



Encouraging Effort Through Feedback

Don Pedro Elementary School, California • November 2007

Topic: Encouraging Girls in Math and Science

Practice: Prescriptive Feedback

Highlights

- Math teacher Joanne Anderson encourages students to focus on the process of math learning.
- One of the teacher's students has learned that asking questions helps her understand the lesson better, and now asks frequent questions that benefit the whole class.
- The teacher shares her enthusiasm for math with her students, and communicates her assumption that they will all learn to like math and become better at it.

About the Site

Don Pedro Elementary School Ceres, CA

Demographics

61% Hispanic

31% English Language Learners



53% Females79% Free or Reduced-price Lunch9% Special Education

Math classrooms often emphasize informational feedback, including:

- Provide positive, substantive feedback to students as they solve problems.
- Encourage students to correct misunderstandings and learn from their mistakes.
- Develop a classroom environment in which learning, improving, and understanding are emphasized.
- Highlight the importance of effort for succeeding at difficult tasks.
- Avoid praising general intelligence.
- Make sure that there are multiple opportunities for students to receive feedback on their performance.

Full Transcript

If a student wasn't performing, there would be multiple ways to give them feedback. One is sitting down with them—sometimes one on one—asking them to stay after school for a few minutes, "Let's go back over what we did today in class, because I still don't think you have it." And we'll just rework from the practice point. They love to use the Smart Board. They like to use—I didn't use the Interwrite Pad today, but they like to use anything that's not paper and pencil. And the little white boards changed my whole math lesson around, just because the kids can immediately do what they used to have to go up to the board to do.

They also have the opportunity with me after school, it's uninterrupted time. They can ask every single question that they want and get an answer. Last week—I made reference to last week's math lesson, and it was probably the best week I've ever had in my whole entire career in math, because I told the kids, "It's going to be tough, and you're going to have to take notes. And every time I write something or say something you don't know, you gotta say, 'Whoa, Ms. Anderson, I don't get it.' And we have to stop right there because I need to know where you're not understanding it."

And we had the most lively math discussion I've ever had in my life. And they were so on top of things. I don't know if you noticed little Josefina sitting in the front corner. She is not a strong math student, but she has learned that answering questions helps clear up the confusion. And she probably asked more questions than anyone else in the class. And everybody said, "Yeah, I wanted to know that too." So she now has the confidence to ask the questions, and she didn't start that until about three weeks ago.

I highly praise the kids after they've finished a difficult problem. The number one way I do that is to point out that, "I thought this was the most difficult problem on the test, and you were successful." I'll make note of that. I warned them this last test we took was a lot of word problems. There were 20 questions, and



I think 8 of them were word problems. And I said, "If you read them carefully and if you do what we did in class, circling, underlining, and highlighting—do whatever you need to find out what the problem is asking—you will be more successful. And then if all else fails, word backwards from the answer."

Because so many of the tests these days are multiple choice, the child always has the ability to go to an answer with four answer choices and work it back into the problem to figure out how to do it. They can't tell me they don't have the ability, they're not smart enough. I told them when I was in math in 6th grade, I probably got C's and D's. I had no real desire because I wasn't motivated; I didn't want to get better. I liked math, but I didn't want to be the best at math, and my teacher did nothing to encourage me to be stronger than I was.

And what I tell the kids is, "I love math, and you are going to love it by the end of the year. Even if you hate it at the beginning, you're going to love it." So I think part of my enthusiasm falls over on them. And when they're having difficulty with a problem, it's simply a matter of, "Let's see why you're having a problem. Where is it confusing you?"

I can understand word problems being difficult for second language learners, and about 60 percent of my class is second language learners. So they have some more difficulties, but I can't accept that as an excuse for them not being able to do it in the long run.

What I try to do when a student says they're not very strong in math, I try to show them all the way in their lives they use math. Whether it's counting money. "I don't understand fractions, Ms. Anderson." "Then let's count it all to money." "I don't understand how to tell time, Ms. Anderson." "Then let's relate it to something that you do know."

I am a complex instruction teacher. I don't know any other way to teach. Number one is, it makes me a facilitator to the classroom and it makes the kids take responsibility for their own learning. They have to be an active part of the class or they're not going to get what they could get out of it. Number two, I have to learn how to give specific feedback to a child. I can't just say, "Oh, that's a nice job, sweetie. Good work." It doesn't work that way, because I don't learn anything from it when someone says, "Good job" I don't know what that means because your "good" might be different from my "good."

I still have a tendency to use, "Good job" but it goes after I've said something else about where they made the correct work or where they did it right. "Oh, look at that. You've solved this problem after last time you didn't understand how to do that problem. Now you've done two in a row correctly. Well done. Or good work." I'm more aware of watching for girls and boys. Any student who seems off task—I'm trying to focus on them. Why are they off task? What part of it are they missing? Is it because their basic skills aren't strong enough and they need those built up before they can understand the next step? Or is it because they're just goofing off today?



Complex instruction taught me that. It taught me to realize that kids learn in different ways. You'll see sometimes we did things with hands. Sometimes we did writing with markers. Sometimes we fold paper instead of measuring it out—we fold it into sections, so they can get the fraction concepts. So it told me that kids learn in just as many ways as adults do, so I should be using all those in my classroom.