4th grade: Can This Be True?

Clip 1 Pre-lesson:

MARGIE TRAINER: Well we are at the San Carlos Charter Learning Center and my name is Margie Trainer. I'm the math coach for the San Carlos School district and I'd like to introduce Elysha Passeggi, fourth grade teacher here at Charter who's going to be doing a lesson this morning. Elysha could you tell us a little bit about your students in your class?

ELYSHA PASSEGGI: Sure, it's a fourth grade class, straight fourth grade, 30 learners. It's a pretty even mix of boys and girls and a wide range of abilities.

MARGIE TRAINER: Could you tell us a little bit about the lesson that we're going to be seeing this morning.

ELYSHA PASSEGGI: Sure. I'm going to do a number talk that's probably going to be about twenty to twenty-five minutes and it's going to be based on relational thinking and mathematics and looking at number properties to examine different types of equations.

MARGIE TRAINER: And how's a relational number talk different from the number talks that you've been doing for example?

ELYSHA PASSEGGI: I want them to look at the equations and not calculate an answer but try and look at the relationships between the numbers, which I think will be a little bit of a challenge for them because they're used to calculating to find an answer.

MARGIE TRAINER: So you're anticipating that they're going to give you strategies they've used in number talks before?

ELYSHA PASSEGGI: Yes, yes. I think that they'll definitely do that.

MARGIE TRAINER: And you're starting with addition?

ELYSHA PASSEGGI: Starting with addition, yes.

MARGIE TRAINER: Okay, because that's a comfortable level for them?

ELYSHA PASSEGGI: Yes, I'm going to start with some true or false problems and then look at addition.

MARGIE TRAINER: Good, okay. Do you think that they will be able to use some kind of a relational thinking if you prompt them?

ELYSHA PASSEGGI: I think some of them will. I think it'll be interesting to see. I'm not quite sure. I'm hoping that they make that connection, that they don't have to calculate, that they can look at the relational thinking. So I think it's definitely possible that some of them will see that.

MARGIE TRAINER: Which strategies do you think that they might use in the true/false equations?

ELYSHA PASSEGGI: I think that they're going to want to calculate at first, so it's going to be, I think a little bit hard to get them away from that. I think that's going to be the biggest struggle, is trying to have them look at the actual numbers instead of computing them.

MARGIE TRAINER: Did you choose the problems deliberately to help so that it might not be possible for them to calculate?

ELYSHA PASSEGGI: I try to and I thought about choosing larger numbers when I made them just so they wouldn't be able to calculate, but I was afraid the larger numbers might scare them away from being able to compare the numbers. So we'll see.

MARGIE TRAINER: And you're going to start out with a couple of problems that will sort of get them started -- get them thinking before the actual lesson that they're going to be doing?

ELYSHA PASSEGGI: Right, right. I have a few true/false problems that just (inaudible). So hopefully it's going to get their mind thinking about them.

MARGIE TRAINER: Is there something that you're going to do specifically in the recording of how they give their answers that might help them see the relationships?

ELYSHA PASSEGGI: Yeah, I was thinking about trying to make connections across the numbers and write this is increasing by a certain amount when the other side increases. So trying to have a visual representation of that and possibly rewriting it kind of stacked on top of each other for them to see.

MARGIE TRAINER: Oh, vertically so they're more comfortable, they're more use to seeing it that way so they maybe would see the change?

ELYSHA PASSEGGI: They might, you know, our kids don't usually vertically write problems, so I don't know if they'll go there, but we'll see. It could help them because it's very clear and visual that you could see the change in the numbers.

MARGIE TRAINER: Do you anticipate that the students would be able at the end to verbalize some kind of a general...make a generalization about what's happening when you're looking at pairs of numbers on both sides of the equal sign? How one has to change in terms of the other in order to keep that balance? Is that possible?

ELYSHA PASSEGGI: I hope so. I mean I think it definitely is a possibility and that would be my goal, is that they do see that. I think there's a really good chance that someone will bring that up. If everybody gets that, I'm not sure. You know, if everyone will see the rule, but I think there's a really good chance that some of them will see that today.

MARGIE TRAINER: Good. Well we're looking forward to seeing the lesson. Thank you.

ELYSHA PASSEGGI: Sure.