

Engaging Students in Disciplinary Literacy, K–6

READING, WRITING, AND TEACHING
TOOLS FOR THE CLASSROOM

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FOREWORD BY

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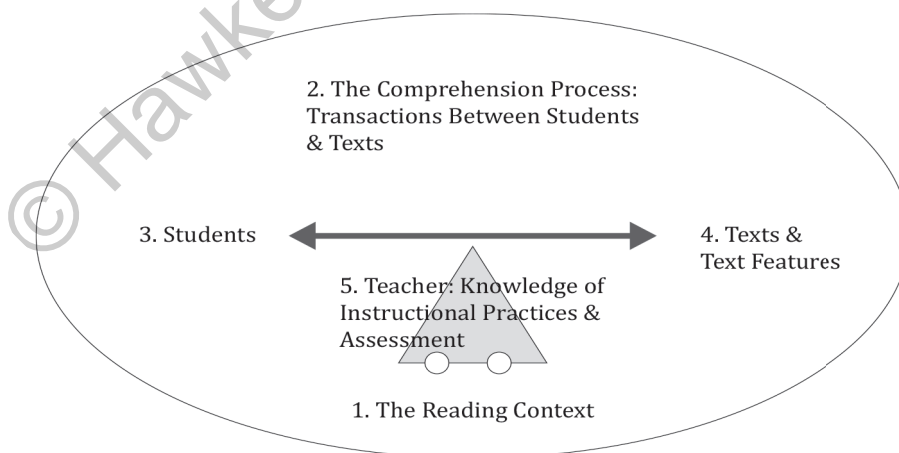
Setting the Context

The first Part provides an overview of the conceptual content for the rest of the book. In Chapter 1, the introduction, we situate an instructional framework in the current educational context, introduce disciplinary literacy, and discuss its relationship to the CCSS. We also introduce five research-based principles of effective instruction that we weave throughout the remaining chapters in the book. Chapter 2 provides an in-depth examination of disciplinary literacy and why it is important for teaching in elementary classrooms. We briefly introduce readers to the three classrooms (lower, middle, and upper elementary) featured in this book and the disciplinary literacy units we enacted in each class.

Figure 3.1. Core Design Principles in Reading

| DESIGN PRINCIPLE | EXAMPLE |
|---|---|
| 1. Authentic Social and Cultural Practices | Use reading as a tool to engage in discipline-specific reading practices (e.g., history-specific reading practices such as using multiple sources to construct an initial interpretation of an event) |
| 2. Optimal Learning Model | Use appropriate scaffolding to help children to develop new conceptual understandings—such as developing historical empathy in history or learning to analyze, interpret, and communicate about data in real-world contexts |
| 3. Key Inquiry Questions | Use inquiry to drive questioning and research to learn new concepts (e.g., to develop understandings of historical events, to understand budgets, and so forth) |
| 4. Composing Requires a Range of Resources | Teach children to draw on resources such as read-alouds, artifacts, Internet research, and interviews with experts in their reading |
| 5. Authentic Assessments Reflect Meaning-Making Process | Use anecdotal notes to monitor the nature of children’s reading as they engage with discipline-specific texts |

Figure 3.2. Important Components in the Reading Process



Reading and interpreting across multiple sources

Elisabeth's students read the book *Who Was Sacagawea?* (Fradin & Fradin, 2002) as the anchor text for the unit. The students read and listened to many other texts during the overall unit (e.g., Adler, 2003; Rowland, 1983) (Design Principle 4: Range of Resources). For example, one day Elisabeth used a 20-minute read-aloud of an informational book entitled *The Story of Sacagawea, Guide to Lewis and Clark* (Rowland, 1989). This chapter book focuses fairly extensively on Sacagawea's life as a young girl. Elisabeth coordinated read-alouds during the unit with sections of her anchor text so that the read-alouds provided complementary information that helped her students better understand the historical ideas presented in their anchor text. Another read-aloud provided background information about Sacagawea's life. For example, when Sacagawea was 11 years old, Minatare Indians attacked her tribe and kidnapped her. Elisabeth helped the students realize that Sacagawea was about their age when she was kidnapped and taken captive by a different tribe. This example of Elisabeth's reading instruction illustrates how she used multiple resources (i.e., read-alouds in conjunction with her anchor text) to help her students begin to develop a greater understanding of historical events (Design Principle 2: Scaffolding). Notice Elisabeth's instructional practices focus on Level 3, the 1st and 3rd bullets, in Figure 3.3.

By spending time teaching her students to draw on multiple resources, Elisabeth helped the students build historical understandings. She began her unit on remembering Sacagawea by posing the following question to her 29 4th-grade students: "What do you know about Sacagawea, Thomas Jefferson, and Lewis and Clark?" After giving her students a few minutes to reflect silently, she asked them to open their journals and write down everything they knew about Sacagawea, Thomas Jefferson, Meriwether Lewis, and William Clark. Following several minutes of writing time, Elisabeth asked the students to share aloud some of what they had written in their journals. Several students said that they knew that Sacagawea was Native American, but did not know much beyond that. A few students knew that Thomas Jefferson had been president of the United States. No one had heard of Lewis or Clark. Later that afternoon during her prep time, as Elisabeth read the students' journal entries for the day, Vanessa's writing captured what most of the students knew about the four historical figures. Vanessa wrote, "I don't know nothing."

In contrast, by the end of the unit, Vanessa wrote two single-spaced pages explaining the context surrounding Sacagawea's life and why we should remember her. Among other ideas, Vanessa wrote (her temporary spellings

year (see <http://www.socialstudies.org/resources/notable>). Similarly, the National Science Teachers Association (NSTA, 2013) compiles an annual *Outstanding Science Tradebooks for Students K–12* (see <http://www.nsta.org/publications/ostb/>).

Teach children to be critical consumers of texts

Using sources to support arguments is a complex process for young learners. With more advanced technology options, such as Wikipedia, YouTube, and Facebook, students need to become critical consumers of the websites and social media options around them. Figure 4.3 provides an outline containing six dimensions for evaluating websites from Zhang and colleagues' (2011) WWWDOT project. With the ease of accessibility, we must help students learn to avoid plagiarism, use direct quotes, and provide appropriate attribution for the ideas of other people. The to-do list for the future helps the student stay organized by recording questions, noting links to additional websites, and other information about the topic.

It is amazing how much even young students have already learned about finding information on the Internet. Helping students become critical consumers of what they read is essential to the sciences and history. As the Internet increases students' ability to access primary sources (e.g., ancestry.com) and because such sources are easily manipulated with software (e.g., editing photographs), we need to be especially concerned with helping students learn to carefully use those sources in their own writing.

Component Three: Assessment for Purposeful Writing

Assessments need to reflect the different types of composing processes students will use in real-world settings. Assessments will reflect the different types of composing processes students use in real-world settings if teachers do

Figure 4.3. Criteria for Evaluating Websites

-
1. Who wrote this and what credentials do they have?
 2. Why was it written?
 3. When was it written?
 4. Does it help meet my needs?
 5. Organization of the site?
 6. To-do list for the future.
-

Source: Zhang, Duke, & Jimenez, 2011, p. 152.

For example, you will read about how Mary's students used inquiry to conduct investigations and experiments. During such inquiry, students use their notebooks to record thoughts or questions about text they read, hypotheses, trial and error, metacognitive processes, and so forth. Additionally, teachers should have students use their notebooks to record changes in thinking as a result of engaging in discussion with other scientists in the classroom. The growth and learning progress portfolio provides a window into what students are thinking, how thinking changes over time, and how classroom talk influences their abilities to engage in scientific inquiry.

DISCIPLINARY LITERACY AND CLASSROOM TALK

To help you get started on transforming your classroom to include talk as a tool for disciplinary learning, we share examples of classroom talk from Elisabeth's 4th- and Mary's 2nd-grade classrooms, embedded within their themes on *why we remember Sacagawea* and *caring for the environment*, respectively. One of their goals is that students learn about the purposes and functions that talk serves in different disciplines. In Elisabeth's 4th-grade classroom, students use talk to (1) develop understandings of social studies (e.g., history, citizenship education, economics, geography) concepts such as cultural universals, historical empathy, and habits of mind required to be informed members of a democracy; (2) deliberate and construct arguments; and (3) reach consensus.

Mary uses talk as a tool with her 2nd-graders to (1) develop understandings of scientific concepts and processes (e.g., scientific inquiry), and (2) engage in scientific argumentation. Each of the examples that follow illustrates three key ideas about disciplinary literacy instruction: (1) that talk is a tool for understanding disciplinary concepts, (2) that students need to learn to use talk in different ways for different disciplinary purposes, and (3) that assessments must reflect different uses of talk for real-world settings and purposes.

Examples of Classroom Talk During 4th-Grade Social Studies

Elisabeth drew on the five design principles introduced in Chapter 1 for her unit. Elisabeth's unit question "Why should we remember Sacagawea?" provided a way for thinking about all aspects of the unit instruction (Guiding Principle 3). Throughout the unit, Elisabeth supported her students' use of talk (Principle 2) in meaningful ways (Principle 1) using a range of resources