

LINDA FISHER: I wonder if you could describe for us the lesson that went before the re-engagement lesson.

HILLARY LEWIS-WOLFSEN: The classroom teacher gave her class one of the MARS assessments called "Candies." It was looking at ratios and began with equivalent fractions.

CAROLYN DOBSON: We did not score it on the papers itself, but we looked through all the responses, and we grouped them into like responses. To see a little bit how the class was thinking. Then, we went on to design, how would we go back into this classroom and help them get into the mathematics that was involved in this task?

LINDA FISHER: When you initially looked at student work, what were some of the things that really sort of jumped out at you, that prompted you to really want to use this as a task to design a lesson around?

CAROLYN DOBSON: The kids are really struggling with the relationships between – with the ratios, and what's involved, and how to structure their work so that they could get at all the pieces. Oftentimes, they didn't even quite understand the language.

LINDA FISHER: So one of the things I think I heard you talking about was that there were a lot of different types of models, so you structured the lesson to help kids make sense of those models. Can you...?

HILLARY LEWIS-WOLFSEN: Well, there were a lot of types of models, and some were used accurately, and some were not quite there yet. So we used some of those that were not quite there but had logic to it, and we're hoping that the students can learn from those and see the validity and usefulness of those models and where solutions could be found, as well as the models that were used well.

LINDA FISHER: I'm thinking that, if I remember right, in designing this protocol, it was to help kids gain new strategies, but to confront the logic of some of their misconceptions so they could let go of them.

CAROLYN DOBSON: That's right.

LINDA FISHER: So do you have any example you could give us of that?

CAROLYN DOBSON: there are several examples we used in the lesson, of course.

CAROLYN DOBSON: Here, with the cream and the chocolate, when they read it, they – one of the answers is, well, it's 9 cups of chocolate that they use, because 9 is right there. 9 cups of these two ingredients, that meant 9 of each!

LINDA FISHER: Rather than reading the recipe.

CAROLYN DOBSON: That's right. Or keeping a proportion, that this was a proportion.