



PLC/Book Study Guide for *What the Science of Reading Says about Reading Comprehension and Content Knowledge*

Jennifer Jump and Kathleen Kopp
with Sherri Levitt

This study guide is designed as a professional development resource and can be used for individual or group book study or as a learning experience for a professional learning community (PLC). The guide was created to support educators in discovering, discussing, and framing their thinking as they investigate the Science of Reading and extend their understanding into the classroom to directly impact work with students.

The guide provides suggestions for reading and engaging with each chapter of the book. The material has been developed to encourage deep reading, engaged conversations, and instructional shifts through learning the pedagogy and considering classroom application. This will be useful for classroom teachers,



special education teachers, specialists, administrators—essentially anyone who supports students. If you work with young people who encounter text, this study guide can support you as you navigate the book.

For each chapter, this guide includes three sections—Read and Engage, Into the Classroom, and Reflections. Educators can work through these sections on their own or with study partners or small groups. The discussion questions will facilitate conversation and thoughtful reflection. As you work your way through this guide, we encourage you to document the changes you make in your classroom and the impact of those changes.

Overview of the Book

In *What the Science of Reading Says about Reading Comprehension and Content Knowledge*, authors Jen Jump and Kathy Kopp consider what happens when students engage with text. They explore how to support students as they develop the skills and knowledge that make reading comprehension a possibility. At the forefront of the book, Jump and Kopp look at the national conversations about the Science of Reading and literacy instruction. Next the authors provide a review and discussion of the actual research on key topics, which is followed by practical applications for teachers, administrators, and all educators supporting PK–12 students. The book helps teachers ensure that research-based literacy instruction is the foundation of the classroom.

Each chapter gives educators the opportunity to:

- Discover research—What is the seminal research that informs the essential components of effective reading instruction?
- Identify and consider the implications for teaching and learning—How does this research help us understand how students learn? How does this research help us understand best practices about instruction?
- Check out key terms—What are the most important concepts teachers need to understand?
- Discover strategies that support learning—How do the strategies connect to content? How can each of the strategies be differentiated to support learning across grade levels? (Hint: Even if strategies are not for the grade level you teach, consider how they may be used to support students.)
- Identify the must-dos—What practices must be implemented to ensure student learning? Why?
- Recognize the considerations that guide change in teaching and learning—What commonly used practices should be reconsidered?

Now . . . let's get reading!

INTRODUCTION

Read and Engage

In the introduction, the authors provide the reader with the fundamentals of the Science of Reading, highlighting the research.

- Begin with Welcome from Jen Jump (pages 7–9).
 - As you read, identify ways that the Hippocratic Oath aligns with your thinking about students, classrooms, and schools.
- Read pages 11–16, which highlight many seminal works and build understanding around the importance of language comprehension in developing readers.
 - What are some of the most important pieces of research and foundational knowledge? How do they relate to what you are already doing in the classroom?
 - Where can you look for additional information to continue to build knowledge around how to best support students in literacy?
- Engage with the Settled Science portion of the text on pages 18–20.
 - Which “settled science” do you agree with most strongly? Why?
 - Which do you disagree with? Why?
- Read Navigating This Book, pages 21–22, to prime yourself for success with the book.

CHAPTER 1:

Building Content Knowledge

Read and Engage

Author Jen Jump often says that students need to “know stuff about stuff in order to learn more stuff.” Sounds silly, redundant even. However, the reality of the statement rings markedly true throughout this chapter. Students make connections, develop deep content and vocabulary knowledge, and are able to navigate through text and learning with greater ease when they have prior knowledge or previous understanding they can connect to.

Read from the fourth paragraph on page 28 (“At the beginning of this chapter . . .”) through page 30. The research clearly establishes that the intentional building of knowledge is important.

Into the Classroom

Check out pages 44–45, the Build-up Texts strategy recommended for secondary classrooms. Whether or not you serve secondary students, this practice can be used in your classroom. When students engage in learning about a specific topic, they should have access to a wide range of texts about that topic. For example, if students are learning about habitats, they should read multiple texts about habitats. To support all students in developing a solid foundation of knowledge and vocabulary about a topic, provide a range of texts. While students should consistently engage with complex texts, knowledge can also come from simpler texts, providing a breadth of understanding to draw upon.

- What topics will students learn about this year? How can you ensure that they have a wide range of texts about those topics?

Remember that complexity is a powerful tool. Allowing for students to engage with complex texts is an integral piece of building knowledge. Providing students with an abundance of texts, including short, simple texts, pictographs, and engaging pieces, can support them in building their understanding.

Reflective Questions

- How can you gauge students’ prior knowledge? What makes some strategies better than others?
- In what ways can students’ misconceptions be barriers? How can instruction combat misconceptions?
- How do students benefit from read-alouds?
- How does shared reading support building student knowledge?

CHAPTER 2:

All about Vocabulary

Read and Engage

The text on pages 52–54 describes tiered vocabulary, vocabulary and comprehension, and vocabulary and text complexity.

- Consider how these three concepts tie together to form a solid level of vocabulary development for students.

On page 53, breadth and depth of vocabulary are defined. *Vocabulary breadth* refers to the number of words a person knows. *Vocabulary depth* refers to how well a person knows the words. Depth of vocabulary knowledge supports students' ability to use words to speak, write, ask challenging questions, and continue to grow.

- How do students acquire depth of vocabulary?
- What strategies support students in gaining breadth of vocabulary?
- How can teachers ensure that students build a solid combination of both breadth and depth?

Continue to page 54, Implications for Teaching and Learning, and read to the middle of page 58. This section describes the importance of explicit vocabulary instruction and word study opportunities.

- How have vocabulary and word study typically been taught in your district or school?
- What is working well with your school's vocabulary instruction?
- What improvements are needed?
- What strategies will you use to improve vocabulary instruction?

Into the Classroom

Pages 54–55, Implications for Teaching and Learning, explain the importance of *explicit* vocabulary instruction.

- How do you *explicitly* teach vocabulary in your classroom?

Check out the strategy on pages 63–64, Connect Two. While the strategy is geared toward second and third graders, it can be beneficial for all grade levels. Secondary teachers can adjust this strategy by using more complex sentence frames with more advanced vocabulary.

Reflective Questions

- When was the last time you encountered a new word? How did you determine its meaning?
- How is your process different from or the same as how students find the meanings of new words?

CHAPTER 3:

Literacy Knowledge: Print Concepts to Genre Study

Read and Engage

The importance of teaching genre is explored on pages 82–83, pointing out that students’ ability to identify genre “requires teachers to explicitly teach students structures and features of different genres,” focusing on fiction versus nonfiction as early as first grade.

- What are your state’s standards regarding genre for each grade level?
- How are these standards addressed in your district, and how might you expand genre instruction?

Read pages 95–96, Promote Literacy with a Print-Rich Environment. Print-rich environments are common at the elementary level, but as grade levels increase, less print seems to be displayed. Learning walls are used less in middle and high schools, and student work is often placed in portfolios rather than displayed on walls.

- Why is print important after primary grades?
- How can educators find more ways to feature print in classrooms?
- How can all educators ensure that print-rich means more than “poster-rich”? Rather than decorating with fancy print so the walls look good, how can print be used to truly support student learning?
- What strategy to infuse print can you implement right now?

Into the Classroom

The Multiple Perspectives strategy suggested for secondary grades (page 93) is also used at the elementary level with fractured fairy tales. For example, *The True Story of the 3 Little Pigs!* by Jon Scieszka or *Red: The (Fairly) True Tale of Red Riding Hood* by Liesl Shurtliff.

- Beyond fractured fairy tales, how can the Multiple Perspectives strategy be used to support students?
- How can Multiple Perspectives help improve students’ comprehension?

Reflective Questions

- What strategies have you used that you were reminded of in this chapter? Consider print awareness, genre study, and text features. How can you reimplement or refresh the strategies?
- What is the power of a read-aloud? How often do you read aloud in your class? How do you connect read-alouds with curriculum?

CHAPTER 4:

Language Structures: Syntax and Semantics

Read and Engage

Not too long ago, Jen Jump ran into a literacy problem. Her eighth-grade daughter's homework asked students to classify figurative language. Her daughter requested help, so they looked at it together. Quickly, Jen realized the problem. Language isn't perfect. The lines could be mushy. Was it hyperbole or personification? Both? Jen thought "both." She phoned a friend who was a high school English teacher. They still weren't sure. Language is challenging. So, they dug in further. They started to imagine how an author would use the sentence in context. For the assignment, students were reading single sentences, with no context to help identify the type of figurative language. This demonstrates why text can be complex. Language is complex.

Jen realized something. As educators, we need to find these instances within text that are complicated. We need to support our students by giving them the space to talk about them, take them apart, and find examples. These powerful experiences can help students navigate the complexity of text. This example does not apply only to figurative language. It is also true for syntax, vocabulary, semantics, archaic language, pronoun use, and so on.

Check out this lesson structure to support navigating sentence complexity or language complexity within sentences:

1. Find the complex part.
2. Analyze it.
 - ☐ Mark it up.
 - ☐ Diagram it.
 - ☐ Annotate it.
3. Teach it.
4. Discuss it.
 - ☐ Why does the author do this?
 - ☐ How does this make the text more interesting?
 - ☐ What do you learn from this complex part? (Figurative language, complex structure, challenging vocabulary, and so on.)
5. Practice it.
 - ☐ Try it in your own writing.
 - ☐ Rewrite it in language that seems simpler.

6. Find it again.

- Where else do you see it?

Throughout this chapter we are reminded of how difficult language can be. Review pages 102–108, paying particular attention to Figure 4.2. This figure demonstrates the relationships that exist among words and sentences. Consider the idea that the language structures component of Scarborough’s Reading Rope is divided into syntax (sentence structure) and semantics (nuanced meanings).

- When do children typically gain understanding of words? Phrases? Clauses? Sentences? Syntax? Semantics?
- How are the timelines different for verbal understanding versus written understanding?
- How/when can educators best teach word phrases, clauses, and sentences explicitly?

Into the Classroom

Pages 113–121 include a variety of strategies for teaching sentence structure. Have you used any of these strategies? Do any of the strategies catch your attention? Perhaps you’ve successfully used one or more of them. Or maybe there’s a strategy for a grade range different than what you teach that you’d like to modify and use. How might you modify it?

The Figuratively Speaking strategy suggested for secondary grades (pages 120–121) focuses on figures of speech such as euphemisms and oxymorons. The same steps can be used at various grade levels to teach figurative language: select texts, identify examples, make note of guiding questions, then read and discuss with students. It may be beneficial to have students work in pairs to discuss the author’s language. For middle grades, consider the tall tales by Steven Kellogg that offer multiple examples of similes, metaphors, hyperboles, and personification. In early grades, introduce figurative language through poetry or nursery rhymes. For example, use *Mary had a little lamb whose fleece was white as snow* to introduce simile or *Peter Piper picked a peck of pickled peppers* to introduce alliteration.

Reflective Questions

- How would you self-assess your own understanding of the complexity of sentences?
- How does your understanding of sentence complexity support helping students in gaining an understanding?

-
- What are reasonable expectations for the learning of language and its nuances at your grade level?
 - What is an appropriate scope and sequence for instruction in language structures?

CHAPTER 5:

Text Structures and Verbal Reasoning

Read and Engage

Pages 128–133 discuss the many elements students use to comprehend text: inferences, text features, text structures, story elements, text connections, transition words, and so on. Consider the standards for introducing these elements and the importance of revisiting them throughout the grade levels.

- Do students tend to gravitate to and understand one text structure more than others? If yes, how can we make various text structures easier to navigate?
- Think about the figurative language section (pages 107–108) and the example mentioned previously about whether a phrase was hyperbole or personification. Can a text be more than one text structure?

Consider this statement from Duke, Ward, and Pearson (2021) on page 131: “Attention to the structure of the text during reading may provide a helpful scaffold for the syntactic complexity and conceptual density that are characteristic of many written texts.” This points to the importance of encouraging readers to pay close attention to text structure to better understand complex text.

- What are the five common types of text structure? Which are most common? How does this answer change across grade levels?
- How can understanding the structure of a text help with comprehending its contents?
- What role do text features (headings, subheadings, etc.) play in helping readers navigate the structure of a text?

Into the Classroom

On pages 136 and 149, two visuals show the pieces necessary to make an inference (clues from text + actively using knowledge = inference). To help students see how thinking occurs when it comes to inferencing, use two puzzle pieces. One puzzle piece shows clues from the text and the second piece shows prior knowledge. Together, the pieces complete the inferencing puzzle. This visualization can be used with any grade level.

As you consider your students, keep in mind the many elements discussed in this chapter: making inferences, text features and structures, graphic organizers, elements of story structure, making connections within, between and among texts, and signal (transition) words. What is your plan to help students utilize these elements?

Reflective Questions

- What is an inference?
- How can you support students who are working with a difficult text and in the process of learning to infer?
- Given the importance of background knowledge in enabling comprehension, how can educators provide more experiences for students? (Think about the “trip” to Carlsbad Caverns described on page 51.)

CHAPTER 6:

Reading Comprehension Strategies

Read and Engage

Review pages 154–155 beginning with the statement, “Comprehension *is* the ultimate purpose of reading text.” Students must be able to comprehend text to understand and learn. It is foundational. We cannot say it enough: Kids need to know stuff about stuff to learn more stuff.

- How do we, as educators, get students excited about the *stuff* we want to share with them?

“The Simple View of Reading (Gough and Turner 1986) identifies the skill of reading as the product of word recognition and language comprehension.” In this book, we are focused on the comprehension component.

- How are you thinking about comprehension now as compared with before you began reading this book? Have your views changed? How?

Into the Classroom

Page 154 states, “Comprehension *is* the ultimate purpose of reading text.” As you think about applying what you are learning in the classroom, consider these comprehension strategies.

- Strategies that support comprehension before, during and after reading (page 157)
- Developing better comprehension questions (page 158)
- Using open-ended questions to elicit higher-level thinking (page 159)
- Encouraging the use of annotations (page 160)
- Teaching fix-up strategies (pages 161–162)
- The Feed Up, Feed Back, Feed Forward strategy (pages 163–164)

How have you incorporated these strategies in the past to help students understand? How can you enhance your use of them?

Reflective Questions

- What comprehension strategies work well for you as a reader?
- What problems might exist with the way educators have typically used comprehension strategies? How can new understandings we’ve gained from research inform our instructional practices going forward?
- How does explicit instruction of comprehension strategies support deep thinking?

CHAPTER 7:

Selecting Relevant Texts: Find the Mirrors and Windows

Read and Engage

In chapter 1, we read about the importance of background knowledge (page 26). Think about how each person's background knowledge is unique, based on their own upbringing, interests, and experiences. Pages 181–183 explore the importance of seeing oneself in the books we read to make connections to texts and to develop empathy.

- Explain the three different types of texts identified on page 182–183. Discuss specific examples of each kind of text.
 - Culturally authentic texts
 - Culturally generic texts
 - Culturally neutral texts

Into the Classroom

On page 184, we state, “Cultural background can influence comprehension depending on how students interpret meaning. Students who read a text that is more culturally familiar to them will recall between 20 and 30 percent more than students who are unfamiliar with the cultural references in the text (Ricker 2016).”

- Consider the students in your class and at your school. To what extent do the texts available in your classroom and at your school reflect their cultural experiences?

Reflective Questions

- What sorts of texts are found in your students' hands? Culturally authentic? Culturally generic? Culturally neutral?
- What can you do to build a diverse array of culturally responsive books in your library? How can you incorporate them meaningfully in your curriculum?