Passion For Teaching and Learning
Grade 1: The Brownie Dilemma
Teacher Debrief and Next Steps

SPEAKER 1: When I started thinking about this lesson, of course you start with the curriculum. You know, students in grade one need to explore fractions and understand that fractions are equal-sized parts of the whole, and maybe they're gonna use words like halves and quarters and things like that. So, I started with that idea in mind and then thought about, you know, the curriculum really talks about, of course, understanding fractions but through investigations. And what better way to investigate fractions than to ask the students to solve, you know, a real problem that my own two kids were dealing with when we went over to my sister's place and there's this tray of brownies, and then the brownies don't match up to the number of kids. And so I found this year that one of the things that really gets my students interested and gets their creative juices flowing and their math juices flowing is to try and solve a problem for my two sons, you know, to try and help me solve something for them. So, I created a little story for them, and it is a true story about my two kids and my sister's two kids and they've got 10 brownies to share and there's these four kids. So, it's not a straightforward question, but it gives them a context that gets them interested. It gives them a purpose for solving it. You know, even one of the students when they were trying to solve it, at first they decided that, Well, the four kids could have four brownies and then the grown-ups could eat the other six brownies, and it was great 'cause then I could turn to them and say, Well, you know, Sakina, I didn't eat a single brownie. The grown-ups didn't have any. The kids did find, you know, a way to get those brownies. And then that got them flowing and actually they ended up solving it no problem after. So, after starting with the overall and specific expectation, then it was really important for me to sit down and figure out, you know, what are the big ideas that I want to get out of this lesson One of the big ideas is definitely this equal-sized portion of a whole. I definitely wanted to get that from my students. And then I started, as I was thinking through the lesson, I started to wonder what else I would get from them. Can I get them to talk about halves Other sized fractions like quarters Would things like thirds come up and would they understand those Another big idea I thought I could push my students was, you know, would there be numbers of brownies that would be easier to share than other numbers of brownies And you heard in the congress them starting to figure something out about odds and even numbers. So, that was a really interesting piece of information that now as a piece of formative assessment moving forward, I can maybe play around with that big idea some more and talk more with the students about what numbers are easier to share, talk more about odd and even numbers. Also when preparing for this lesson, I sat down and I tried to anticipate, Well, what if I've got students who get stuck What would I do for them Because the numbers--10 brownies and four kids--is quite large, I thought, What if you just gae them two brownies and four kids So, in

anticipation of the lesson, I came up with a way to modify the question so that if I had some students who are really struggling, lessening the numbers might get them unstuck. At the same time when I was planning the lesson I also thought about where could I go with the lesson How could I extend it And so I came up with another couple of possibilities besides 10 brownies and four kids. What about five brownies and four kids Or what about three brownies and four kids So, a lot of planning, you know, thinking through the student responses. I sat with paper and Post-it notes and drew out what I thought students were going to do so that I would be prepared for different scenarios that might come up when I'm visiting from group to group. Differentiated learning, it's a big part of everything you consider when you're planning your lessons. With the math rack, you know, there's always entry points for students with any of them. I had students, I was listening to them even on the carpet today, I had a student and I heard him say, you know, I found, you know, in the eight and eight he found the 10 and then counted on. So, for him, you know, he had that 10 was his entry point and counting on was an easier strategy for him. When planning my lessons here, you definitely need to think about, you know, what are you going to do to be inclusive to that student when those numbers like 10 brownies and four kids, it's just overwhelming And that's why, like I said before, it's so important to consider that before and then think about what an alternative would be. And so lessening numbers, you know, reducing the number is a huge strategy. So, that's why I thought ahead about for a student who's struggling they might start with two brownies and four kids instead. Or even what if it was--I guess two brownies and four kids would be really good. I mean, you could even lessen it more. Two kids, one brownie. I mean, that can be the starting point that can just send the ball rolling. That's all you need. So, it's always important to see in your planning where you might want to push the kids to go. So, I always sort of plan ahead if there's some way to enrich the numbers or push them a little bit further. It's always great to have that planned out ahead of time. Sometimes I like to write it on cue cards, too, so you can even leave a card with a student and then you're able to get around to more students and visit with them while another group is sort of pushing themselves and excited about moving a bit forward. So, now it's a matter of deciding, you know, where I want to go next with this lesson. I was noticing this student work here, they decided to go straight to, you know, quarters when they decided how to share the 10 brownies. So, I want to get back to my students and I definitely want to talk to them about maybe halves and quarters and maybe even seeing if I can tease the big idea out of them about what's bigger A half or a quarter