MIA BULJAN: Speaking of kids who are willing to just grapple now. You know, they were really in productive struggle for a long time today.

ERIKA ISOMURA: Yes.

MIA BULJAN: Um, the word triple. Now, I saw you talking to Dylan early on who was just like, "It's triple. It's three times as much."

ERIKA ISOMURA: Right.

MIA BULJAN: And it was just like... Um, that was really hard for some kids. Was that part of your differentiation plan?

ERIKA ISOMURA: Yes.

MIA BULJAN: Okay, so it was the elastic context, which was, like, where's the whole, what are the parts, don't get it. Um, that four, four, two was freaky for them.

ERIKA ISOMURA: Mm-hm.

MIA BULJAN: And then the wording of triple. Okay.

ERIKA ISOMURA: Yeah, I thought about...I was going to put three times but then I thought, you know, the numbers themselves and the story in that particular case was not super challenging, but I'm curious to know if they know this vocabulary.

MIA BULJAN: So he did. Did you come across other kids who did?

ERIKA ISOMURA: Sofia did not. His partner did not.

MIA BULJAN: Okay.

ERIKA ISOMURA: So that's why I had the conversation with them because, um, when I was asking about it, it was very clear that she didn't, and he had assumed that she did. So that's why I stopped and talked to them because he was just on and didn't even think to ask, "Do we agree?"

So I, I knew Sofia's language skills are not as, um, proficient as Dylan's, so I wanted to check in and see if that was something, and yeah. I didn't get to many of the other groups because, um, most of the other groups had at least one...one proficient English speaker that I figured would just say it.

MIA BULJAN: Yeah.

ERIKA ISOMURA: But I did...yeah, I had wanted to go and check with Camila and Elijah. That was the other group I really wanted to check in with.

MIA BULJAN: Curious about, right? What I noticed towards the end when you...when there was this, um, sort of like this big math ideas and I noticed that towards the end you did sort of counsel some groups away from the more controversial ones.

ERIKA ISOMURA: Mm-hm. Inside Mathematics MIA BULJAN: Like, those are, um, everyone's struggling with these, let's put these aside.

ERIKA ISOMURA: Yes.

MIA BULJAN: And focus them in on the ones that they probably had more access to. Because they were struggling enough with some of the more simple ones that, um... They were all hard, so they couldn't differentiate, like, they weren't going to get these really without, you know?

ERIKA ISOMURA: Right. Yeah.

MIA BULJAN: Um, so, um, in terms of differentiation, so like, there's a point where you just say, like, focus in and then you were able to direct them that way.

ERIKA ISOMURA: Right. Because if they had spent all the time on "Lindsay's Elastic," they wouldn't have done anything, and they still wouldn't have been correct.

MIA BULJAN: Right.

ERIKA ISOMURA: Or had anything that was useful, so that was...

MIA BULJAN: Is there a magic...is there a magic, um, is there a sweet spot for that where, like, at what point do you recognize that this struggle is not productive and you make that decision? Or was it case by case?

ERIKA ISOMURA: I think it was case by case, and if I happened to come across them while they were doing that.

MIA BULJAN: So you sort of like keyed in, like, is this going anywhere and then maybe ...?

ERIKA ISOMURA: Right. And there were definitely some that even with some of the ones I considered less challenging, they were stuck. And I probably should've pushed them off to something else, but my intention was after they do it in pairs they were going to be doing it in groups of four and renegotiating that.

So, like, I already know I want Jerry working with Federico's group, and I think I want Dylan's group working with, um, either Diego's group or Rosa Linda's group. I haven't quite decided that yet, but I want them to come back and now renegotiate because there are...I think there came a point where they were really on top of it. And towards the end, they were still pushing hard, but I think their brains were exhausted and they weren't reasoning through as well as they had at the beginning.

MIA BULJAN: Uh-huh.

ERIKA ISOMURA: But I was really so impressed that despite that, they kept pushing.

MIA BULJAN: Yeah, they were on point.

ERIKA ISOMURA: Yeah.

MIA BULJAN: So, you know, we talk a lot...you hear a lot under the Common Core about this type of formative assessment lesson.

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ERIKA ISOMURA: Mm-hm.

MIA BULJAN: And, um, it's interesting to hear you talk about, like, how you're going to group students for this next, like, you know, to push further on this. And what you really did here was you created your own formative assessment lesson because the point was to gather this information about students. Is there any student that you learned something new about or, like, what kind of information did you gather about them that you think you might be able to use?

ERIKA ISOMURA: Um...

MIA BULJAN: Like, what surprised you?

ERIKA ISOMURA: So I think one thing that surprised me was there were a couple of groups that were still really struggling to understand the difference between Camila and Jesus's problem.

MIA BULJAN: Yeah.

ERIKA ISOMURA: So I felt like we had beaten that one to death and at this point everybody should get that, but there were still a couple of groups that were like...

MIA BULJAN: There were still a couple, yeah.

ERIKA ISOMURA: "I'm not sure what's happening in Camila's problem." Where have you been?

MIA BULJAN: Yeah.

ERIKA ISOMURA: So, um, that was a little bit of a surprise. So we're going to have to tip in to that just to touch again, and then I'll probably work with those two groups that I really felt like were not on the same anything as the rest of us.

MIA BULJAN: So when we're not on camera I want to check in with you, because in my mind I know what those two groups are but I wonder if you picked the same two groups. I was like, "What is happening there?" Okay, and then, um, that's all my questions. So now I just want to know, like, how did you think it went? Like, is there anything you, like, change? Is there anything you, like...

ERIKA ISOMURA: I was actually pretty pleased because...I mean one of my big concerns with the whole videotaping thing was, "Are they going to do any work, or are they just going to be all over the place, crazy?" And they were super engaged in it, and they really...I feel like they really, um, they didn't always show it but the conversations I heard and engaged in, I feel like they were really getting the idea of context, context. How does the context influence what I'm doing and how does multiplication work?

Not necessarily by any sort of standard algorithm but just how does it work in a model. How does it work with physical objects, because I feel like if I have that, it's not a huge leap to go into, "now this is how it's written as an equation and this is what you do with it, because you already know what you're going to get. So let's try it. Did we get that? Oh, that's how that happens," versus the other way of, "here's the numbers, the numbers, and the numbers and then I give you a word problem and you just kind of punch it into this formula and pray that it's correct, but you have no idea if there's anything." So.