inferential and literal comprehension of a text (Elleman, 2017).
- Effective inference instruction helps students "use their background knowledge and integrate it with the information in the text, self-generated elaborations, graphic organizers that connect concepts, and text clues" (Elleman & Oslund, 2019, p. 5).

Comprehension Strategies

- "Reading strategies are deliberate, goal-directed attempts to control and modify the reader's efforts to decode text, understand words, and construct meanings of text" (Afflerbach et al., 2008, p. 368).
- A large body of research indicates that teaching students decoding (Steacy et al., 2016), vocabulary (Wright & Cervetti, 2017), and reading strategies (Okkinga et al., 2018) not only improves word reading skills, but also predicts reading comprehension (Duke & Cartwright, 2021).
- Researchers stress the importance of students monitoring and regulating their thinking processes while learning—a set of skills researchers call metacognition (Mayer, 2011; National Research Council, 2000).
- A student with strong reading comprehension uses different strategies to make meaning of the text that she or he engages with, and comprehension is tied to the effort as much as it is to ability (Baker & Brown, 1984; Pressley et al., 1992).
- Evidence-based strategies include monitoring understanding of texts, predicting, activating prior knowledge, using text structure, visualizing, making inferences, summarizing during reading, generating questions, self-explaining, and self-evaluating while reading (Afferblach et al., 2020; Duke et al., 2011; Filderman et al., 2021; NICHD, 2000; Okkinga et al., 2018).
- Research shows that comprehension strategy instruction is most effective when it uses a gradual release approach that provides high support and decreases support as students can carry out tasks independently (Raphael et al., 2009).

Writing

- Graham et al. define writing as "a goal directed and self-sustained cognitive activity requiring the skillful management of (a) the writing environment; (b) the constraints imposed by the writing topic; (c) the intentions of the writer(s); and (d) the processes, knowledge, and skills involved in composing" (2013, p.4).

- Evidence-based writing instruction has been shown to: (De Smedt & Van Keer, 2014):
  - Increase students' knowledge about writing.
  - Teach children strategies to plan, write, and revise drafts.
  - Foster student enjoyment and motivation to write.
  - Teach students to set goals and plan while writing.
  - Engage students in collaborative writing projects.
  - Capitalize on technological writing tools.

Executive Function

- Research shows that executive function—the mental processes that allow us to plan, focus attention, manage tasks, and achieve goals (Cartwright, 2023)—mediate and predict elementary (Altemeier et al., 2008; Wu et al., 2020), middle (Kieffer et al., 2021), and high school students' oral language, vocabulary, and reading comprehension (Peng et al., 2022).
- The three critical components of executive function—working memory (where information is processed), cognitive flexibility (the ability to switch between code-focused and meaning-focused skills), and inhibitory control (ability to control one's attention)—play an important role in coordinating word recognition and language comprehension (Cartwright, 2023).
- This is because word recognition and language comprehension require the ability to pay attention to the organizational structure of language and text (attentional control), create a schema for connecting new ideas to known ideas (working memory), focus on relevant details of a text (inhibitory control), balance code-focused and meaning-focused activities (cognitive flexibility), and come up with a plan for attempting a reading task (Duke & Cartwright, 2021).
- A lack of executive function skills can undermine the comprehension process. Fortunately, data indicates that teaching organization, cognitive flexibility, and inhibitory control can improve reading comprehension on standardized measures (Cartwright, 2023).

Learning Science

While the Science of Reading movement has informed how children learn to read, we are also guided by the basic principles of how people generally learn and what conditions create the best opportunities for children to absorb and consolidate the new information.

Explicit instruction represents a research-verified approach to help master new content material (Archer & Hughes, 2011; Hughes et al., 2017; Rosenshine, 1995). Seven principles of explicit instruction contribute to student literacy achievement:

- Activating students' prior knowledge
- Establishing a clear lesson purpose, goals, and expectations
- Presenting instruction in small, manageable segments
- Drawing student attention to important features of content through modeling and think-aloud

- Utilizing guided practice with varying levels of scaffolded support to gradually develop independence in completing tasks
- Providing opportunities for students to receive feedback and respond
- Incorporating reviews spread out over time

2) Responsiveness

We know that engaging with the text is crucial to making meaning and enjoying reading. Teachers and a high-quality curriculum can offer learners multiple ways of acquiring information and knowledge, demonstrating what they know, and engaging with learners' unique academic, social, and emotional needs.

- Children's experiences and knowledge vary greatly, and experts agree that instruction should be flexible enough to fit different learner profiles (Litwin & Pepin, 2020; Subban, 2006; Tomlinson, 2014).
- Differentiated literacy instruction occurs when an instructor adjusts the process by which students learn, the content of what a student is learning, the environment in which a student learns, and the products that demonstrate learning to meet an individual student's needs (Watts-Taffe et al., 2012).
- Research shows that literacy achievement can increase when teachers are supported to differentiate their literacy instruction, particularly for letter-word and writing outcomes (Connor et al., 2011; Puzio, 2020)
- The term "scaffolding" is often used to describe the instructional use of supports— including feedback and modeling—to help students carry out tasks until they can do so independently (Wood et al., 1976).
- Research and expert opinion verify the use of scaffolding in small groups or one-on-one instruction to help students realize learning goals, gradually withdrawing support as students build mastery (Archer & Hughes, 2011; Fisher et al., 2011; Harvey & Ward, 2017; Lajoie, 2005; National Research Council, 2012; Richardson & Lewis, 2018; Rosenshine, 1995; Rosenshine & Stevens, 1986; Scharer, 2018; Sweller, 2008).
- Research suggests that formative assessment and data-based decision-making can be used to inform and improve academic achievement (Lai & Schildcamp, 2019).
- The Formative Assessment for Students and Teachers (FAST) State Collaborative on Assessment and Student Standards defines formative assessment as a "planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes and support students to become self-directed learners" (2018, p. 2).
- Studies show formative data is most effective when the data is used to clarify learning goals, elicit and analyze evidence of student thinking, engage in self-assessment and peer feedback, and use evidence and feedback to adjust learning strategies, goals, or next instructional steps (National Research Council, 2012).

3) Equity and Belonging

The ability to learn to read and read to learn is a civil right. We are committed to ensuring fair, inclusive, and rigorous educational resources and helping all students reach their academic potential. We are committed to creating rigorous and engaging curricula that all students can access successfully, regardless of background, personal characteristics, location, or circumstances.

- In the United States, educational inequality and achievement gaps are pervasive. According to the 2022 National Assessment of Educational Progress (U.S. Department of Education, 2022):
  - The average score for Black students (198) was 28 points lower than White (226) students.
  - English language learners scored 30 points lower (190) than native English speakers (220).
  - Students who receive free and reduced-price lunch scored 28 points lower (203) than those who do not.
- Children living in poverty are more likely to have gaps in their foundational reading skills, and the hardships they face may also impact cognitive and social-emotional functions that influence their ability to learn (Litwin & Pepin, 2020).
- Low literacy rates are linked to not only lower educational attainment but also poorer physical health (Bennett et al., 2009), and lower earnings (Karoly, 2015; Mckinsey, 2009).
- Two critical analyses of access to children's books from Neuman and Celano (2001) and Neuman and Moland (2019) revealed that too many U.S. children—disproportionately children of color, indigenous children, and impoverished children live in book deserts without consistent access to books (Neuman & Moland, 2019; Neuman & Celano, 2006).
- Studies have shown that access to print resources—board books, stories, and informational books—early on in a child's development has an immediate and long-term effect on their vocabulary, background knowledge, and comprehension skills (Allington et al., 2010).
- Students should be offered books that reflect their personal experiences and culture while positively depicting the rich tapestry of cultural and ethnic groups around them (Worthy & Roser, 2010).
- As Bishop (1990, p. ix) notes, "Books are sometimes windows, offering views of worlds that may be real or imagined, familiar or strange. These windows are also sliding glass doors and readers have only to walk through in imagination to become part of whatever world has been created and recreated by the author. When lighting conditions are just right, however, a window can also be a mirror. Literature transforms human experience and reflects it back to us, and in that reflection we can see our own lives and experiences as part of the larger human experience. Reading, then, becomes a means of self-affirmation, and readers often seek their mirrors in books."

- Children from dominant cultural and social groups have no trouble finding mirrors in texts. But if they are always staring into the mirror, they become transfixed, unable to find empathy or understanding for those who are not like them. Similarly, the reverse is also true. As Bishop writes in her landmark text, *Mirrors, Windows, and Sliding Glass Doors*: "When children cannot find themselves reflected in the books they read, or when the images they see are distorted, negative, or laughable, they learn a powerful lesson about how they are devalued in the society of which they are a part" (1990, p. 557).
- One important goal is for literature to offer readers a realistic and authentic mirror of their lives and experiences. Seeing themselves accurately and sympathetically represented helps children develop "positive self-images and sense of worth" (Lehman et al., 2010).
- Literature can help children develop their cultural identity by providing positive representations of their culture, strengthening self-identity. It can also help children understand and appreciate other cultures, which can reduce negative stereotypes (Al-Hazza & Bucher, 2008).
- Texts should include multicultural literature, which focuses on diverse experiences within the United States, and global literature, which focuses on international cultures and contexts (Lehman et al., 2010).
- Simply providing access to multicultural books will not ensure equity. Gholdy Muhammad states, "Equity is teaching and learning centered on justice, liberation, truth, and freedom and is free of bias and favoritism. You cannot talk about true justice, liberation, truth, and freedom without talking about anti-racism. Equity is not just about adding a multicultural book to the classroom library or providing access to something educationally good or sound. Doing that does not ensure that children will learn about their identities and histories" (2023, p. 33).
- Identities are multilayered and shaped by the social and cultural environment as well as by literacy practices (Gee, 2000).

4) Well-Being

- Recent research from neuroscience, developmental science, and the learning sciences reveals that effective instruction "depends on secure attachments; affirming relationships; rich, hands-on learning experiences; and explicit integration of social, emotional, and academic skills" (Darling-Hammond & Cook-Harvey, 2018, p. 1).
- Experts agree that education should focus on teaching the "whole child" to (1) develop healthy personal relationships, (2) treat others with respect and dignity, (3) develop the cognitive capacity to solve problems and think creatively, (4) succeed in post-secondary education and the labor market, and (5) be a good citizen (Greenberg, 2023, p. v).

- The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2020) defines social and emotional learning (SEL) as "the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions."
- CASEL (2020) stresses the importance of using SEL to advance "educational equity and excellence through authentic school-family-community partnerships to establish learning environments and experiences with trusting and collaborative relationships, rigorous and meaningful curriculum and instruction, and ongoing evaluation," and offers a framework that outlines the five most critical SEL competencies that can be taught and applied at various developmental stages:
  - Self-Awareness: Ability to understand your emotions, thoughts, and values and how they impact your behavior.
  - Self-Management: Appropriately managing your emotions, thoughts, and behaviors in different contexts.
  - Social Awareness: Understanding and empathizing with others, including those different from oneself.
  - Relationship Skills: Ability to form and maintain supportive relationships, including building relationships with diverse individuals or groups.
  - Responsible Decision-Making: Ability to make caring, constructive choices.
- Pam Allyn and Ernest Morrell have identified that a similar set of underlying social, emotional, and cognitive strengths should be leveraged as the foundation for building "super readers." They articulate seven strengths: belonging, curiosity, friendship, kindness, confidence, courage, and hope (2016).
- Because academic, social, and emotional learning is interconnected and can be explicitly taught, a "key task for educators becomes the intentional development of these skills, traits, strategies, and attitudes in conjunction with the development of content knowledge and academic skills" (Farrington et al., 2012, p. 7).
- According to Dr. James Comer and the Yale Child Study Center, learning must address six primary pathways (physical, cognitive, psychological, language, social, and ethical) that must be developed to ensure students succeed in school and life (Comer et al., 2004).
- Students need rich and meaningful experiences when learning skills—experiences that engage the mind and heart and help shape positive school histories (Muhammad, 2020).
- Attention to students' holistic learning and development can promote high-quality educational opportunities and outcomes for all children across race, socioeconomic status, gender, sexual orientation, and other differences (Niemi, 2021).

5) Joy

As critical as word recognition and language comprehension are, they are nearly eclipsed by a capacity far more difficult to teach and quantify—motivation and joy in reading. If you can cultivate the desire to pick up a good book and lose yourself in the pages, you have ensured a lifelong love of reading.

- When children enjoy reading, they do it more often (Litwin & Pepin, 2020).
- Students who read for pleasure (reading that is freely chosen) tend to have larger vocabularies, greater background knowledge, and higher reading test scores than their peers who do not (Allington, 2012; Cunningham & Stanovich, 2003; Hiebert & Reutzel, 2010; Sullivan & Brown, 2013; Wasik et al., 2016). This is because "joy feeds engagement and agency, which increases effort and practice" (Miller & Lesesne, 2022, p. 233).
- According to Jeffrey Wilhelm (2014), pleasure reading is one of the largest predictors of academic achievement and economic outcomes over time, even after controlling for parental socioeconomic status and educational level (Guthrie et al., 2001; Kirsch et al., 2002; Sullivan & Brown 2013).
- Pleasure reading increases brain function (Berns et al., 2013; Weinstein et al., 2021), educational engagement (Allington et al., 2010; Evans et al., 2010), enhances equity in communities that need it, builds resilience, and imbues young people with empathy and resilience (Cleaver, 2020). A love of reading also leads to better physical health (DeWalt, 2005; Weinstein et al., 2021) and a longer life expectancy (Bavishi et al., 2016).
- Engagement—a driver of reading joy—fosters reading motivation and interest (Guthrie et al., 2012), and reading motivation predicts a large proportion of the variance in reading ability above and beyond academic and cognitive skills among Grades K–12 students (Guthrie et al., 2012; Ryan & Deci, 2002; Toste et al., 2020).
- To promote student reading motivation, research suggests:
  - Exposing students to a diverse array of inclusive texts, including popular fiction, informative texts, and texts created to cultivate foundational reading skills (Hiebert, 2020).
  - Ensuring families and students have consistent access to books (Neuman & Celano, 2012).
  - Presenting students with authentic and relevant reading activities, offering meaningful choices to students, fostering students' feelings of competence and self-efficacy, promoting relatedness, and strengthening student autonomy (Brandt et al., 2021; Gambrell, 2011; McRae & Guthrie, 2009; Ryan & Deci, 2017);
  - Encouraging students to choose high-interest texts that build upon their interests can also foster a value for reading (Guthrie et al., 2007). Students that self-select books are more motivated to read, expend more effort to read, and gain a better understanding of texts (Baye et al., 2019; Gallagher, 2009; Gambrell, 1996; Guthrie, 2000; 2008; Schiefele, 1991; Koskinen et al., 1995; Sewell, 2008; Pruzinsky, 2014; Tatum, 2009).

- "All children, even striving readers, benefit from joyful reading, classrooms filled with books, a teacher who promotes reading, time to read self-selected books, and support for both learning to read and their reading identity development" (Miller & Lesesne, 2022, p. 24).

CONCLUSION

Scholastic's mission is to ensure all students have equal access to literacy. To support this imperative, we are recentering our efforts on evidence-based practices that are proven to work. We are confident that by relying on tried-and-true solutions, we will provide more responsive, practical, engaging, equitable, and effective solutions. All students will learn to read, read to learn, and love to read.

REFERENCES

Adams, M. J. (1990). *Beginning to Read: Thinking and Learning About Print*. MIT Press.

Adams, M. J. (2009). The challenge of advanced texts: The interdependence of reading and learning. In E. H. Hiebert (Ed.), *Reading More, Reading Better* (pp. 163–189). Guilford Press.

Afflerbach, P., Pearson, P.D. & Paris, S.G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61(5), 364–373. https://doi/org/10.1598/RT.61.5.1

Al-Hazza, T.C. & Bucher, K. (2008). Building Arab Americans' Cultural Identity and Acceptance with Children's Literature. *The Reading Teacher*, 62(3) pp. 210–219.

Allington, R. L., McGill-Franzen, A., Camilli, G., Williams ,L., Graff, J., Zeig, J., Zmach, C. & Nowak, R. (2010). Addressing summer reading setback among economically disadvantaged elementary students. *Reading Psychology*, 31, 411–427.

Allington, R. (2012). What matters for struggling readers: Designing research-based programs. Boston, MA: Pearson.

Allyn, P. & Morrell, E. (2016). *Every Child a Super Reader*. New York, NY: Scholastic.

Altemeier, L. E., Abbott, R. D. & Berninger, V. W. (2008). Executive functions for reading and writing in typical literacy development and dyslexia. *Journal of Clinical and Experimental Neuropsychology*, 30(5), 588–606. https://doi.org/10.1080/13803390701562818

Archer, A. & Hughes, C. (2011). *Explicit Instruction: Effective and Efficient Teaching*. NY: Guilford Publications.

Baker, L. & Brown, A. L. (1984). Metacognitive skills and reading. In D. Pearson, M. Kamil, R. Barr & P. Mosenthal (Eds.), *Handbook of Reading Research* (pp. 353–395). New York, NY: Longman.

Bavishi, A., Slade, M. D. & Levy, B. R. (2016). A chapter a day: Association of book reading with longevity. *Social Science & Medicine*, 164, 44–48.

Baye, A., Inns, A., Lake, C., & Slavin, R. E. (2019). A synthesis of quantitative research on reading programs for secondary students. Reading Research Quarterly, 54(2), 133-166.

Beck, I. L., McKeown, M. G. & Kucan, L. (2002). *Bringing Words to Life: Robust Vocabulary Instruction*. New York: Guilford.

Bennett, I. M., Chen, J., Soroui, J. S. & White, S. (2009). The contribution of health literacy to disparities in self-rated health status and preventive health behaviors in older adults. *Annals of Family Medicine*, 7(3), 204–211.

Bennett, H., Denston, A. & Arrow, A. (2023). The effectiveness of a parent-implemented, phonological awareness programme on the phonological awareness skills of preschool children. AJLL https://doi.org/10.1007/s44020-023-00034-6

Berns, G. S., Blaine, K., Prietula, M. J. & Pye, B. E. (2013). Short- and long-term effects of a novel on connectivity in the brain. *Brain Connectivity*, 3(6), 590–600.

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), 191-206.

Bishop, R. S. (1990). Mirrors, windows, and sliding glass doors. *Perspectives*, 6(3), ix–xi.

Blevins, W. (2017). *A Fresh Look at Phonics: Common Causes of Failure and 7 Ingredients for Success*. Thousand Oaks, CA: Corwin.

Brandt, L., Sharp, A.C. & Gardner, D.S. (2021). Examination of teacher practices on student motivation for reading. *The Reading Teacher*, 74(6), 723–731. https://doi.org/10.1002/trtr.1999

Buckingham, J. (2018). The fight for phonics in early years reading. *Research Ed.* https://researched.org.uk/2018/07/04/the-fight-for-phonics-in-early-yearsreading

Bus, A., van Ijezendoorn, M., & Pellegrini, M. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65(1), 1–21.

Cabell, S. Q., & Hwang, H. J. (2020). Building content knowledge to boost comprehension in the primary grades. *Reading Research Quarterly*, 55(1), 99–107.

Cantor, P., Osher, D., Berg, J., Steyer, L. & Rose, T. (2018). Malleability, plasticity, and individuality: How children learn and develop in context. *Applied Developmental Science*, 23(4), 307–337. https://doi.org/10.1080/10888691.2017.1398649

Carreker, S. (2021). *Structured Literacy: Applying the Science of Reading in the Classroom* [White paper]. Voyager Sopris Learning.

Cartwright, K. B. (2023). *Executive Skills and Reading Comprehension: A Guide for Educators*. (2nd edition) NY: Guilford Press.

CASEL (Collaborative for Academic, Social, and Emotional Learning). (2020). CASEL's SEL Framework: What Are the Core Competence Areas & Where Are They Promoted? https://casel.s3.us-east-2.amazonaws.com/CASEL-SEL-Framework-11.2020.pdf

Castles, A., Rastle, K. & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5–51. https://doi.org/10.1177/1529100618772271

Catts, H. W., Hogan, T. P. & Adlof, S. M. (2005). Developmental changes in reading and reading disabilities. In H. W. Catts & A. G. Kamhi (Eds.), *The Connections Between Language and Reading Disabilities,* 25–40. Lawrence Erlbaum Associates Publishers.

Cervetti, G. N., & Wright, T. S. (2020). The role of knowledge in understanding and learning from text. *Handbook of Reading Research*, 5, 237–260.

Cervetti, G. N., Wright, T. S. & Hwang, H. (2016). Conceptual coherence, comprehension, and vocabulary acquisition: A knowledge effect? *Reading and Writing: An Interdisciplinary Journal*, 29(4), 761–779.

Cheatham, J. P. , Allor, J. H. (2012). The influence of decodability in early reading text on reading achievement: a review of the evidence. *Read Writ,* 25, 2223–2246. https://doi.org/10.1007/s11145-011-9355-2

Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W. & Yagan, D. (2011). How does your kindergarten classroom affect your earnings? Evidence from Project Star. *The Quarterly Journal of Economics*, 126(4), 1593–1660. https://doi.org/10.1093/qje/qjr041

Cleaver, S. (2020). Raising an active reader: *The Case for Reading Aloud to Engage Elementary School Youngsters*. Rowman & Littlefield Publishing Group.

Comer, J. P., & Gates, H. L. (2004). Leave no child behind: Preparing today's youth for tomorrow's world. Yale University Press.

Connor C. M., Morrison F. J., Schatschneider C., Toste J., Lundblom E. G., Crowe E. & Fishman, B. (2011). Effective classroom instruction: Implications of child characteristic by instruction interactions on first graders' word reading achievement. *Journal of Research on Educational Effectiveness*, 4, 173–207.

Connor, C. M., Phillips, B. M., Kim, Y., Lonigan, C. J., Kaschak, M. P., Crowe, E., Dombek, J. & Al Otaiba, S. (2018). Examining the efficacy of targeted component interventions on language and literacy for third and fourth graders who are at risk of comprehension difficulties. *Scientific Studies of Reading*, 22(6), 462–484. https://doi.org/10.1080/10888438.2018.1481409

Cunningham, A. E. & Stanovich, K. E. (2003). Reading matters: How reading engagement influences cognition. In J. Flood, D. Lapp, J. Squire & J. Jensen (Eds.), *Handbook of Research on Teaching the English Language Arts* (2nd Ed.), 666–675. Mahwah, NJ: Lawrence Erlbaum Associates.

Darling-Hammond, L. & Cook-Harvey, C. M. (2018). *Educating the Whole Child: Improving School Climate to Support Student Success*. Palo Alto, CA: Learning Policy Institute. https://doi.org/10.54300/145.655

De Smedt, F. & Van Keer, H. (2014). A research synthesis on effective writing instruction in primary education. *Procedia-Social and Behavioral Sciences*, 112, 693–701.

Dewalt, D. A. & Pignone, M. P. (2005). The role of literacy in health and health care. *American Family Physician*, 72(3), 387–388.

Duke, N. K. & Cartwright, K. B. (2021). The science of reading progresses: Communicating advances beyond the simple view of reading. *Reading Research Quarterly*, 56(S1), S25–S44. https://doi.org/10.1002/rrq.411

Duke, N. K. & Mesmer, H. A. E. (2019). Phonics faux pas: Avoiding instructional missteps in teaching letter-sound relationships. *American Educator*, 42(4), 12–16

Duke, N. K., Pearson, P. D., Strachan, S. L., Billman, A. K. (2011). Essential elements of fostering and teaching reading comprehension. In S.J. Samules & A. Farstrup (Eds.) *What Research Has to Say About Reading Instruction* (4th Ed.), 51–93. Newark, DE: International Reading Association.

Duke, N. K., Ward, A. E., & Pearson, P. D. (2021). The Science of Reading comprehension instruction. *Read Teach*, 74(6), 663–672. https://doi.org/10.1002/trtr.1993

Durkin, D. (1966). *Children Who Read Early*. New York, NY: Teachers College Press.

Ehri, L. C. (2005). Learning to read words: theory, findings, and issues. *Scientific Studies of Reading*, 9(2),167–188. https://doi.org/10.1207/s1532799xssr0902_4

Ehri, L. C. (2022). What teachers need to know and do to teach letter-sounds, phonemic awareness, word reading, and phonics. *The Reading Teacher*, 76(1), 53–61. https://doi.org/10.1002/trtr.2095

Elbro, C. & Buch-Iversen, I. (2013). Activation of background knowledge for inference making: Effects on reading comprehension. *Scientific Studies of Reading*, 17(6), 435452. https://doi.org/10.1080/10888438.2013.774005

Elleman, A. M. (2017). Examining the impact of inference instruction on the literal and inferential comprehension of skilled and less skilled readers: A meta-analytic review. *Journal of Educational Psychology*, 109(6), 761–781. https://doi.org/10.1037/edu0000180

Elleman, A. M. & Oslund, E. L. (2019). Reading comprehension research: implications for practice and policy. Policy Insights from the Behavioral and Brain Sciences, 6(1), 3–11. https://doi.org/10.1177/2372732218816339

Evans, M., Kelley, J., Sikorac, J. & Treimand, D. (2010). Family scholarly culture and educational success: Books and schooling in 27 nations. *Research in Social Stratification and Mobility*, 28, 171–197.

Fahle, E. M., Kane, T. J., Patterson, T., Reardon, S. F., Staiger, D. O., Stuart, E. A. (2023). School district and community factors associated with learning loss during the COVID-19 pandemic. Education Recovery Score Card. ExplainingCOVIDLosses.pdf (educationrecoveryscorecard.org)

Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W. & Beechum, N. O. (2012). Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review. Chicago: University of Chicago Consortium on Chicago School Research.

Filderman M. J., Austin C. R., Boucher A. N., O'Donnell K., Swanson E. A. (2021). A meta-analysis of the effects of reading comprehension interventions on the reading comprehension outcomes of struggling readers in third through 12th grades. *Exceptional Children*, 88(2), 163–184. https://doi.org/10.1177/00144029211050860

Fillmore, L. W. & Snow, C. E. (2000). What teachers need to know about language. In C. T. Adger, C. E. Snow, & D. Christian (Eds.), *What teachers need to know about language* (pp. 7–53). McHenry, IL: Delta Systems and Center for Applied Linguistics.

Fisher, H. (2011). Inside the primary classroom: Dissatisfaction behind a veil of compliance. British Journal of Educational Studies, 59(2), 121–141.

Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R. & Wissel, S. (2016). Foundational skills to support reading for understanding in kindergarten through 3rd grade (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: http://whatworks.ed.gov.

Foorman, B., Herrera, S., Petscher, Y., Mitchell, A. & Truckenmiller, A. (2015). The structure of oral language and reading and their relationship to comprehension in kindergarten through grade 2. *Reading and Writing: An Interdisciplinary Journal*, 28, 655–681.

Formative Assessment for Students and Teachers (FAST) State Collaborative on Assessment and Student Standards (SCASS). (2018). *Revising the Definition of Formative Assessment*. Washington, DC: Council of Chief State School Officers. Retrieved from https://ccsso.org/resource-library/revising-definition-formative-assessment

Gallagher, W. (2009). Rapt: Attention and the focused life. Penguin.

Gambrell, L. B. (1996). Creating classroom cultures that foster reading motivation. *The Reading Teacher*, 50, 14–25.

Gambrell, L. B. (2011). Seven rules of engagement: What's most important to know about motivation to read. *The Reading Teacher*, 65, 172–178. https://doi.org/10.1002/TRTR.01024

Gee, J. P. (2000). Chapter 3: Identity as an analytic lens for research in education. *Review of Research in Education*, 25(1), 99–125. https://doi.org/10.3102/0091732X025001099

Gillon, G. T. (2018). *Phonological awareness: From research to practice*, 2nd ed. The Guilford Press.

Goldenberg, M. & Goldenberg, C. (2022). Lessons learned? Reading wars, reading first, and a way forward. *The Reading Teacher*, 75(5), 621–630. https://doi.org/10.1002/trtr.2079

Gotlieb, R., Rhinehart, L., Wolf, M. (2022). The "reading brain" is taught, not born: Evidence from the evolving neuroscience of reading for teachers and society. *The Reading League Journal*.

Gough, P. B. & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6–10. https://doi.org/10.1177/074193258600700104

Graham, S., Gillespie, A. & McKeown, D. (2013). Writing: Importance, development, and instruction. *Reading and Writing*, 26, 1-15.a

Greenberg, M. T. (2023). Evidence for social and emotional learning in schools. Learning Policy Institute. https://doi.org/10.54300/928.269

Grimm, R. P., Solari, E. J., McIntyre, N. S., & Denton, C. A. (2018). Early reading skill profiles in typically developing and at-risk first grade readers to inform targeted early reading instruction. Journal of School Psychology, 69, 111-126.

Guthrie, J. T. (2008). Reading motivation and engagement in middle and high school: Appraisal and intervention. In J. T. Guthrie (Ed.), *Engaging Adolescents in Reading* (pp. 1–16). Corwin Press.

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), 282–313. https://doi.org/10.1016/j.cedpsych.2006.05.004

Guthrie, J. T., Mason-Singh, A. & Coddington, C. (2012). Instructional effects of concept-oriented reading instruction on motivation for reading information text in middle school. In J. T. Guthrie, A. Wigfield, & S. L. Klauda (Eds.), *Adolescents' Engagement in Academic Literacy* (pp. 155-215). College Park, MD: University of Maryland.

Guthrie, J. T., Schafer, W. D. & Huang, C. W. (2001). Benefits of opportunity to read and balanced instruction on the NAEP. *Journal of Educational Research*, 94, 145-162.

Guthrie, J. T. & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research*, Vol. 3, pp. 403–422). Lawrence Erlbaum Associates Publishers.

Hadley, E. B., Dickinson, D. K., Hirsh-Pasek, K. & Golinkoff, R. M. (2018). Building semantic networks: The impact of a vocabulary intervention on preschoolers' depth of word knowledge. *Reading Research Quarterly*, 54(1), 41–61. https://doi.org/10.1002/rrq.225

Hall-Mills, S. S., & Marante, L. M. (2023). Teaching Expository Text Management and Proficiency Skills for Comprehension for Students With Language/Learning Disabilities. *Learning Disability Quarterly*, 0(0). https://doi.org/10.1177/07319487221145689

Harmon, J. & Wood, K. (2018). The vocabulary-comprehension relationship across the disciplines: Implications for instruction. *Education Sciences*, 8 (3), 101.

Harvey, S. & Ward, A. (2017). *From Striving to Thriving: How to Grow Confident, Capable Readers*. New York, NY: Scholastic.

Hebert, M., Bohaty, J. J., Nelson, J. R., & Brown, J. (2016). The effects of text structure instruction on expository reading comprehension: A meta-analysis. Journal of Educational Psychology, 108(5), 609.

Henbest, V. S. & Apel, K. (2017). Effective word reading instruction: What does the evidence tell us? *Communication Disorders Quarterly*, 39(1), 303–311. https://doi.org/10.1177/1525740116685183

Hernandez, D. J. (2011). Double jeopardy: How third-grade reading skills and poverty influence high school graduation. Annie E. Casey Foundation.

Hiebert, E. H. (1999). Text matters in learning to read. *The Reading Teacher*, 52(6), 552-566.

Hiebert, E. H., Goodwin, A. P. & Cervetti, G. N. (2017). Core vocabulary: Its morphological content and presence in exemplar texts. *Reading Research Quarterly*, 53(1), 29–49. https://doi.org/10.1002/rrq.183

Hiebert, E. H., Goodwin, A. P., & Cervetti, G. N. (2018). Core vocabulary: Its morphological content and presence in exemplar texts. Reading Research Quarterly, 53(1), 29–49. https://doi.org/10.1002/rrq.183

Hiebert, E. H. (2019). Teaching Words and How They Work: Small changes for big vocabulary results. New York, NY: Teacher College Press.

Hiebert, E. H. (2020). The core vocabulary: The foundation of proficient comprehension. *The Reading Teacher*, 73(6), 757–768. https://doi.org/10.1002/trtr.1894

Hiebert, E. H. & Reutzel, D. R. (2010). Revisiting silent reading: New directions for teachers and researchers. International Reading Association.

Hudson, R. F., Torgesen, J. K., Lane, H. B. & Turner, S. J. (2012). Relations among reading skills and sub-skills and text-level reading proficiency in developing readers. *Reading and Writing*, 25, 483–507. https://doi.org/10.1007/s11145-010-9283-6

Hughes, C. A., Morris, J. R., Therrien, W. J., & Benson, S. K. (2017). Explicit instruction: Historical and contemporary contexts. Learning Disabilities Research & Practice, 32(3), 140-148.

Hwang, H., Cabell, S. Q. & Joyner, R. E. (2022). Does cultivating content knowledge during literacy instruction support vocabulary and comprehension in the elementary school years? A systematic review. *Reading Psychology*, 44(2), 145–174. https://doi.org/10.1080/02702711.2022.2141397

Jones, C. D., Clark, S. K., & Reutzel, D. R. (2012). Enhancing alphabet knowledge instruction: Research implications and practical strategies for early childhood educators. *Early Childhood Education Journal*, 41(2), 81-89.

Kane, T. & Sean Reardon. (2023, May 11). Parents Don't Understand How Far Behind Their Kids Are in School. https://www.nytimes.com/interactive/2023/05/11/opinion/pandemic-learning-losses-steep-but-not-permanent.html

Karoly, L. A. (2015). Economic impact of achievement gaps in Pennsylvania's public schools. RAND Corporation.

Kieffer, M. J., Mancilla-Martinez, J. & Logan, J. K. (2021). Executive functions and English reading comprehension growth in Spanish-English bilingual adolescents. *Journal of Applied Developmental Psychology*, 73, 101238. https://doi.org/10.1016/j.appdev.2021.101238

Kim, J. S., Burkhauser, M. A., Mesite, L. M., Asher, C. A., Relyea, J. E., Fitzgerald, J. & Elmore, J. (2021). Improving reading comprehension, science domain knowledge, and reading engagement through a first-grade content literacy intervention. *Journal of Educational Psychology*, 113(1), 3–26. https://doi.org/10.1037/edu0000465

Kirsch, I., de Jong, J., LaFontaine, D., McQueen, J., Mendelovits, J. & Monseur, C. (2002). *Reading for change: Performance and engagement across countries: Results from PISA 2000*. Paris, France: Organisation for Economic Co-operation and Development. Retrieved May 29, 2015 from http://www.oecd.org/edu/school/programmeforinternationalstudentassessmentpisa/33690904.pdf

Koskinen, P. S., McCarthey, S. J., & Hoffman, J. V. (1995). National reading research center. The Reading Teacher, 49(1), 72-75.

Kuhfeld, M. & Lewis K. (2022). COVID-19 in the early elementary years: A comparison of achievement in Spring 2019 and Spring 2022. *Collaborative for Student Growth*. NWEA.

Lai, M. K. & Schildkamp, K. (2012). Data-based decision-making: An overview. In K. Schildkamp, M. K. Lai, & L. Earl (Eds.), Data-Driven Decision-Making Around the World: Challenges and Opportunities (pp. 9–21). Netherlands: Springer.

Lajoie, S. P. (2005). Extending the scaffolding metaphor. Instructional Science, 33(5), 541-557.

Lee, J. (2011). Size matters: Early vocabulary as a predictor of language and literacy competence. *Applied Psycholinguistics*, 32(1), 69-92.

Lehman, B., Freeman, E. & Scharer, P. (2010). *Reading Globally, K-8: Connecting Students to the World Through Literature*. Thousand Oaks, CA: Corwin.

Lindsey, J. (2022). *Reading above the fray: Reliable, research-based routines for developing decoding skills*. Scholastic Professional.

Litwin, E. & Pepin, G. (2020). *The power of joyful reading: Help your young readers soar to success!*. New York, NY: Scholastic.

Mayer, R. E. (2011). Instruction based on visualizations. In Handbook of research on learning and instruction (pp. 441-459). Routledge.

McKinsey Education. (2009). Shaping the future: How good education systems can become great in the decade ahead. McKinsey & Company.

McRae, A. & Guthrie, J. T. (2009). *Promoting reasons for reading: Teacher practices that impact motivation*. In E.H. Hiebert (Ed.), Reading more, reading better (pp. 55-76). New York, NY: The Guilford Press.

Mesa, C., & Yeomans-Maldonado, G. (2019). The role of prekindergarten Spanish in predicting first-grade English word reading among dual-language learners. Journal of Speech, Language, and Hearing Research, 62(6), 1755-1774.

Mesmer, H. A. E. & Griffith, P. L. (2005). Everybody's Selling It—But Just What is Explicit, Systematic Phonics Instruction? *The Reading Teacher*, 59(4), 366-376.

Mesmer, H. A., Cunningham, J. W. & Hiebert, E. H. (2012). Toward a theoretical model of text complexity for the early grades: Learning from the past, anticipating the future. *Reading Research Quarterly*, 47(3), 235–258.

Miller, D., & Lesesne, T. (2022). The Joy of Reading. Heinemann Educational Books.

Moats, L. C. (2020). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do*. Washington, DC: American Federation of Teachers

Mohr, S., Schneider, K. P., & Anderson, J. A. (2023). Communicative action and interaction in Africa: Towards a broader picture. Journal of Pragmatics, 215, 96-100.

Muhammad, G. (2023). *Unearthing joy: A guide to culturally and responsive teaching and learning*.

Nation, K., & Snowling, M. J. (2004). Beyond Phonological Skills: Broader Language Skills Contribute to the Development of Reading. *Journal of Research in Reading*, 27, 342-356. http://dx.doi.org/10.1111/j.1467-9817.2004.00238.x

National Center on Improving Literacy (2019). Best practices in universal screening. Washington, DC: U.S. Department of Education, Office of Elementary and Secondary Education, Office of Special Education Programs, National Center on Improving Literacy. Retrieved from: http://improvingliteracy.org.

National Institute of Child Health and Human Development (NICHD) (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. 00-4769). Washington, DC: U.S. Government Printing Office.

National Research Council. (2000). How people learn: Brain, mind, experience, and school (expanded ed.). Committee on Developments in the Science of Learning and Committee on Learning Research and Educational Practice. J. D. Bransford, A. Brown, & R. R. Cocking (Eds.). Commission on Behavioral and Social Sciences and Education. National Academy Press.

NELP (National Early Literacy Panel). (2008). *Developing Early Literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy. http://lincs.ed.gov/publications/pdf/NELPReport09.pdf.

Neuman, S. & Celano, D. (2001). Access to print in low- and middle and low-middle-income communities: An ecological study of four neighborhoods. *Reading Research Quarterly*, 36, 8–26.

Neuman, S. B., Newman, E. H. & Dwyer, J. (2011). "Educational effects of a vocabulary intervention on preschoolers' word knowledge and conceptual development: A cluster-randomized trial": Erratum. *Reading Research Quarterly*, 46(4), 393.

Neuman, S. & Celano, C. (2012). Giving our children a fighting chance: Poverty, literacy, and the development of information capital. New York: Teachers College Press.

Neuman, S. B., & Celano, D. (2006). The knowledge gap: Implications of leveling the playing field for low-income and middle-income children. *Reading Research Quarterly*, 41(2), 176–201.

Neuman, S. B., & Moland, N. (2019). Book deserts: The consequences of income segregation on children's access to print. *Urban Education*, 54(1), 126–147.

Niemi, H. (2021). Education reforms for equity and quality: An analysis from an educational ecosystem perspective with reference to Finnish educational transformations. Center for Educational Policy Studies Journal, 11(2), 13-35.

Oakhill, J. V. & Cain, K. (2012). The precursors of reading ability in young readers: Evidence from a four-year longitudinal study. *Scientific Studies of Reading*, 16(2), 91–121. https://doi.org/10.1080/10888438.2010.529219

Okkinga, M., van Steensel, R., van Gelderen, A. J. S., van Schooten, E., Sleegers, P. J. C., & Arends, L.R. (2018). Effectiveness of reading-strategy interventions in whole classrooms; a meta-analysis. *Educational Psychology Review*, 30, 1215-1239. https://doi.org/10.1007/s10648-018-9445-7

Ouellette, G. & Beers, A. (2010). A not-so-simple view of reading: How oral vocabulary and visual-word recognition complicate the story? *Reading and Writing: An Interdisciplinary Journal*, 23(2), 189–208. https://doi.org/10.1007/s11145-008-9159-1

Parker, D. C., Klingbeil, D. A., Hanrahan, A. R., Schramm, A. L., Copek, R. A., & Willenbrink, J. B. (2022). Effects of a multi-component decoding intervention for at-risk first graders. Journal of Behavioral Education, 31(2), 326-349.

Peng, P., Zhang, Z., Wang, W., Lee, K., Wang, T., Wang, C., Luo, J. & Lin, J. (2022). A meta-analytic review of cognition and reading difficulties: Individual differences, moderation, and language mediation mechanisms. *Psychological Bulletin*, 148(3-4), 227–272. https://doi.org/10.1037/bul0000361

Piasta, S. B., Purpura, D. J. & Wagner, R. K. (2010). Fostering alphabet knowledge development: A comparison of two instructional approaches. Reading & Writing, 23,607–626. https://doi.org/10.1007/s11145-009-9174–x

Piasta, S. B. & Hudson, A. K. (2022). Key Knowledge to Support Phonological Awareness and Phonics Instruction. *The Reading Teacher*, 76(2), 201-210. https://doi.org/10.1002/trtr.209

Pikulski, J. J. & Chard, D. J. (2005). Fluency: Bridge between decoding and reading comprehension. *The Reading Teacher*, 58(6), 510–519.

Pressley, M., Beard El-Dinary, P. & Brown, R. (1992). Skilled and not-so-skilled reading: Good information processing and not-so-good information processing. In M. Pressley, K. Harris, & J. Guthrie (Eds.), *Promoting Academic Competence and Literacy in School* (pp. 91–127). San Diego, CA: Academic Press.

Pruzinsky, T. (2014). Read books. Every day. Mostly for pleasure. English Journal, 103(4), 25-30.

Purpaff, L. A. (2009). A developmental continuum of phonological sensitivity skills. *Psychology in the Schools*, 46(7), 679-691. https://doi.org/10.1002/pits.20407

Pulido, D. (2007). The effects of topic familiarity and passage sight vocabulary on L2 lexical inferencing and retention through reading. Applied Linguistics, 28(1), 66-86.

Puzio, K., Colby, G. T. & Algeo-Nichols, D. (2020). Differentiated literacy instruction: Boondoggle or best practice? *Review of Educational Research*, 90(4). https://doi.org/10.3102/0034654320933536

Pyle, A., & Danniels, E. (2017). A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. Early Education and Development, 28(3), 274-289.

Raphael, T., George, M., Weber & Nies. (2009) Approaches to teaching reading comprehension. In S.E. Isreal & G.G. Duffy (Eds), *Handbook of research on reading comprehension*. (pp. 449-469). New York: Routledge.

Recht, D. R. & Leslie, L. (1988). Effect of prior knowledge on good and poor readers' memory of text. *Journal of Educational Psychology*, 80(1), 16–20. https://doi.org/10.1037/0022-0663.80.1.16

Richardson, J., & Lewis, E. (2018). Next Step Forward in Reading Intervention: The RISE Framework. Scholastic.

Ricketts, J., Nation, K. & Bishop, D. V. (2007). Vocabulary is important for some, but not all reading skills. *Scientific Studies of Reading*, 11(3), 235–257. https://doi.org/10.1080/10888430701344306

Roberts, T. A. (2021). Learning letters: Evidence and questions from a science-of-reading perspective. *Reading Research Quarterly*, 56(S1). https://doi.org/10.1002/rrq.394

Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed.). Macmillan.

Rosenshine, B. (1995). Advances in research on instruction. *Journal of Educational Research*, 88(5), 262–268.

Ryan, R. M. & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). University of Rochester Press.

Ryan, R. M. & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press. https://doi.org/10.1521/978.14625/28806

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), *Handbook for research in early literacy* (pp. 97–110). New York, NY: Guilford Press.

Scharer, P. (2018) *Responsive Literacy: A Comprehensive Framework* (pp. 56-73). New York, NY: Scholastic.

Schiefele, U. (1991). Interest, learning, and motivation. Educational Psychologist, 26(3-4), 299-323.

Seidenberg, M. (2017). *Language at the Speed of Sight: How We Read, Why So Many Can't, and What Can Be Done about It*. New York, NY: Basic Books.

Sénéchal, M., Ouellette, G. & Rodney, D. (2006). The misunderstood giant: On the predictive role of early vocabulary to future reading. *Handbook of early literacy research*, 2, 173-182

Sewell, M. (2008). Ensemble learning. RN, 11(02), 1-34.

Smith, K. G., & Ryan, A. E. (2020). Relationship between single word reading, connected text reading, and reading comprehension in persons with aphasia. American Journal of Speech-Language Pathology, 29(4), 2039-2048.

Smith, R., Snow, P., Serry, T. & Hammond, L. (2021) The Role of Background Knowledge in Reading Comprehension: A Critical Review, *Reading Psychology*, 42:3, 214-240.

Stahl, K. A. D. (2011). Applying new visions of reading development in today's classrooms. The Reading Teacher, 65(1), 52-56.

Steacy, L. M., Elleman, A. M., Lovett, M. W. & Compton, D. L. (2016). Exploring differential effects across two decoding treatments on item-level transfer in children with significant word reading difficulties: A new approach for testing intervention elements. *Scientific Studies of Reading*, 20(4), 283-295. https://doi.org/10.1080/10888438.2016.1178267.

Steinbrink, C., Zimmer, K., Lachmann, T., Dirichs, M. & Kammer, T. (2014). Development of rapid temporal processing and its impact on literacy skills in primary school children. *Child Development*, 85(4), 1711–1726.

Storch, S. A. & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: evidence from a longitudinal structural model. *Developmental Psychology*, 38(6), 934–947.

Subban, P. (2006). *Differentiated instruction: A research basis*. International Education Journal, 7(7), 935–947.

Sullivan, A. & Brown, M. (2013). *Social Inequalities in Cognitive Scores at Age 16: The Role of Reading*. London: Centre for Longitudinal Studies.

Sweller, J. (2008). Instructional implications of David C. Geary's evolutionary educational psychology. Educational Psychologist, 43(4), 214-216.

Tatum, A. W. (2009). Reading and resilience. Reading into Practice, 1(1), 1-9.

Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all students*. ASCD.

Torgesen, J. K., Wagner, R. K., Rashotte, C. A., & Herron, J. (2018). Summary of outcomes from first grade study with "Read, Write, and Type" and "Auditory Discrimination in Depth" instruction and software with at-risk children. FCRR Technical Report #2. Florida Center for Reading Research.

Toste, J. R., Didion, L., Peng, P., Filderman, M. J., & McClelland, A. M. (2020). A meta-analytic review of the relations between motivation and reading achievement for K–12 students. Review of Educational Research, 90(3), 420-456.

Tunmer, W. E., & Chapman, J. W. (2012). The Simple View of Reading Redux: Vocabulary Knowledge and the Independent Components Hypothesis. *Journal of Learning Disabilities*, 45(5), 453–466. https://doi.org/10.1177/0022219411432685

U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2022 Reading Assessment.

Vellutino, F. R., Tunmer, W. E., Jaccard, J. J. & Chen, R. (2007). Components of reading ability: Multivariate evidence for a convergent skills model of reading development. *Scientific Studies of Reading*, 11(1), 3–32. https://doi.org/10.1080/10888430709336632

Wasik, B. A., Hindman, A. H. & Snell, E. K. (2016). Book reading and vocabulary development: A systematic review. *Early Childhood Research Quarterly*, 37, 39–57. https://doi.org/10.1016/j.ecresq.2016.04.003

Watts-Taffe, S., Laster, B. P., Broach, L., Marinak, B., Connor, C. M. & Walker-Dalhouse, D. (2012). Differentiated instruction: Making informed teacher decisions. *Reading Teacher*, 66(4), 303-314. https://doi.org/10.1002/TRTR.01126

Weinstein, G., Cohn-Schwartz, E. & Damri, N. (2021). Book-oriented environment in childhood and current cognitive performance among old-aged Europeans. *Dementia and Geriatric Cognitive Disorders*, 50(3),274–282.

Werfel, K. L. & Krimm, H. (2017). A Preliminary Comparison of Reading Subtypes in a Clinical Sample of Children With Specific Language Impairment. *Journal of speech, language, and hearing research : JSLHR*, 60(9), 2680–2686. https://doi.org/10.1044/2017_JSLHR-L-17-0059

Wilhelm, J. & Smith, M.W. (2014). *Reading Unbound: Why kids need to read what they want and why we should let them*. New York: Scholastic.

Wolf, M. (2008). Proust and the squid: The story and science of the reading brain. Harper Collins.

Worthy, J. and Roser, N. (2010). Productive Sustained Reading in a Bilingual Class. In Hiebert, E., and Reutzel, R. (Eds.), *Revisiting Silent Reading: New Directions for Teachers and Researchers*. Newark, DE: International Reading Association.

Wood, D., Bruner, J. S. & Ross, G. (1976). The role of tutoring in problem solving. *Child Psychology & Psychiatry & Allied Disciplines*, 17(2), 89–100.

Wright, T. S. & Cervetti, G. N. (2017). A systematic review of the research on vocabulary instruction that impacts text comprehension. *Reading Research Quarterly*, 52(2), 203–226. https://doi.org/10.1002/rrq.163/

Wu, Y., Barquero, L. A., Pickren, S. E., Barber, A. T. & Cutting, L. E. (2020). The relationship between cognitive skills and reading comprehension of narrative and expository texts: A longitudinal study from Grade 1 to Grade 4. *Learning and individual differences*, 80, 101848. https://doi.org/10.1016/j.lindif.2020.101848

Yopp, H. K. (1992). Developing phonemic awareness in young children. The Reading Teacher, 45(9), 696-703.