

If You Show Me How, I Can Learn to Do It: The Role of Modeling

Not too long ago, Doug decided that he wanted to learn to ski. Given that he lived in San Diego, he had never skied before but was interested in this winter sport. He enrolled in a class at the local community college in preparation for a trip to Breckenridge. During the first class session, the participants watched a video of skiers and were provided with a short reading about the dangers of skiing. During the next class meeting, the ski instructor had the class suit up despite the fact that it was 70 degrees outside. In their ski suits, with poles and boots, the class members climbed a set of stairs. When they reached the top, they saw a ski slope of sorts. This slope was mechanical and had a piece of carpet that moved. The class was told that this experience would prepare them for the downhill feel of skiing. Faithfully, Doug got onto the contraption and “skied” down the hill. To any observer, it looked more like a controlled fall rather than skiing.

For the next several sessions, the class members took time attempting to make it to the bottom of the hill without falling. They were provided lectures about various types of equipment and good-versus-bad places to ski. The teacher gave a number of quizzes, covering such topics as types of lifts, snow conditions, danger signs, and the like. One day, the class was asked to write a response comparing cross-country skiing with downhill skiing.

Doug learned a lot about skiing, but not how to ski. No one showed him the moves required to navigate the snow. No one modeled the ways in which skiers made decisions about traversing a mountainside. No one explained the split-second decisions that skiers make while skiing. And no one provided an authentic environment for learning these concepts.

The results were predictable. Doug felt like he could ski. He had done very well on the quizzes and had passed the downhill performance test. He left for Breckenridge very pleased with his progress. Unfortunately, Doug was not ready to ski based on his experiences. He fell a lot and ended up in the hospital with frostbite and injured hands. Sadly, he never skied again.

Looking back on this experience, it's easy to identify the problem. Doug lacked a model of what good skiers do. It wasn't that Doug wasn't motivated or knowledgeable. He needed to get inside the mind of an expert, someone who could explain the moves and the reasons for those moves. He needed an opportunity to think like a skier before receiving feedback and coaching about skiing.

Regardless of the learning goal, our experience suggests that novices need models to be successful. We'll focus on reading as our learning goal in this book, but we know that modeling facilitates all kinds of learning. As you read the following example from Diane's teaching, consider how instructional modeling, if played out widely, would solve many of the problems that occur for many of us on a daily basis.

From Skiing to Writing: Why Modeling Is Important

Recently, as a formative way to measure the effectiveness of her instruction, Diane asked her 11th-grade students what they thought had helped to strengthen them as writers since the beginning of the school year. While they offered many insights, the most notable was what Mario said, "You give us examples. You show us how you write it. Then you help us until we can write our own. When you teach us like this, it's easy to learn how to do it."

What Mario referred to was that, like many teachers, Diane thinks through anchor texts as examples of how to read and write the type of text the class is discussing. Some of these she writes herself and others are published works. To Diane and her colleagues, sharing a piece of text means thinking it through with the students—yes, inviting students to peek inside the instructors' minds to see what they are thinking as they read or write the text.

For example, if she addresses the California English language arts standard (California State Board of Education, 2007) that requires students to be able to "structure ideas and arguments in a sustained, persuasive, and sophisticated way and to support them with precise and relevant examples" (Writing Strategies 1.3), she shares advertisements, letters to

the editor, and editorials while thinking out loud about the elements that constitute a persuasive piece of writing. By sharing these anchor texts as well as modeling how to think through the text construction, students acquire a mental graphic of a persuasive text. As Diane says, “I see that all of these begin with an introductory hook, or what we call a grabber, that captures the attention of the reader and causes us to want to read further. After the hook, the writer provides the reader with supported facts that promote his or her stance and then follow this with a statement of conclusion that moves the reader to action.” This mental model supports their comprehending and writing of additional persuasive pieces.

Once they have the visual model of the format and the language of a persuasive text, students coconstruct an oral piece of persuasion. For example, they talk through a letter to the school principal about why the school should not have soda vending machines. As they craft the content, students also discuss the format. By making the first draft an oral draft, students have an opportunity to try on the academic language and instantiate in their minds the elements of structure of the targeted piece. As they coconstruct this piece, Diane supportively models as needed. For example, she might think aloud that because the audience is the principal, who likes research, it is important for them to include some data that supports their position.

Next, they are ready to transfer this new knowledge as they write a persuasive letter to a friend or a company about another topic of personal significance, such as the ill effects of unhealthy eating or why companies should not profile one type of appearance when hiring employees. This segment also begins orally as they share their ideas with a partner who offers them feedback about the content and the format. Now they are ready to independently write this persuasive piece.

Supportive modeling of this type introduces the target concepts and authentically acquaints students with academic and topical language as well as genre structure. Additionally, it helps them to acquire the security and competence they need to be successful at the task when they try it independently. Modeling provides students with pictorial, process, and linguistic examples, which serve as the cognitive hooks on which they can hang new information. As they become fluent or familiar with these dimensions, they are cognitively free to refocus their attention on expanding and transferring the informational base to new situations.

We had an affirmation that this type of instruction was really working when it was time for students to take the high school exit exam, a state requirement in California. To our surprise and good fortune, the writing prompt asked the students to write a letter to a company persuading them about something students felt was important. Although

the students believed that we had known what the prompt was going to be, we were as surprised as they. Our students did very well as a result of the modeling they experienced—a 99% pass rate.

The student who didn't pass scored poorly on language conventions but fared well on content and structure. He was a speaker of African American vernacular English, and we believe that his content was superior to his ability to express that understanding with standard English. We are well aware that "it may sometimes seem that there are only two kinds of English in the United States, good English and bad English" (Hymes, 1981, p. v) and that a less-than-positive profile exists about those who do not speak what is believed to be the good English (Bernstein, 1970). This profile promulgates a deficit image of the speaker and the speaker's language that, when played out in schools and professional situations that require the good English, propels the profiled speaker in a downward trajectory of failure.

It is this realization that caused Diane to again model for this particular student how she makes a match between the audience and the way she expresses a message. For example, she used a number of photos for potential audiences (such as people at a lecture, people in Balboa Park, friends having coffee, two people talking at a bus stop) and thought aloud about how she might adjust her register for each situation. While looking at the Balboa Park picture, she said, "I see that this is a group of friends walking through our park. They're probably going to a museum. While they're walking, I bet they're talking in an informal register. If I were to join this group, I know that I could use some slang and lots of pronouns." Exposure through modeling provides a way to let this student in on the thinking process about how to construct a message for a particular audience. This type of modeling is not done to the student; rather, it is done as a shared partnership designed to offer exposure regarding language registers.

This modeling of language was a way to support this student's growing knowledge about language variations as different but not deficit so as not to disparage his home community. This is important because Edwards (2007) implored educators to expose their students to all of the language registers they will need to succeed in situations outside of their homes. Again, modeling supports this possibility.

An Instructional Perspective on Modeling

Modeling is a primary way through which teachers can offer instructional demonstrations for their students, such as showing how

competent readers make sense of texts (e.g., Taylor & Pearson, 2002). Shared reading, a common form of modeling text processing, has evolved from a focus on Big Books—originally developed by Holdaway (1979, 1983) as a way for teachers to model while young students watched—to a variety of classroom interactions in which the teacher and students share a text. Currently, shared reading is a generic term many teachers use to describe a range of classroom activities, including echo reading (students repeating the words aloud after the teacher reads), choral reading (students reading aloud while the teacher reads aloud), or Cloze reading (the teacher reads aloud, pausing periodically for students to fill in the missing word) (e.g., Blachowicz & Ogle, 2001).

In their study of effective teachers in England, Topping and Ferguson (2005) noted, “Effective teachers were more likely to teach a range of literacy skills and knowledge at the word, sentence and text level through the context of a shared text” (p. 126). According to the study, shared reading involved the teacher modeling reading by focusing on word- or sentence-level work. Alternatively, Short, Kane, and Peeling (2000) described shared reading as allowing the teacher to “model and support the use of cues and self-monitoring reading strategies, which may include the use of pictures to help construct meaning, making predictions, rereading, segmenting and blending phonemes, and finding familiar word chunks to decode words” (p. 287). As can be seen in these two definitions, specifically identifying what constitutes a shared reading is difficult; however, both definitions indicate that shared readings have potential with older readers and should not be limited to use with emergent readers.

Regardless of the definition, modeling is a key component of reading instruction. Consider the personal perspective of Dr. Jill Bolte Taylor, a Harvard neuroscientist who suffered a major stroke at age 37; her mind deteriorated enough that she could not walk, talk, read, write, or recall anything of her previous life. Over several years and with a significant amount of work and the support of her mother, Taylor regained most of her skills. In her book, *My Stroke of Insight: A Brain Scientist's Personal Journey* (2006), Taylor discussed the difficulty in learning to read again and how the modeling and guidance provided by her mother were critical in her rehabilitation. In the excerpt below, we get a rare glimpse into the reading development process from someone who was a very skilled reader and had to relearn everything, from letter recognition to comprehension:

Learning to read again was by far the hardest thing I had to do. I don't know if those cells in my brain had died or what, but I had no

recollection that reading was something I had ever done before, and I thought that the concept was ridiculous. Reading was such an abstract idea that I couldn't believe anyone had ever thought of it, much less put forth the effort to figure out how to do it. Although G.G. [her mother] was a kind taskmaster, she was insistent about my learning and placed a book titled *The Puppy Who Wanted a Boy* in my hands. Together we embarked upon the most arduous task I could imagine: teaching me to make sense of the written word. It befuddled me how she could think these squiggles were significant. I remember her showing me an "S" and saying, "This is an 'S,'" and I would say, "No Mama, that's a squiggle." And she would say, "This squiggle is an 'S' and it sounds like 'SSSSS.'" I thought the woman had lost her mind. A squiggle was just a squiggle and it made no sound.

My brain remained in pain over the task of learning to read for quite some time. I had a real problem concentrating on something that complicated. Thinking literally was hard enough for my brain at this early stage, but jumping to something abstract was beyond me. Learning to read took a long time and a lot of coaxing. First, I had to understand that every squiggle had a name, and that every squiggle had an associated sound. Then, combinations of squiggles—er—letters, fit together to represent special combinations of sounds (sh, th, sq, etc.). When we string all of those combinations of sounds together, they make a single sound (word) that has a meaning attached to it! Geez! Have you ever stopped to think about how many little tasks your brain is performing this instant just so you can read this book? (p. 101)

Taylor's experience with learning how to read again mirrors the struggle so many students face as they seek to wrestle with every little squiggle. As well, her mother's efforts to teach her daughter resonates with our own experiences as teachers—"the kind taskmaster." Shared reading, modeling thinking while reading, is part of a larger instructional plan first described by Pearson and Gallagher (1983). The gradual release of responsibility model of instruction suggests that the teacher first models then guides students toward independence. The idea is that, over time, the responsibility (cognitive load) shifts from the teacher doing all or most of the work to students doing significant amounts of work. Our adaptation (Fisher & Frey, 2008a) of this model contains four components: (1) focus lessons, (2) guided instruction, (3) productive group work, and (4) independent learning.

For us, one significant key to learning is the focus lesson in which modeling first occurs. As was evident in the instruction Diane shared with her 11th-grade students, it is during the initial focus lesson when the teacher establishes a purpose and models his or her thinking. This is the

time when students in Diane's English class get to see writing modeled through authentic writing examples that are shared, discussed, and analyzed by someone who has the expertise to let the students in on how to make sense of this new information.

This needs to happen all day long for students. During science instruction, students should get to see scientific thinking being modeled, and during history class, students should observe historical thinking by their teachers who have expertise with this information. This modeling needs to occur so that students realize through conversation with their teachers the specifics of the new information they are learning. This is when a clear purpose as well as the process for learning is established.

After the focus lesson, students experience guided instruction and group work that is also designed to support and empower the development of the knowledge they need to move toward independence. When this happens, students are being taught in ways that are supported by brain and learning research (Willis, 2008). For example, think about Diane's students who were

- Engaged and making connections among their personal language experiences and interests and the new information
- Processing the modeled information while constructing the new knowledge
- Investing in writing tasks they were helping to create
- Intrinsically motivated because they wanted to share their message
- Solving authentic problems related to their everyday school life
- Challenged yet unthreatened because they were well supported by their teacher
- Employing more than one modality (visual, auditory, kinesthetic)
- Making decisions while engaged in interest-driven investigations which supported the development of their new knowledge

Let's think about this as we move into the next chapter, where we can step back just a bit to relate what we already know about a gradual release of responsibility model of instruction and shared reading.

Looking Ahead

In the next chapter, we augment this information about effective instruction by exploring what is known about what happens in the brain

as one reads. These insights support the importance of instructional modeling. From there, we explore the ways in which teachers use modeling to develop students' thinking about text. More specifically, we consider the ways in which teachers model comprehension, word solving, text structures, and text features.

In each of the subsequent chapters, we integrate theories of cognitive science and neuroscience with best practices in teaching. We do so for science, social studies, mathematics, English, and elective classes. Along the way, you meet a number of teachers who use modeling to facilitate their students' understanding of complex ideas. The teachers and students exemplified in this book are composites of our own work as well as teachers and students we have observed (Fisher, Frey, & Lapp, 2008); the voices are authentic, although the names are not.

The final chapter introduces you to a number of real teachers who use modeling to improve student learning. These teachers are featured on the DVD that is included in this book.

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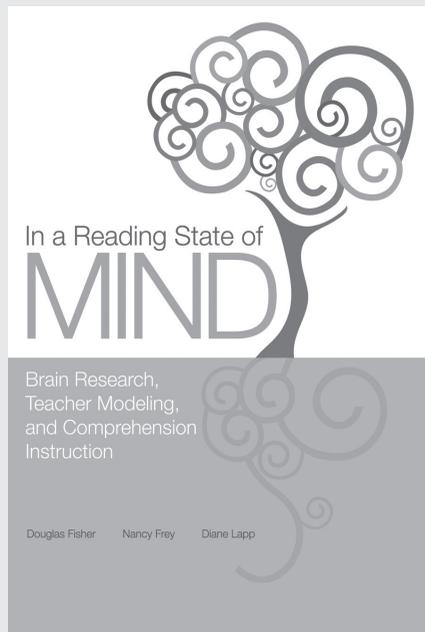
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