# Foundations





## Teaching Reading Across the Day

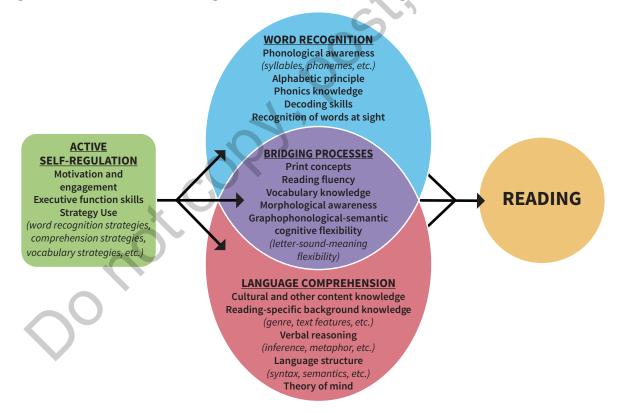
There's an old adage that students learn to read until third grade, and after that, they read to learn. But in truth, we never stop learning to read and, ideally, we learn from our reading from the very start. Because of this, students need reading instruction at every grade level and across the day: We should bring instruction about *how to read* and opportunities to do so into our content areas, and we should bring opportunities to build knowledge and vocabulary into our literacy block (Bryant et al., 2001; Greenleaf et al., 2011; Hwang et al., 2022; Hwang, Cabell et al., 2023; Hwang, McMaster et al., 2023; McKenna & Robinson, 1990; Swanson et al., 2014; Vaughn et al., 2013).

Successful reading requires a complex, interconnected set of word reading skills, executive functioning skills, and the use of comprehension skills and strategies together with deep and varied knowledge—from knowledge about words (i.e., phonics, morphology, vocabulary) to knowledge related to culture and content to knowledge about genre, topic, language, verbal reasoning, and theory of mind (Cervetti & Hiebert, 2015; Cervetti & Wright, 2020; Graesser et al., 1994; Kintsch, 1986; Moll et al., 1992). Reading happens with a text, for purpose(s), and always within context(s). To develop this depth and breadth of skills and knowledge, experience the varied purposes and contexts for reading, and develop facility with reading any kind of text, all teachers should be reading teachers and students should be reading across the day.

#### **Reader Models**

For decades, researchers have created models to synthesize and organize research findings. You may be familiar with the Simple View of Reading (Gough & Tumner, 1986), which posits that reading comprehension is the product of word recognition and language comprehension; Scarborough's Rope (Scarborough, 2001), which unpacks word recognition and language comprehension strands included in the Simple View's broader categories; the Componential Model of Reading (Joshi & Aaron, 2000), which includes cognitive, psychological, and ecological factors related to reading; the Construction-Integration Model (Kintsch, 1988), which explains how readers create a mental model for comprehension; the Direct and Indirect Effects Model of Reading (DIER; Kim, 2020, 2023), which highlights hierarchical, dynamic, and interactive relationships among elements; and/or the Active View of Reading (Duke & Cartwright, 2021), which includes the contributions of executive functioning skills and bridging processes (overlapping areas between word recognition and language comprehension) to proficient reading (see Figure 1.1).

Figure 1.1 Duke and Cartwright's Active View of Reading (2021)



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An understanding of any of these models can help us conceptualize research-based components that would be important to include in a comprehensive approach to literacy instruction within English language arts (ELA) and the content areas. These models can also help us choose reading resources and curricula, plan lesson content effectively, and guide our assessments as we attempt to pinpoint sources of reading difficulty.

Take a look at Table 1.1 on pages 21–24 to see a quick explanation and example of each of the components from the Active View of Reading model, a model that is both current and comprehensive. Notice how most of the components include both skills (which I'll define as *proficiencies*, something a reader is able to do) as well as knowledge (something a reader needs to know). Knowledge is a part of nearly everything—even the ability to use and apply strategies (a reader's goal-directed actions) requires a knowledge of those strategies. As you read through Table 1.1, consider the application of each of these components when reading literature or informational texts, when reading during an ELA class, or when reading during history, science, math, or any other content area.

Table 1.1 Explanations and Examples of the Components Detailed in the Active View of Reading

Component from the Active View of Reading	Quick Explanation	One Example		
Active Self-Regulation				
Motivation and engagement	Approaching a text with a desire to read it, being interested in the topic, having a positive self-concept about reading, finding value in the reading  Engagement may overlap with executive function skills	I am excited to read this book because I'm interested in the topic, and I have a plan to talk about it with my friends later.		
Executive function (EF) skills	Includes skills such as cognitive flexibility, working memory, inhibitory control, attention, and planning	I can hold information in my mind from chapter to chapter, remembering important information. If I get distracted while reading, I can refocus my attention.		
Strategy use	Taking an active approach to reading means using strategies as needed.  Strategies are conscious actions or steps a reader can take to help with anything from reading words accurately to comprehension	I realize that I don't understand what I just read, so I'm going to back up, reread, and pause after each sentence to check my understanding before moving on.		

(Continued)

Table 1.1 (Continued)

Component from the Active View of Reading	Quick Explanation	One Example		
Word Recognition				
Phonological awareness	Attention to the sounds in spoken words; most helpful for reading is phonemic awareness	I know the word <i>lighter</i> has four phonemes, or sounds: /l/ /ī/ /t/ /ûr/ .		
Alphabetic principle	An understanding that the sounds in spoken language can be represented by written letters	I know that I can spell /t/ with the letter t.		
Phonics knowledge	Knowledge of sound-letter (phoneme-grapheme) correspondences In English, there are around 44 phonemes (sounds) but there are around 250 graphemes (letters or letter groups that correspond to a single sound)	I know how to spell <i>lighter</i> with seven letters, even though it has four phonemes.		
Decoding skills	Being able to break words apart (segment) and blend sounds to correctly pronounce words using phonetic and/or morphological knowledge	If I don't know the word <i>lighter</i> , I can go through the word, pronouncing it part-by-part—/l//ī//t//ûr/ or light-er—then blend the sounds together to say lighter.		
Recognition of words on sight	Eventually, all words should become sight words, words that a reader knows right away without having to decode them. Usually, a word becomes a sight word after a reader orthographically maps the word, connecting letters, sounds, and meaning	I slowed down to decode <i>lighter</i> , and the next time I see it, I'll know it right away and don't need to segment and blend. I can just read it.		

Component from the Active View of Reading	Quick Explanation	One Example		
Bridging Processes				
Print concepts	Understanding conventions of printed language, such as knowing how to hold a book with the spine on the left; knowing to read the text left-to-right, top-to-bottom; knowing what the punctuation marks on the page direct a reader to do, and so on	When I am reading a page with multiple lines of print, I start at the top left, read across the page, then go to the next line to continue my reading.		
Reading fluency	Accurate and automatic word reading and reading with proper phrasing, pace, and prosody (expression, intonation, emphasis) informed by the meaning of the text	As I read this character's dialogue, I think about how he's feeling and use expression in my voice to match it. I read it smoothly and it sounds like someone talking.		
Vocabulary knowledge	Understanding words in a text  Readers need to be able to correctly pronounce the word and know its meaning, especially related to the context of the text in which they encounter it	I can pronounce the word <i>row</i> and I know it can mean to use oars to move a boat. But in this context, it describes an argument between two people.		
Morphological awareness	Awareness of meaning-based units in words and using that knowledge to figure out what a word means and its likely pronunciation	I know that <i>spect</i> often means <i>observe</i> , <i>in</i> - means <i>into</i> , and <i>-ion</i> changes a verb to a noun, and this knowledge helps me to break the word <i>inspection</i> into parts to read it and to figure out its meaning.		
Graphophonological- semantic cognitive flexibility	A reading-specific EF skill that involves the ability to manage and shift attention continuously between letter–sound information and meaning information associated with printed words	As I'm reading, I pay attention to what the words say and how to read them.		

(Continued)

Table 1.1 (Continued)

Component from the Active View of Reading	Quick Explanation	One Example		
Language Comprehension				
Cultural knowledge	What readers understand about people, social norms, practices, experiences, and more related to the culture(s) they interact with or are part of	This story is set in an urban middle school in present-day United States—similar to where I live and go to school—so I can bring what I know to help me visualize the story, but the character's cultural background (first-generation Chinese American) is different from mine, so I'll be learning about that culture from the text.		
Content knowledge	Information readers bring to a text about a topic and concepts related to a topic, which they may have learned from a variety of experiences (lessons in school, books they've read, shows they've watched, experiences, and so on)	This textbook chapter is about planets in our solar system, so I'll use what I know from the Magic School Bus book I read about this topic and remember what I learned on my trip to the planetarium to help me understand this text.		
Reading-specific background knowledge	Knowledge of a genre and its elements; for example, how texts of that genre are typically structured	This book is a mystery and I know there is always a detective who collects clues, gets tricked by a red herring somewhere along the way, and eventually figures out the mystery. I'll use what I know about that predictable structure to pay attention to the important details.		
Verbal reasoning	Using reasoning to make inferences, including when readers encounter figurative language	I know that the phrase hit the road doesn't literally mean to hit the street with a stick, based on the context and how the phrase is used.		
Language structure	Understanding the organization of information within a sentence and how the information connects with other information	In the sentence, "Katie was ready for her race—the hardest event she'd ever tried—because of her dedicated practice," I understand that the information offset in em-dashes is meant to offer extra background information, a parenthetical. I know that her and she refers to Katie, the subject of the sentence.		
Theory of mind	Making inferences about a character's feelings, actions, motivations, and more People develop this in life, and readers apply it when reading texts	I can understand why the character locked her sister out of her room, even though she didn't say why, because in an earlier chapter, her sister took her favorite sweater without asking and got a stain on it.		

Source: Adapted from Duke & Cartwright (2021).



#### Texts, Tasks, and Sociocultural Context

The Active View is a reader model because it details what the reader brings to the text, what's in the reader's mind, and what the reader does. But notice the authors are also very clear that reading is not *only* about the reader: They include an important note that "reading is also impacted by text, task, and sociocultural context" (Duke & Cartwright, 2021, p. S33). These additional factors are critical to consider when planning reading instruction.

#### **Texts**

Just as we evaluate what a reader brings to a text, we can and should evaluate what each text demands of the reader. You can evaluate the level of complexity to ensure you're choosing appropriate texts for your grade level, and you can also evaluate the information, concepts, and content in the text to make decisions about what to highlight in your lessons.

All students need experience every day with grade-level texts. But how do we know when a text is "grade level"? Unfortunately, it's not a simple thing to determine. Different leveling systems help us assign numeric and alphabetic levels to texts based on various criteria, with correlation charts that match level ranges to grade levels. While these leveling systems can "get you in the ballpark" (Hiebert, 2011, p. 2), none of them are completely scientific or as precise as we may assume.



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Quantitative leveling is done by computers that count (*quant*-) aspects such as word length and numbers of syllables, word frequency and repetition, sentence length, text length, and overall cohesion (how much the words within the selection relate to each other). Though it may seem like we'd get a perfect result every time, consider this: *Horrible Harry and the Birthday Girl* (Kline, 2016), a text that a second grader might choose to read, has about the same Lexile level as *The Grapes of Wrath* (Steinbeck, 1939). The computer only sees the shorter sentences and simpler language of Steinbeck's work, not the complex themes and ideas in the text. Another example: the dystopian thriller *The Running Man* by Stephen King (1982) is the same Lexile level as *Trixie the Halloween Fairy* (Meadows, 2009) from the Rainbow Magic series—one is OK to hand to a first grader and the other would give most of them nightmares!

Qualitative leveling, on the other hand, evaluates (qual-) aspects of texts only humans can judge (though I wouldn't be surprised if an AI tool exists or is currently in development), such as levels of meaning or text purpose, text structure and organization, language conventionality and clarity, text content, themes and ideas, literary features, sentence complexity, and knowledge demands. While these text qualities are much more helpful for planning instruction—knowing the themes of a narrative are complex could help me choose strategies for helping a reader to understand them, knowing the sentence complexity is challenging could help me think of supports for sentence fluency, and so on—it's important to remember that even people with expertise in a given qualitative leveling system will, at times, arrive at a different level for the same text. They may, for example, weigh different elements more heavily than others or skew the level up or down based on their own background or bias about what makes for an age-appropriate theme.

So again, while not a perfect science, using one or more leveling systems can give you a general sense of grade-level appropriateness, but then you'll need to read any text you plan to use for instruction and consider its content in relation to what your students know and are able to do. For example, consider the following questions:

- \* How relevant is this text to my students' interests and identities?
- \* Does the information in the text align to what we're studying?

- \* What knowledge does the author assume the reader has (and do my students have it)?
- What challenges and complexities are in the text, and what strategies might my students need as they engage with it?

In addition to reader—text questions such as those in the list above, in Chapters 3–11, you'll find additional advice and considerations for text selection and use specific to each lesson structure.

#### **Tasks**

Any act of reading also includes a task (or a purpose): Why is the reader reading this and what will they do with the text or ideas from the text once they've read it? Based on a task or purpose, the way we read, the depth with which we readeven how we read—might be different. Consider, for example, how you read an email that you open when you're not sure if it's spam. Or how you're reading this book or any others that you are studying for helpful information for your teaching craft. Or how you read a cherished letter from a loved one.

In school, tasks can vary widely from asking readers to work on reading words accurately (as you will in phonics and spelling lessons), to asking them to summarize the key information from the text, to preparing for discussion groups about the text, to reading deeply to analyze and interpret



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an author's craft, and more. When you teach, you almost always assign the task, but you also want to help nurture students to be self-directed, independent, and motivated readers who establish their own goals, purposes, and plans for their reading. You'll want them, for example, to decide to pick up a book because they want to get lost in the world of the story or to choose a text to learn new information about a topic they are passionate about.

Reading tasks and purposes might be unique to certain content areas, from ELA to math to science or history. When I read a math problem, my task is to understand what information is important to solving the problem and what is ancillary, to organize the information and come up with a sequenced plan for solving it, and then to reread to double check that I applied all the information from the problem in my solution. When I read a history textbook, I am thinking as a historian—linking events together, determining causes and effects, and remembering key historical figures and their roles in the events of history. And when I read a poem as inspiration to write my own poetry, I might study an author's use of figurative language and infer about their decision-making to inform my own decisions.

#### **Sociocultural Context**

Reading isn't something that only happens "inside the head" of the reader (Tierney & Pearson, 2021). Instead, outside factors mediate reading, contributing to and impacting the way a reader approaches a text and the meanings a reader derives from the text. The social context (who the reader is reading with or talking to about their reading) and cultural context (what cultural background and experience the reader brings to the reading and how aligned the text is to what the reader knows and considers interesting and important) shapes their reading experience, their purposes for reading, and how they read.

Social factors can influence children's experiences as readers in the classroom, including whether or not they have conversations with teachers and peers about specific texts, such as during literature circles or whole-class conversations. The general attitudes and culture around reading in the classroom can also influence readers. For example, are we, in this classroom, a community of readers who recommends books to each other, makes time to share texts together, and gets excited about new titles, or is reading something we do only from textbooks when assigned?

Factors outside of school can also impact readers' experiences—cultural norms and community perspectives about reading, how family and community members talk (or don't talk) with students about specific texts,

what purposes they see for reading outside school, and more. For example, in certain cultures, oral storytelling plays an important role, and storytellers are valued and respected. A reader who comes from such a culture and has grown up hearing and enjoying stories told again and again might easily connect with narrative texts. We can also consider language practices that are common and/or valued within a community—such as translanguaging between English and Spanish in a multilingual household—and the extent to which the students' reading experiences align to that linguistic context (España & Herrera, 2020). As teachers, we need to develop what Ladson-Billings (1995) calls *cultural competence*, where we strive to know as much as possible about the cultures of the students we teach, "utilize students' culture as a vehicle for learning" (p. 161), and "work back and forth between the lives of students and the life of school" (Ladson-Billings, 2006, p. 36).

While most standards and standardized assessments don't consider sociocultural context, we must acknowledge that reading doesn't exist within the vacuum of the classroom, so neither should our reading instruction. When we learn about the social, cultural, and linguistic backgrounds and rich funds of knowledge that students bring to school and to their reading (Moll et al., 1992), provide opportunities for students to be social around their reading (Guthrie et al., 2012), and acknowledge that "literacy practices are purposeful and embedded in social goals and cultural practices" (Barton et al., 2000, p. 8), our reading instruction will be more meaningful and complete (Nieto, 2017; Souto-Manning, 2010; Souto-Manning & Martell, 2016).



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### Teach Strategies and Build Knowledge-Together

Instruction during ELA and across the day in various subjects and content areas needs to support students with the full complex range of skills and strategies they need to read successfully while also acknowledging their existing knowledge and building on it. Students will need experience reading a wide range of texts (different genres, text types, and levels of complexity) with varying levels of support from you, for assorted tasks and purposes, in differing social contexts.

The ultimate goal of reading is comprehension, and we know from research that readers need both knowledge and strategies to make meaning of texts. Knowledge alone is not enough; children need strategies both to activate their knowledge and to integrate and mediate knowledge (e.g., summarizing, inferring) while reading to form a coherent mental model of the text (Cervetti & Wright, 2020; Cromley & Azevedo, 2007; Kintsch, 1988). Strategies alone are not enough, either. Research has shown that when we ask students to try new strategies during reading instruction, doing so in texts where they have background knowledge (because the texts are connected to content area studies or because students already know about the topic) and/or where they are motivated and engaged will reduce cognitive load and support their facility with the new learning (Peng et al., 2023; Willingham, 2006). It's also important to remember that while there is a robust research base for strategies, as Robertson writes, "strategies are not the end goal of instruction. Rather, strategies are vital tools that enable readers to access textual information, accomplish learning goals, and acquire knowledge" (2021, p. 146).

Over time, you'll help your students build their knowledge of people, places, and things through your content studies and through the texts you carefully select for demonstration as well as with those you choose or offer for guided and independent practice. Importantly, students learn *from* their reading; in short, reading begets knowledge and knowledge sets you up to read with more comprehension and purpose (Bråten & Samuelstuen, 2004; Braunger & Lewis, 1997; Hwang et al., 2022), something Pearson calls the "virtuous cycle" (Serravallo, 2023a).

