

LINDA FISHER: Does somebody else want to share?

TEACHER 3: I noticed at the beginning, the two that I was watching, I think they knew the answer, and so they were kind of driven by knowing the answer, but somewhere through there they stopped. That wasn't important to them anymore, it was the discussion and understanding, which I thought for those students was amazing. A lot of times, they just shut off – "I know the answer, that's it." – but this, they did get into it, and the answer wasn't important towards the end, which was very interesting.

CLASSROOM TEACHER: And maybe that's why we're reaching not to the higher... the kids who are like "Ugh, I know this!" You know? We get the kids who are sort of, you know, this speaks to them more.

TEACHER 4: What I noticed, the two that I was watching, they were very enthusiastic about all the problems, and then it got to the diagram for the cream and the chocolate, and the 9 squares and the 18 squares, and it just really confused him! And he was starting to change his mind, because then he thought that, "Well, maybe I was wrong." But she was very shy, so she wasn't manipulating him to see what the problem was with that. So hopefully after that discussion, he saw that that was the wrong answer. It would be very interesting to see if anybody changes their answer to that 9 and 18. Because he seemed to, you know, he was going along just fine, and then that 9 and 18— he was just a little confused.

TEACHER 5: I have a question. So the students did the work, but they were not given corrections back. Okay. One of the things that I found interesting, two of the children I was watching, Timothy and Osi, I think was the other one's name, when that problem about the cream and the chocolate came up, the first thing that he did was to draw a little diagram on the paper. One of them drew blocks, the other one drew, like a number line. I don't know if they thought "I'm gonna make sure that I'm right before I start this discussion." And then when they started the discussion, it wasn't, "That person is wrong," it was "They must have been thinking this." It was the fact that they went into that, which is what you originally said. They went into a discussion about what the other person must have been thinking. Listening to the exchange between the two of them, there was a little, switch in their thinking, from one of the students, from listening to his partner, you heard, "Oh, yeah! That's what he was thinking." And I thought that was really powerful to watch children do that. I think that was the only thing, not the only thing but one of the things that I thought was really interesting about the whole thing.

TEACHER 6: One of the things I found, too, was with one of the same students along that same row, using the manipulatives on the third problem. The one boy put the manipulatives 3, 1, 3, 1. Three of one color, one. He was going along, and he almost got to the end, down there, and then he had looked at the problem again and said, "Oh! It's 2!" and he changed it. He fixed it, so it really matched the answer. That was great to see he fixed his own answer with manipulatives. Another one, his partner drew little boxes, and put little letters in each box as he went along, others down the row did manipulatives 2 and 3, 2 and 3, 2 and 3. They were almost following the two different answers of the first problem, where it was the diagonal versus the lined up across the row. It was the same sort of difference. It was really interesting.

TEACHER 2: I think that just goes to show that if they're not given that space to share how they get an answer, the other kids aren't exposed to that, and then they don't ever have that tool. Sometimes I think teachers expect, "Oh, well if they know how to find their own way to solve it, they'll use their own ways." But if it's sharing, they get to share, other students are sharing their ways, and then they become their own. It's great that they can just increase their, "toolbox," I guess. Just like we've learned other ways to understand how they get to use it. I just think it's a great thing.

TEACHER 6: And also, two other boys I was observing at first thought, well it seemed to me, it was obvious to me that they thought of everything in numbers, in mathematically and with computational-type solutions. Not visually. The other people were doing more visual, later. I don't know what they did at first, but these kids wrote down things like, (consulting her notes) " $3+1=4$, $12/4=3$ " and they had the answer.

(laughs) It was really fun to see what they approached first, and what they used first. It was nice that they could have paper to draw and write, and manipulatives later too. They could approach whichever one was more comfortable for them first.

TEACHER 7: I really like your conclusion of the lesson, you mentioned that you wanted them to go back to make a mark, edit and revise your answer, kind of like a writing process. So math is not a discrete subject anymore. All the learning's merged together. Throughout the lesson, because math is kind of like— you bring order to the chaotic world. Those students, using different ways, using different imaginations, and they try to explore, to find different ways to bring the order. To find a unique number other, which is a great thing to see. They also get a chance to see other people's doing, and a way to raise your level of exploration and thinking. Really great.