FRAN DICKINSON: Let's go over here and take a look at this buttons task. Give me a sign of agreement or disagreement. "I remember the Buttons task." How many people remember it? Awesome! Wow, I'm really getting old at this point, because I wouldn't remember the Buttons task if I were you guys. On your tables, I've handed each of you a copy of a sheet that I'd like you to take a look at. You might recognize some of your work, but I've left off all names, so nobody knows whose work this is. But I thought that it would be great for us to take a look at some of the work that you all were doing on this task.

So as we look at this sheet, the directions say at the top, "Here are two different ways of figuring out pattern 11 on the Buttons task." Learner A and Learner B. Today we're going to refer to these learners at Learner A and Learner B. Below the two examples, you'll see a question. A series of questions. With your partner, compare and contrast these two different strategies. What is similar? What are the differences? Record some of the things you hear at your table on the lines below.

What I would really like to do right now is to provide two minutes of quiet think time for all of you. Look over the two Learners' thinking. Their work. And see if you can notice some similarities or differences. let's have two minutes of quiet work time, feel free to make some notes on your paper. And then we'll have a conversation. Go ahead and do that now.

As I'm walking the room I've noticed that some people are writing down questions that they have. I think that's an awesome strategy. So if you're not understanding somebody's strategy, you could write down a question, that when we open it up for conversation, you're free to ask of your partners.

Share what you guys think about these two different strategies. What are the similarities, what are the differences, what are the questions you guys have about these strategies? Go ahead and have those conversations. I'm going to be listening in. See how you guys are talking. STUDENT: I like Learner A versions better.

STUDENT: Yeah, but they… Learner A used multiplication and Learner B used addition.

STUDENT: and addition's probably easier…Kind of easier…

STUDENT: Addition could be easier for some people, but if you wanted to make, if you wanted to get it done faster, then you sh… like, like you should do Learner A's strategy. Like what Learner A did.

STUDENT: Yeah.

STUDENT: Megan, what do you think?

STUDENT: I think the same thing. Learner A made it easier.

STUDENT: I was kind of confused about the first one. The first one was really weird.

STUDENT: Well, I sort of understood the first one, but the second one was kind of confusing, because why would they just add 4+3+3+3 and so on? It didn't really make that much sense.

STUDENT: Because they hate times-ing.

STUDENT: Well, I guess, that's a way.

STUDENT: If you don't like wasting so much ink and paper.

STUDENT: Well, I, but, you know.

STUDENT: I think the main difference, probably, was that the first person did 11 times 3 plus 1, to find all the buttons, and the other person just added them all.

STUDENT: I know. Also, one person did 4, and the other person did 3 plus 1.

STUDENT: Yeah.

STUDENT: I think that B …

STUDENT: Oh, that's why they did 4!

STUDENT: Um, I think that Learner A had a good strategy, but they should have, like, included the picture to show that, the black button? Yeah.

STUDENT: I wonder why they did times 3? Oh yeah!

STUDENT: Because there's 3 buttons on

STUDENT: Buttons on a side.

STUDENT: Like, it increases by 3 buttons each time.

STUDENT: Okay, let's write that down.

STUDENT: Mr. D gave the, the Learner…B, like a 0. Like maybe he didn't get it right, because he got two wrongs.

STUDENT: Yeah, I think maybe, I don't know. It's kind of hard to read, too.

STUDENT: Yeah. This one is a little bit neater than this one.

STUDENT: I just liked Learner A's strategy, except they didn't put the parentheses like I like them.

STUDENT: I think I might have drawn it out, and then…

STUDENT: I don't know…

FRAN DICKINSON: So I heard some really great conversations about Learner A and Learner B's work as I walked the room. I was wondering if I could get someone to report out on what they heard at their table. And particularly, I would love to hear some questions that you guys were coming up with. Some groups came up with questions that they would ask Learner A and Learner B.

STUDENT: Well, what we were sort of talking about was how Learner A, like, explained their situation more. But Learner B, they just like did "I added…blah blah blah… equals 34, which is the number of buttons." And if you try to find the number of buttons, so, I think they should have explained more, like, where they got… The 3 and the 4.

FRAN DICKINSON: Some things that you're wondering about. Good! Kelcey, what did you hear at your table?

STUDENT: For Learner B, I understand how you got, like, 3 11's, but I don't understand where you got the 4 from. So that's my question. Where did you get the 4?

FRAN DICKINSON: I would like to kind of stop there, because I think that Kelcey raises a really good question. I've heard two really good questions about Learner B's strategy. One was, what are all these 3's? and Kelcey's question was, what about this 4? Where's the 4 coming from?