Cut to the Heart of Learning by Analyzing a Classroom

A journalist-turned-Ph.D. offers advice for observing teacher-student interactions critically.

By Jenny DeMonte

For the past 40 years, education journalism in the United States has focused on two things: money and test scores.

But interestingly, the hundreds of stories on these two issues rarely reach into the heart of education, the place where the rubber meets the road: inside classrooms where teaching touches students. This is where the money gets spent and the future test scores are decided. But what teachers do with students rarely makes it into news stories.

As a former journalist now finishing a doctorate in educational studies, I understand now why reporters tend to turn away from covering actual instruction. Teaching is intellectually challenging and difficult work, so much so that many reporters don't know how to observe and translate it into a news story. Although I wrote and edited many stories on education, I can't think of one that delved into instruction the way it could have.

Yet teaching creates the moment when students either learn or don't. Understanding what goes on in classrooms, and whether it is helpful in improving student learning, is essential for journalists who want to throw a spotlight on the potential and failure of education in the United States. What I try to do here is provide a way to look at life inside classrooms – with attention to the lower elementary grades – to help reporters observe teacher actions and student responses in a critical way.

Imagine we're in a classroom watching a mathematics lesson. An elementary school teacher has her students complete several two-digit multiplication problems and write out their work. One student completes a problem this way:

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 1 2
  35
 x25
 255
 80
1055
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The answer is incorrect. Simply marking this problem "wrong," though, doesn't help the student understand how to get the right answer. You may know how to do this problem correctly, but to be a good teacher, you must be able to figure out what the student did, explain why it is wrong, and help her understand how to do it right.

That's why teaching is hard. This student doesn't know how to carry the tens, and as a result she takes the carried tens (2), multiplies 2 times 5 and adds the answer, 10, instead of simply adding 2 to the partial product. He does the same thing again in the other column, multiplying 1 times 2 before adding it, getting 80 instead of 70.

The student obviously doesn't understand why he's carrying the number, or that the carried 2 really represents 20 and the 1 really represents 10. The teacher has to understand the underlying algorithm enough – and know the student well enough – to help him puzzle out for himself what will work.

Try it sometime in a room full of 9-year-olds. It is easier said than done.

This is just one example of the complex interactions that occur by the minute in classrooms. In reading, the instruction often consists of questions and responses, which seems pretty obvious. But there are questions, and there are better questions. To know whether a teacher is pushing students intellectually takes some work. Below are two examples of teachers questioning fourth-grade students, all of whom attend disadvantaged schools. (The examples are illustrative

only, and are parts of larger lessons.) In the first example, students have all read an article and as a group discuss it with the teacher.

Teacher: *What did this article tell you about?*

Student: *They used dog sleds and no technology to get to the North Pole.*

Teacher: *Is there anything else special about this trip?*

Student: *They had to navigate by the sun.*

Teacher: *Anything else?*

Student: *They had to drag a lot of stuff to get back.*

Teacher: *So there were dog sleds and there was no technology. How many people and how many dogs reached the North Pole?*

Student: *Six people.*

Teacher: *And how many dogs?*

Student: *Twenty.*

Teacher: *Right.*

An experienced observer might notice that the questions ask students to simply repeat what they already read. Some educators would say that this exchange is not about instruction at all, but it is simply assessment – the teacher assesses whether students remember what they read and understand the basic information in the text.

But lessons change from day to day and build on previously learned knowledge. While watching teachers, you have to consider that lessons might start with simple recall before working through inferences and story structure.

The teacher of the lesson below is asking students to apply complex skills and ideas to understand texts after they had read multiple stories over the course of several weeks. You might take the measure of the exchange and then question the teacher afterward; for instance, asking why she didn't dig even more deeply, how she deals with students at different stages of comprehension and why she chose these stories.

Student: *What we were doing with all four of these books was, we were trying to weave a common thread through the books.*

Teacher: *Do you have anything to add about what a common thread is?*

Student: *A common thread is also a theme, it's a theme that is in every book that we read.*

Teacher: *Good. Who can tell what a theme is?*

Student: *The objective, the main objective.*

Teacher: *OK, what is a common thread through all the books? What's the main theme? What's the big thread that's being woven through all of the books we've read?*

Student: *In every story there is a child.*

Teacher: *The main character is a young person. So that means, how is the author telling the story?*

Student: *From a child's point of view.*

Teacher: *Right, right. OK, what's a common theme?*

Student: *Every child has had a problem.*

Student: *I might be wrong, but are they all a memoir?*

Teacher: *Let's take a look at that a minute. Are they all memoirs in a way?*

Student: *Well, I think that "Just Plain Fancy," that doesn't seem like a memoir.*

Teacher: *Why not?*

Student: *Because it wasn't a memory about something.*

Teacher: *What is a memoir?*

Student: *A memoir is when someone did something in the past and then they pull back and remember it.*

Teacher: *OK, is that what happened in "Just Plain Fancy"?*

The lesson continues with the teacher leading students in a discussion about whether the four books are memoirs and asking for evidence to support their claims. This complex lesson uses multiple skills – from simply remembering the book's content, to identifying story structure and plot, to comparing all of these to

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other books in order to draw conclusions about the genre and author's intent. These books, though, are fairly easy-to-read books, not dense novels. Still, expert teachers can use simple texts to offer instruction in complex ideas.

The teacher in this vignette also takes advantage of an unusual or unexpected student response. One student suggests that a story is a memoir, which veers off the trajectory of the lesson. The teacher seizes on this moment to push students to more fully consider the genre. She recognizes in an instant what the question is, what the possibilities are for the students, and then shifts the direction of the discussion to use this moment to its greatest advantage.

I offer these examples so reporters can glimpse how instruction of students in the same grade in the same conditions might differ dramatically depending on the teacher. Of all the aspects of education, this is the one with the greatest potential to change student outcomes. Yet reporting on teaching demands that journalists look closely and learn what interactions are at the heart of a good education, and to ask questions when they don't see it. To do this, journalists must be able to distinguish between superficial teaching and teaching that requires kids to think deeply and engage in learning. Profiles of schools should include classroom vignettes that focus on teaching and learning, and should also give educators a chance to explain what they're doing and why.

Neither more money nor better tests will actually improve educational outcomes without a laser-like focus on what goes on in classrooms between teachers and students. Only that will make possible the high quality education that we should expect in all of our schools. ■

Jenny DeMonte was a reporter and editor for 15 years, and will receive a Ph.D. in educational studies from the University of Michigan in 2007.

Resources: Experts on Teaching and Learning

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MATH INSTRUCTION

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EFFECTS OF SCHOOLING

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LITERACY AND WRITING INSTRUCTION

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