Chapter 1

Reader's Rules of Notice

Reading is both our passion and our work.

We've dedicated our professional lives largely to the teaching of reading. But some time ago, we became aware that we're considerably better at teaching students how to read *literature* than how to read *complex nonfiction*.

And when we recognized how many complex nonfiction texts we read each and every day and how much this reading contributes to the various kinds of formal and informal work we do—and to the various pleasures and passions we enjoy—it gave us a start. When we monitored our nonfiction reading in the context of our jobs, our lives as citizens, and our lives as parents, spouses, friends, and family members, we realized that if we were going to better prepare students for their lives both in school and out, we needed to focus our attention more closely on nonfiction and the ways that experts make meaning of such texts.

This book is our effort to do just that. In it, we share our understanding of what it takes to become a consciously competent reader of nonfiction, along with useful lessons that help students develop that competence and continue to develop expertise consciously over time. Our focus is on helping students learn and apply what we, following Peter Rabinowitz (1987), call reader's rules of notice—that is, the cues in a text that help us recognize what authors expect us to attend to and then use to construct meaning.

What Skilled Readers Do

Our work is based on two central insights. The first is that reading is simultaneously a top-down and bottomup process. The second is that not everything in a text is of equal importance. We address these one at a time in the following pages.

Expert Reading Is Simultaneously Top Down and Bottom Up

The first insight is that comprehending what we read is simultaneously a top-down and bottom-up process (see Figure 1.1). This may sound complicated, but it's really quite simple: Expert readers start constructing an overarching understanding about the text as soon as they begin reading. This overarching understanding

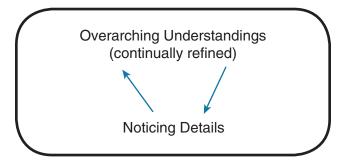


Figure 1.1

The Top-Down Bottom-Up Process of Reading Comprehension

points them to the details they notice (top down), and these details, in turn, refine the overarching understanding (bottom up), which helps them recognize other details that lead to a further refined understanding (more top down), in a continuing process.

As Kintsch (2005) explains, top-down processes "guide" comprehension, and bottom-up processes "constrain" it (p. 128). The influential reader-response theorist Louise Rosenblatt (1978) makes much the same point: As we read, we develop a "tentative framework" that influences the "selection and synthesis of further responses" (p. 54) that then reinforce or revise the framework.

We can illustrate this idea using the reading with which we begin our day: the newspaper. Michael subscribes to the New York Times, Jeff to the Idaho Statesman (or, as he'd prefer it to be called, the Idaho StatesPERSON). On the day we drafted this paragraph, the Supreme Court affirmed the right of same-sex couples to marry. We were both eager to read the reporting and commentary on this important issue. Michael began reading a Times editorial knowing it would endorse the decision and critique the dissenting justices' opinions. Jeff was unsure what position the Statesman would take and looked for details revealing that position. Both of us read in ways that were mindful of the ongoing cultural and historical conversations about civil rights and the rights of same-sex couples, conversations of which the decision and newspapers' reporting of it are a part. To guide us, we used our overarching understandings of the topic, the cultural conversation, and the kinds of texts (newspaper editorials, in this case) we chose to read to explore the issue.

Noticing the Conversation

This illustration reveals the importance of the *schemas*—which can be thought of as bookshelves in our brain—we use to store and organize information. Readers use background schemas to make sense of text. Reading research has long made clear the power of this schematic understanding.

Consider this short passage from a classic study by Bransford and Johnson (1972):

A newspaper is better than a magazine. A seashore is a better place than the street. At first it is better to run than to walk. You may have to try several times. It takes some skill but it's easy to learn. Even young children can enjoy it. Once successful, complications are minimal. Birds seldom get too close. Rain, however, soaks in very fast. Too many people doing the same thing can also cause problems. One needs lots of room. If there are no complications, it can be very peaceful. A rock will serve as an anchor. If things break loose from it, however, you will not get a second chance. (p. 722)

Despite being composed of uncomplicated words, without schema markers to activate background knowledge, this paragraph was difficult for readers in the Bransford and Johnson study to understand. In contrast, readers who were told before they read that the topic of the passage was making and flying a kite had a much easier go of it—in fact, they experienced no comprehension problems whatsoever. That overarching conceptual understanding allowed them to activate their prior schematic knowledge about kites so they could use that knowledge to comprehend the text. Without activating that knowledge, even expert readers struggled mightily with the text. They couldn't figure out the local-level meaning of words without some sense of the whole. The above passage is what textbooks and much complex nonfiction texts look like to students who lack or fail to apply the background knowledge that would help them make sense of their reading.

Experienced readers necessarily employ *a priori* conceptual understanding to aid in their reading of new texts. One reason we're able to do so is because we tend to read to deepen existing areas of expertise rather than to develop entirely new ones. We know a lot about the cultural and historical conversations to which most of the texts we read are contributing. Our students don't have that advantage in the reading they do in and for school. They don't have schemas that are as well developed as those of adults; they have to read what's assigned; and they are often learning about something totally new to them. Noticing

the conversation a text is part of and activating or building the background knowledge necessary to comprehend that turn in the conversation are prerequisite steps to effective reading. This book therefore begins with lessons that help students notice the conversation a text is part of. If readers don't notice this, they can't activate whatever necessary background knowledge they have, and they can't build new schematic knowledge about the topic that might be necessary to understand what is being said.

Noticing Key Details

Now, for the second central insight: Not everything in a text is of equal importance. Skilled readers know how to separate the wheat from the chaff; less accomplished readers have difficulty doing so. Reynolds (1992) provides a comprehensive review of research establishing that more successful readers self-consciously identify and pay more attention to important information than less successful readers do and that more successful readers continuously adapt their understanding of what's most important as they read.

Noticing Genre and Text Structure

In addition to the *a priori* conceptual understanding we bring to our reading, we bring *a priori* understanding of how texts work. Let's return to our newspaper example. We know that news stories have headlines but that these headlines are likely not written by the author of the story. We know that news stories, features, editorials, reviews, and so on all work a bit differently. We know that stories that appear above the fold are regarded as more important than stories on the same page that appear below the fold. We know that news stories are a genre and that this genre often employs text structures like comparison, definition, or process analysis. In short, we know how to notice both genres and the text structures embedded in those genres to guide our reading.

Peter Rabinowitz (Rabinowitz & Smith, 1998) applies a useful metaphor in thinking about genre and structure. He writes that reading a text is like putting together an item that arrives from the manufacturer unassembled—you have to have at least some sense

of what it is you're making (top down). You don't just follow step-by-step directions without a clear sense of what you're going to end up with. The steps only make sense *if you know what the end product will look like*. In that light, each individual piece needs to be understood in terms of how it connects to neighboring pieces and how everything contributes to the purpose and shape of the whole (bottom up).

What This Noticing Means for Us as Teachers

First, because understanding a text requires readers to approach that text with some general understanding both of the cultural and historical conversation of which it is a part and of its structural features and genre, we have to teach students to notice the way in which a particular turn in the conversation is framed and shaped. Fortunately, authors do specific things to help readers orient themselves to the conversation, the genre, and the text structures they employ. We have found that we need to teach students how to notice and attend to these orienting moves. If we do, students are much more able to enter into texts and make meaning of them. In fact, we have found that they do so with the enthusiasm and joy of a knowing insider, someone who is in the process of developing new forms of expertise.

Second, because skilled reading requires readers to notice key details—to sort out what's important from what is less so—we have to teach students (1) to notice and use the *signaling moves* authors use to indicate what is most important and (2) to sort the important stuff they notice into categories that help them get a sense of the whole.

The lessons in this book are designed to teach students the rules of notice that expert readers employ, often unconsciously, as they read.

Principles of Effective Instruction

The lessons in this book are informed by four key principles.

1. The Importance of Teaching How

The first recommendation of the *Reading Next* report on adolescent literacy (Biancarosa & Snow, 2006) is that teachers ought to provide "direct, explicit comprehension instruction" (p. 4). Students need to understand *how* to do what we want them to do. This seems obvious, but many common instructional practices don't provide explicit instruction about how to do what we want students to do. Asking questions, for example, teaches students neither how to answer our questions nor how to ask their own. (Key principle 2 shows why this is true.)

2. The Importance and Difficulty of Transfer

Understanding any individual text is not that important. It would be nice if students remembered all the nuances of what we taught them about, say, *Narrative of the Life of Frederick Douglass*—but they won't. What is important is that they are able to apply what they learned from reading the *Narrative* to their subsequent reading and to their thinking about civil rights issues in their lives. What matters is that students *transfer* what they learn—both conceptually and strategically—to new reading and real-life situations.

Unfortunately, the data on transfer aren't that inspiring. Transfer typically doesn't occur. For example, students don't automatically apply strategies required by one reading to subsequent readings. The good news is that they can be taught to transfer new strategies if certain conditions are met. Haskell (2000) presents eleven of those conditions, which we have reduced to four:

- 1. Students must have command of the knowledge that is to be transferred.
- 2. Students must understand the principles to be transferred.
- 3. The classroom culture must cultivate a spirit of transfer.
- 4. Students must deliberately and repeatedly practice applying the meaning-making and problem-solving principles to new situations.

Byrnes's (2008) discussion of transfer is remarkably similar. He too argues that if students can develop deep, principled knowledge of what they do, they can then apply it to new situations. As Jeff has argued previously (Wilhelm, Douglas, & Fry, 2014):

All instruction must involve service to self. After all, how can we call something "learning" if it does not lead to self-regulation and independence, to understanding new ways of doing things that can be applied right now and developed and further used in the future, both in school and out? (p. 30)

3. The Importance of Practice

How do students develop conscious competence that can be transferred? First of all, they need plenty of a particular kind of practice.

The research on the importance of practice was made famous by Malcolm Gladwell (2008) when he argued that ten thousand hours of practice are necessary to become an expert in a field. In an article that's adapted from a recent book, Anders Ericsson, the author of the study on which Gladwell bases his claim, and a colleague (Ericsson & Pool, 2016a) explain that Gladwell got the study wrong. Ten thousand isn't a magic number; although lots and lots of practice is needed to become an expert, the actual amount needed varies by field. But more importantly, they explain, Gladwell fails to consider the nature of the practice that moves people toward expertise. They call that practice deliberate practice. Such practice

involves constantly pushing oneself beyond one's comfort zone, following training activities designed by an expert to develop specific abilities, and using feedback to identify weaknesses and work on them. (Ericsson & Pool, 2016a)

That's the kind of practice we hope to provide in our lessons. How often do schools provide students the kind of deliberate practice they need in mindfully applying what they have learned to new reading situations? How often do students develop conscious and transferable strategic competence? In our experience: very seldom.



Rules of Notice

Video 1.1

http://resources.corwin.com/ divingdeep-nonfiction

To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.

4. The Importance of Promoting a Dynamic Mindset

The lessons in this book teach students transferable strategies they can apply to the reading and writing of ever more complex texts over time.

Working consciously toward this kind of development helps cultivate an attitude that Carol Dweek (2006) calls the *growth* or *dynamic* mindset—a validating attitude that one *can* and *will* learn, through targeted effort and strategic practice, to become ever more competent and proficient. This process begins with the learners engaging in what Lave and Wenger (1991) call *legitimate peripheral participation* in which the learner becomes competent enough to participate as a novice expert and eventually an actual expert in the ongoing disciplinary conversations and the knowledge making and problem solving that are generated by these conversations.

The most important service we can provide our students is to help them develop and cultivate a dynamic mindset. The dynamic mindset—on the part of teachers *and* students—is a prerequisite to achieving the kind of expertise required by complex texts—and modern life.

The bottom line: Our abilities are not inborn and fixed; they are cultural and dynamic. The dynamic

mindset is based on the understanding that intelligence and abilities are developed and cultivated with practice over time. In contrast, the fixed mindset, expressed through information-driven teaching, assumes that abilities and intelligence are static. We need to convey to students that they—that anyone—can master the next available challenge if they embrace their capacity to learn and if a few minimal conditions are met. And we need to believe this ourselves.

Figure 1.2 summarizes the fixed versus growth/dynamic mindset. The descriptions are based on Carol Dweck's *Mindset* (2006) and Peter H. Johnston's *Opening Minds* (2012).

The Current Educational Climate

We haven't yet mentioned the Common Core State Standards, because we wanted to argue the importance of teaching students how to read complex nonfiction texts independent of this mandate. However, the CCSS and all next-generation standards worldwide provide even more forceful justification for the lessons that follow.

Next-generation standards worldwide, including the anchor standards of the Common Core, are entirely strategic; they focus on *what*—the outcome—but implicitly require that students learn *how* by foregrounding words that ask them to *do* things like argue, analyze, and explain. Next-generation standards therefore insist on the transfer of expert reading processes, as well as those of composing, speaking, and listening.

While we endorse the importance of teaching students to read complex nonfiction (something stressed by the CCSS), we have significant concerns with some of the instructional ideas that have sprung up surrounding these standards. We discuss those concerns in great detail in *Uncommon Core* (Smith, Appleman, & Wilhelm, 2014), but we'll mention a couple of them here.

One concern is the emphasis on text-dependent questions and the way these questions are used in instruction. There are two problems here. The first

Fixed Mindset

Intelligence and abilities are static.

Tends to lead to avoiding challenges.

Tends to be defensive or give up easily when faced with challenges.

Tends to see effort as fruitless or worse.

Tends to ignore useful feedback, particularly when it is negative—sees it as judgment.

Tends to feel threatened by the success of others.

Learning goal tends to be to look as smart as one can.

The most important information is whether one is successful. It shows who is smart and more valuable. *How* is irrelevant.

When encountering difficulty, views the difficulty as failure, questions one's ability, assigns blame for failure, and ceases acting strategically.

When asked, "When do you feel smart?" says things like: "When I don't make any mistakes." "When I finish something fast and it's perfect." "When something is easy for me, but other people can't do it."

Everything is about the outcome.

When teaching, asks questions like: "Can I teach them?" "Are they able to learn?"

Growth (or Dynamic) Mindset

Intelligence and abilities can be developed and cultivated.

Tends to lead to embracing challenges.

Tends to be persistent in the face of setbacks.

Tends to see effort as the path to mastery.

Tends to learn from criticism, framing it in causal or procedural terms informing principles of how to do things in the future.

Tends to find lessons and inspiration in the success of others.

Learning goal tends to be to learn as much as one can.

The most important information is *how* someone did (or could do) something, because that's what one can learn from.

When encountering difficulty, engages in self-monitoring and self-instruction, increases strategic efforts, and doesn't see oneself as failing. Says, "I don't have it quite yet." Consciously builds a toolbox for problem-solving success. Sees learning as a process.

When asked, "When do you feel smart?" says things like: "When it's really hard, and I try really hard, and I can do something I couldn't do before." "When I work on something a long time and I start to figure it out."

Everything one is doing has value regardless of the outcome.

When teaching, asks questions like: "How can I teach them?" "How will they learn best?"

Source: Based on Dweck (2006) and Johnston (2012).

Figure 1.2

The Fixed Mindset Versus the Growth (or Dynamic) Mindset

is that text-dependent questions are typically relevant to only one text and so cannot be transferred to new reading situations. The second is that teachers are too often the only ones asking the questions, which means that teachers are the only ones noticing what's worth asking about. If we want students to become highly expert readers (as the standards and the world demand), we must help them become independent and attentive noticers, questioners, and interpreters on their own. Text-dependent questions can help achieve this goal only if they teach students something that students can apply on their own to their future reading.



Rules of Notice and Transfer of Learning

Video 1.2

http://resources.corwin.com/divingdeep-nonfiction

Our second concern is a related one: the emphasis on close reading and how that is being interpreted in connection with instruction. Most discussions of close reading suggest that reading is an entirely bottom-up process. As we explained earlier, it isn't. You can't notice the details that are worth attending to unless you are guided by a conceptual framework and a familiarity with genre.

How This Book Works

The lessons in this book are built on the four kinds of noticing we have outlined in this chapter:

- 1. Noticing the conversation
- 2. Noticing key details
- 3. Noticing genre
- 4. Noticing text structure

Chapter 2 provides seven lessons that help students notice the conceptual conversation of which the text is

a part. Chapter 3 provides seven lessons on noticing key details. Chapter 4 provides seven lessons on noticing and making meaning based on genre. The seven lessons in Chapter 5 focus on noticing and making meaning based on text structure, with an emphasis on comparison and contrast.

Each chapter comprises a series of seven lessons that proceed similarly:

Lesson 1: Reading Visual Texts

Students examine some kind of visual text. Visual texts get learners into the game, allowing them to focus on what they must do to understand the author's message without attending to the demands of vocabulary and complex syntax. Visual texts are accessible to struggling readers and English learners, helping all students to name the rules of notice—direct statements, ruptures, calls to attention, and reader's response—and to see and develop their strategic facility using these rules.

Lesson 2: Thinking Aloud

We explicitly model the kind of expert procedures we want our students to apply and mentor students into practicing these strategies, naming specific rules of notice that will assist them.

Lesson 3: Practice in Miniature

Students have the opportunity to practice what we've modeled by deliberately and consciously applying the strategy to short texts we have written or selected.

Lesson 4: Questioning

Students apply a procedure for questioning to the text that focuses their attention on noticing and interpreting in ways that can be transferred and applied to all texts.

Lesson 5: Writing and Responding

Students are cast as writers or respondents to the writing of others to practice and monitor the use of focal strategies using the rules of notice.

Lesson 6: Search and Find

Students pay attention as they read and watch *outside school*, looking for ways to apply the rules of notice that they've learned in class. They see the relevance of their learning as they transfer it to other texts and situations.

Lesson 7: Putting It All Together

Students pull together everything they've learned in the instructional sequence as they consider a complete nonfiction text, consolidating their learning of the strategies associated with the rules of notice.

Each lesson is ready to teach but is also a model for other lessons you'll create for your own students based on the same principles. For additional lessons and extensions, visit this book's companion website at http://resources.corwin.com/divingdeep-nonfiction.

How to Use This Book

Although the lessons we present in this book are classroom tested and we think you could teach them as
written, we suspect that you might want to adapt them
to meet the needs of your own students. We designed
the lessons to be usable from late elementary through
high school, but depending on your students, you
might want to move faster or slower than we suggest.
You might want to substitute one of the texts we suggest for one that's easier or more difficult. You might
want to use different grouping procedures than the
ones we suggest. You might want to break the lessons
up and offer them on consecutive days instead of in a
single period.

That said, we think it's crucially important to maintain the principles of practice at play here. That is, it's crucial that the lessons provide explicit instruction in the ways authors cue their readers to notice and make meaning with what's most important, that students get plenty of deliberate practice in applying those rules of notice, and that the lessons require students to deliberately transfer their strategic learning and in so doing cultivate a growth mindset.

Although you may choose to modify the lessons in some way, we do advise that you teach them in the

order that we suggest. Doing so will guarantee that you enact the principles we discuss above. However, following the sequence doesn't mean that you need to teach the lessons one after another, uninterrupted by any other instruction. In fact, if you've read one or more of our other books (e.g., Smith, Appleman, & Wilhelm, 2014; Smith & Wilhelm, 2002, 2006, 2010; Wilhelm, 2007; Wilhelm, Douglas, & Fry, 2014; Wilhelm, Wilhelm, & Boas, 2009), you know we advocate embedding instruction within inquiry contexts that require and reward the use of new strategies. In inquiry, the curriculum is reframed, usually with an essential or existential question (Wilhelm & Novak, 2011) that poses a personally and socially/culturally compelling problem to be solved. We believe that strategies for reading, composing, speaking, listening, and problem solving are best learned in the context of addressing and solving such problems. Courtney Cazden (1992) offered a metaphor that we have long found compelling: the instructional detour. That is, the lessons we provide can be used to focus students' attention on particular strategies that they can then employ on the main road of the inquiry. If we practice the strategies with texts and content relevant to the inquiry, we get a twofer. But we can also take a meaningful detour if the students see how they are practicing a strategy that they will immediately apply in the context of a meaningful inquiry. Indeed, the value of the lessons will be most obvious to students when they are rewarded for applying them to pursue an inquiry that matters to them.

Let's get started.



Getting Started Using Rules of Notice

Video 1.3

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