

Points of Entry

Students need skilled guides to help them master complex informational texts.

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We'll just drive over here now so we don't drop down into that ice crevasse. There's moving water just below the surface."

We looked at each other in silent horror. What had started as a fun adventure onto an Icelandic glacier suddenly seemed more risky. Our guide's words were meant to soothe us, but neither of us felt confident. Fortunately, we had a seasoned explorer to lead us, one who understood the terrain. He spotted signs we overlooked and negotiated our three-axle glacier truck onto firmer surface. Fifteen minutes later, we were outside the vehicle, awed by a vista we had never dreamed of. The guide stood by, confident and relaxed. While we had been momentarily petrified, he had been calm and assured. The expedition was successful because he had the tools and experience to negotiate a landscape he understood.

As teachers, we also lead our students through the challenging terrain of informational texts. As our guide did, we look for signs that the surface conditions are shifting, and we understand what lies beneath. We use tools specially constructed for the task, much like our guide's

customized Arctic truck. Together, these actions create access points for traversing the geography of informational texts.

In other words, we don't simply expect our students to hurtle themselves headlong into a piece of complex informational text alone. We use access points to ensure that their journey is as awe-inspiring as the Langjökull glacier was for us.

What Makes Informational Texts So Challenging?

For the purposes of this article, we define *informational text* as text that teaches about the physical, biological, or social world. The Common Core State Standards muddle this a bit by including a broader range of texts that are more accurately described as *literary nonfiction*—that is, biographies, autobiographies, and memoirs. But these are often less challenging for students because they use narrative structures that are already familiar in fiction. We also exclude hybrid texts that use a considerable amount of narrative to explain science or history (such as the Magic School Bus series by Joanna Cole).

Although these literary nonfiction and informational-narrative hybrid texts are valuable, they don't possess the characteristics of what Scott and Balthazar (2010) call



“the grammar of information” (p. 288), which includes complex nominal (noun phrase) groups, clausal subordination, and theme and information mechanisms. Consider this passage from *A Drop of Water* by Walter Wick (Scholastic, 1997), a read-aloud informational text appropriate for grades 2–3:

Because water molecules cling to each other like tiny magnets, a drop of water can stay in one piece, even as it falls through the air. But the molecules at the water’s surface cling with a force that causes the surface to shrink. This force is called *surface tension*. (p. 9)

These three sentences contain complex noun phrases (*molecules at the water’s surface*); subordinated clauses (multiple clauses in the first sentence); and new information at the end of sentences (*causes the surface to shrink*). Sentence structures like these occur much less frequently in narrative text or spoken language. Taken together, the grammatical elements typical of informational texts result in densely packed passages that many students have difficulty parsing.

Teachers need to help students find access points that enable them to gain entry to complex informational text and then trek their way through to a successful conclusion. Four access points are

- Establishment of the purpose by modeling and thinking aloud.
- Close reading instruction.
- Collaborative conversations.
- Independent reading.

Access Point 1: Establishing Purpose

Students benefit from having a clearly established purpose for learning, which alerts them to what is expected and draws their attention to salient points of instruction (Marzano, 2009). Purpose statements tell students

what they will be learning, what they will do with what they learn, and how they will self-regulate and interact with others as they learn.

For example, to begin her 3rd grade students’ study of *A Drop of Water*, teacher Siobhan Kelley explains,

You and I are going to read about how water has a special property, called surface tension, which lets us do amazing things. You’re going to work together to do one of the experiments in the book, and explain to each other how surface tension makes it possible. You’ll use those science lab habits we’ve been practicing to be a safe and excellent team member.

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As she reads her students a portion of the book, she models and thinks aloud about what she knows will be difficult for them. She records her reading digitally to post on her class learning management system. Parents can later retrieve her recorded reading and think-aloud for playback as they read the text again with their children at home.

After reading a passage on surface tension, Ms. Kelley tells her students, “That had lots of information in it, and I know I need to read it again. This time I’m going to use the photographs

investigating vocabulary and structure, and synthesizing these components to understand the text. We ask students to use critical thinking skills to make connections across texts, events, and phenomena. Students co-construct this knowledge through extended discussion; the teacher guides the discourse by using substantive, text-dependent questions.

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on the page as I read to help me understand these ideas.” She draws their attention back to the time-lapsed photographs of a water drop falling from a faucet, linking the pictures to phrases like *shrinks itself into a round ball, or sphere* and clauses like *the drop flattens, then elongates as it falls* (p. 8). Beyond the grammatical instruction she is providing, Ms. Kelley is also modeling how she resolves problems—in this case, by using the photographs—and how she interacts with the text. She is demonstrating that students need persistence when confronting dense informational text and that they should expect to reread to gain understanding.

Access Point 2: Close Reading

Close reading is the systematic practice of analyzing a text to gain deep comprehension. It involves identifying central ideas and key details,

process; it provides an authentic reason for rereading and discussing the text. After all, a passage that is easily read and understood independently is not likely to provoke the kind of deliberation that occurs when the meaning is not easily located.

Boyles (2012) advises that teachers engage students in close reading

- Use short passages.
- Teach students to ask questions of the text to monitor their own thinking.
- Observe and analyze what students are doing (and not doing) both cognitively and metacognitively.

We add the following suggestions to Boyles’s list:

- Encourage students to annotate the text to make their thinking visible.
- Design text-dependent questions to promote discussion and check for understanding.
- Help students develop the habit of rereading.

■ Make sure that the text-dependent questions promote critical thinking.

Seventh grade physical science teacher Rana Majidi is having her students analyze the textual information and accompanying data tables in their city’s annual drinking water quality report. Students read the section on source water first independently, and then a second time while annotating the text. Ms. Majidi notices that many of her students underline phrases describing contaminants (*microbial contaminants, pesticides and herbicides, and organic chemicals*). Through repeated readings and extended discussion, students learn what each of these categorical terms means by parsing the examples.

However, the science teacher isn’t finished with this portion of the report. She asks, “It says that some of the microbial contaminants ‘come from sewage treatment plants, agricultural livestock operations, and wildlife.’ How does that result in viruses and bacteria?” This question prompts students to zoom in on the relevant portion of the report. Ms. Majidi has recognized that the organizational structure of these bulleted items means that her students are at risk of noticing only the list without fully processing the items’ connection to one another and comprehending the embedded information about the viruses and bacteria. Students discuss what these examples had in common, slowly realizing that the source is excrement. Now highly interested, students immediately turn to the table of microbial contaminants; they are relieved to discover that their local drinking water system averaged 0.1 percent for the previous year.

Now that they possess a deeper understanding of the potential harm microbial contaminants represent, Ms. Majidi’s students are interested in discussing a portion of the passage

devoted to safe management of the watershed. Consulting the report's map and data table, students move between these text features and the passage itself to draw inferential meaning. The teacher's questions provoke this critical thinking: "Does this report mean that our drinking water is safe, or are we at risk? How do you know?" By studying and discussing the data table, students realize that the presence of coliform bacteria in their local drinking water exceeds Environmental Protection Agency standards.

"This was a big shift for them," Ms. Majidi said later:

They initially thought 0.1 percent was no big deal. After they took a closer look at the details, they understood that a seemingly small number can in fact have a large impact. They wouldn't have drawn this conclusion if I just told them about it. We needed to do a close reading to extract this information.

Access Point 3: Collaborative Conversations

It's not enough to have students read complex informational texts; they also need time to discuss these texts and interact using academic language. As noted in the Common Core speaking and listening standards, students should "prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively" (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010, p. 22).

A number of instructional routines—such as book clubs, reciprocal teaching, and Socratic seminars—facilitate students' interaction using academic language. Each of these strategies places the text at the center of structured student interaction.



Digital Tools Can Increase Student Engagement

As tablets have become more popular in classrooms, the availability of digital texts has grown exponentially. Make the most of these innovations by using digital annotation tools that foster collaborative learning. Tools such as Notability (www.gingerlabs.com) and Skitch (<http://evernote.com/skitch>) enable students to annotate texts and share them with their classmates, as well as to view what others have written about the reading. Teachers can also use tools like these to create their own annotations in advance of the reading, thus posing questions and sharing their thinking with students even when they're not present with them.

For example, students in a 10th grade history class have read "A Declaration of Conscience," a 1950 speech given by Margaret Chase Smith in the U.S. Senate, in which she condemned the nationwide smear campaign being conducted by Senator Joseph McCarthy, through which many American citizens were accused of being traitors and Communists. In her speech, Smith implored her fellow Republicans to stop using these tactics.

The class uses reciprocal teaching to interact with the text. As part of their discussion about the section of the text that outlines basic principles of Americanism (the right to criticize, the right to hold unpopular beliefs, the

right to protest, and the right of independent thought), the students say,

KARLA: So, in summary, she says there are things that make you an American and that these things are important and that people should not be afraid to say what they think.

MUTAWALI: My question is about why this information is here. Why does she have to tell people in the Senate about what it means to be American? They should already know.

STEPHANIE: I think that this section is really about the definition of who is American, so that she will be able to say that some people are not really American. I think she might be trying to have a clearer definition so that if people are just accused, then they would know who the Communists really were.

RAMZY: Why did you think that? Just before, she said "It is high time for the United States Senate and its members to do some real soul searching and to weigh our consciences as to the manner in which we are performing our duty." I predict that she is going to say that the Senate has not been very American.

Their conversation continues, with students analyzing the text using academic language and their cognitive skills to predict, summarize, question, and clarify. They did not start the year knowing how to access complex informational texts through collaborative conversations. Their teacher modeled expectations, engaged them in close readings, and gave them time to interact with one another and texts.

At the outset of the year, their teacher showed them video clips from students working collaboratively the previous year, pausing the video periodically to share his thinking about students' interactions. He notes their body language, the respect that they give one another even when they disagree, their turn-taking, and their use of questions to continue the conversation. He also periodically

asks a group to join him in a fishbowl activity so that the rest of the class can observe their interactions. Again, he pauses periodically to note what he observes in the group. In addition, he provides students with language frames that they can use to make a claim, agree, offer a counterclaim, request evidence, reach consensus, and determine areas of disagreement.

Access Point 4: Wide Reading

In the push to increase the complexity of the informational texts that students read, there is a risk that students will actually read less. Complex texts take time to understand, and close reading slows students down as they reread and annotate. Wide reading ensures that students read enough to build their background knowledge and vocabulary.

Unfortunately, there is evidence that students are reading less than they were a decade ago (National Endowment for the Arts, 2007). More current research (Ivey & Johnston, 2013) confirms the value of wide reading and suggests that students become more strategic in their reading and more eager to talk about what they read when they engage in considerable reading of self-selected texts.

In another study, students who spent 10 minutes a day reading complex informational texts of their choice that aligned with the content they were studying performed significantly better on outcome measures than their peers whose 10 minutes consisted of traditional classroom instruction (Fisher, Ross, & Grant, 2010).

Teachers should identify topically appropriate informational texts and then provide students with class time for reading those texts. In addition, students should be encouraged to read widely outside the school day. Pilgreen (2000) identified eight factors required for effective wide-reading efforts. Students need

- Access to a large range and volume of reading materials to choose from.

- Texts that appeal to them by being interesting and provocative.

- An environment conducive to reading.

- Opportunities to talk about books with peers and teachers.

- Teachers who have access to high-quality professional development in creating the environment and finding books.

- Nonaccountability—students do

not complete logs, write reflections and book reports, or otherwise do schoolwork, but rather read quietly and get lost in their texts.

- Ungraded follow-up activities that allow students to share their ideas from texts with others.

- Distributed time to read; students should read widely and independently nearly every day to build their habits and stamina for reading.

Access and Time

An informational text reading diet relies on both access and time. We give students access by establishing and modeling a purpose for reading; providing guided instruction through the close reading process; and encouraging collaborative, text-based conversations. We also need to give students the time to read and use such texts for the purposes of investigation

and to exercise choice in how they build knowledge.

Collectively, these cumulative reading experiences build students' stamina and ability to process dense informational texts that don't easily give up their meaning. By helping students gain access to such texts, we open up the physical, biological, and social vistas of the world to them. **EL**

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Video Bonus

Click to watch a video in which 4th grade teacher Melissa Noble leads her students through a close reading of the article "Magic Rocks" as part of a unit on inventors.