

LINDA FISHER: A different question, you know, they always talk about “using wrong answers” as part of the learning process. We got to see a really nice example of that. How do you think students reacted to seeing those wrong answers being put up there?

JEAN LIU: Well, this class loves to point out (laughter) wrong answers, or correct me, so I think this really, they loved that. They loved correcting the teacher, and correcting. I think it helps them try to explain how one person got this, and “Let me tell you how it’s supposed to go!” It corrects, and then it correctly teaches. Also, I noted that the kids who, when they see the wrong answer, it’s like “Oh, maybe mine’s wrong.” And they’ll correct it. They’ll think, and it confuses them, and it challenges them.

LINDA FISHER: It puts them into that disequilibrium?

JEAN LIU: Mmm hmmm.

LINDA FISHER: What specific features helped to sort of promote student thinking (bell). Oh – did it get lost in the bell?-- what features of the design of the lesson do you think helped to promote student thinking or the types of discussion that went on?

TEACHER 1: I think the going back and looking at different solutions! Like you said, going through the student’s papers and grouping them to “like” answers, and going back and looking at those different answers, and where those students might have come up with that answer.

LINDA FISHER: This probably isn’t evident to you, but one of the key things about picking out student work is stripping enough of their work away so that everybody has to think about it. A lot of times, there were labels, or things on their work, so when you want to sit down and try this on your own, you need to give them only the bare bones of the answer so it’s interesting enough to think about.

TEACHER 4: And I think too that nobody was pointing fingers, like “You got it wrong!” And the kids weren’t—“Are they looking at me? Am I the one with the wrong answer?” I think they need that chance to see that maybe there are other possibilities. Is this a right possibility, or a wrong possibility? Then they were able to discuss that—it wasn’t the teacher going “You got it wrong, because...” or “This is the right way to do it, because...” I think they felt like they were part of the process, and that was really good for them. They really enjoyed that.

JEAN LIU: And it helped to have just a blank sheet of paper in front of them, not the actual ones that they did. It wasn’t “Oh!” it was “Nobody knows what I got!” so they felt comfortable, it gave them a blank—“I’m ready to learn something new, and I’m ready to contribute. I may not have done this on my paper, but I’m not worried about that.” It gave them a chance to ...

LINDA FISHER: So there were some safety nets built into the lesson.

JEAN LIU: Mmm hmmm.

TEACHER 6: It also expanded the boys who were thinking mathematically first, when the second chart was shown, the simplified ...not the diagonal but the next one, they go “Oh!” and then they discussed “Oh, that makes it easier, more simplified.” They hadn’t thought of that.

LINDA FISHER: I know because the group that I was listening to, as soon as that second one went up there, because she even posed the question, it was like “Oh! That is so much clearer!” They were making that choice between strategies that you want them to make without—even before you posed that question. That was nice.

LINDA FISHER: I’m out of questions, so-- anybody have any wrap-up comments that you want to make?

TEACHER 6: Not wrap-up yet, but just to add to what you said earlier, I think the discussion brought out a lot, too.

TEACHER 2: And I think that for the early finishers, or for a lesson to have a time to wrap it up, or to pose a question, “Have you changed your thought process in terms of each of the questions, or did you use different strategies?” Trigger some metacognitive thinking about their thinking about their own thinking while they’re doing the math problems over again. Maybe just write down, “Did you change your thought process?” Just explicitly ask them, instead of, in addition to our interpretation of them changing their thought process. Do they know they’re changing their thought process at all.

LINDA FISHER: It would be really interesting to see what they put on with the red pen. But I’d give them a couple of days rest first. (laughter) They worked really hard today, it was great.

VARIOUS: thank you!

TEACHER 6: I enjoyed seeing the different ways they think, thank you!

LINDA FISHER: And it is a luxury, just to watch a couple of students, instead of worrying about a whole class, isn’t it?

TEACHER 2: In addition to that, I just think that it worked well, one of the questions was “How do you think the lesson worked in terms of just one teacher being up in front?” I think it works out great. I love the think-pair-share, and encouraging questions, and feedback in terms of other people’s answers. I think that it’s totally feasible with one person, one teacher.

LINDA FISHER: Good! So I want to be invited back when you guys have designed your own lessons to try!

TEACHER: We’re gonna need your help!

LINDA FISHER: Okay, well, Valerie has my number.