LIZ O'NEAL: I'm Liz O'Neal. I'm a first-grade teacher.
KRIS ACQUISTI: And I'm Kris Acquisti, math coach for Jefferson Elementary school district. Could you please take us through the sequence of activities in this base ten formative assessment that you've done so far.

LIZ O'NEAL: Sure. We started off with a pre-assessment called Maria's Piggy Bank and this was given cold to the class. There was no preparation whatsoever. After this pre-assessment I evaluated their work, and most students were successful, especially in numbers one and two. The third question, there was some difficulty but I wasn't sure, from the pre-assessment, whether it was the wording of the assessment or understanding of composing and decomposing numbers.

KRIS ACQUISTI: After you gave the pre-assessment what lessons, warm-ups and activities have you done so far?

LIZ O'NEAL: I chose activities to practice composing and decomposing numbers and again my focus, for this unit, was to try and understand whether the students were having difficulty with coin values, which is the pre-assessment, or composing and decomposing numbers. I wanted to understand if they were able to compose and decompose numbers successfully without worrying about the value of coins...That was something that I would do as an extension, later on.

KRIS ACQUISTI: Could you please take us through the sequence of activities in this base ten formative assessment that you've done so far.
LIZ O'NEAL: Sure. We started off with a pre-assessment called Maria's Piggy Bank and this was given cold to the class. There was no preparation whatsoever. After this pre-assessment I evaluated their work, and most students were successful, especially in numbers one and two. The third question, there was some difficulty but I wasn't sure, from the pre-assessment, whether it was the wording of the assessment or understanding of composing and decomposing numbers.

Warm-ups that I started with. We have done "Re-naming that number." Which we will be doing today as well. We also did "Quick look at Ten Frames", which again, we will be doing today as well. "What is my shortest name?" So those are the three warm-ups I have used, quite a bit, over the last couple of days.

KRIS ACQUISTI: Any activities?
LIZ O'NEAL: The activities. We have done "How many more", "Finding Tens", "Which is Greater? Which is Less?", and then the activity today, this will be our second time, "How Many are Hiding?"

KRIS ACQUISTI: O.K. Good. And so that brings us into today's lesson. What is your lesson going to look like today?

LIZ O'NEAL: Today. As soon as the students walk in they will be working on their math message which is on the board. They know they need to get started right away and they will be re-naming a number. The number they will be re-naming is thirty-four.

After we finish with re-naming the number, I will give them some time to work on it individually, I will walk around and check for strategies. We will spend a few minutes comparing strategies, different strategies, putting them up on the board, but this will be a quick warm-up...No more than five minutes or so.

After this, we will go over to the carpet and be looking at "Quick look at Ten Frames." This is a structured student talk. It will be in the form of a number talk...Which we do extensively. It is a big emphasis for our math department, here in Jefferson, the structured student talk. So, I will be showing them a ten frame. They will have a few seconds to figure out what that number is. I will then put up some sentence frames. I will give them a moment to show me when they have their number. When they are ready to go. So, I want to make sure everyone is engaged. Once I see that everyone has a number in their head, I will give them some time for pair share or partner talk. But I will have the sentence frames up. So that they do have a structure they need to follow.

After the student talk, during that time, I will be walking around and checking for different strategies. Checking for understanding. Then we will spend a few minutes going over some preselected students so that I can get some different strategies. So, we will have some preselected different strategies that we will share out as a group. And I will make sure, that at the end, everyone is convinced that it's the same number. The same number on the ten frame. After that, we will go into our main activity, which will be "How Many are Hiding?" This was very successful the first time we did this in class. The students loved it. I will go over again the sentence frame that I will later put on the board. But I want them to practice so that they know exactly what they are supposed to be asking each other. So, it will be a structured talk. They will also be asking each other how they know, how they know their answer, how they know they came up with that. So that they have to convince their partner, show their thinking about how they know about what number they came up with.

This activity is...Everyone will start off with ten, each partner group, ten cubes. And they will be grabbing some, hiding them under their plate. Putting the rest on top. They have to ask each other, "How many are on top?" And then afterwards, "How many are hiding?", and how do you k

As I walk around groups, partner groups, that are very successful with the ten, I am going to give them a few more cubes to expand their thinking.
KRIS ACQUISTI: What do you want your students to know and understand as a result of working on this lesson?

LIZ O'NEAL: I want my students to be very comfortable composing and decomposing numbers up to ten. This will be something that is expanded later, up to twenty, but I want to have comfort up to ten, composing and decomposing in a variety of ways.

KRIS ACQUISTI: What will your first graders say, write, show or do to communicate their understanding?

LIZ O'NEAL: Well, first of all, they will use sentence frames and they will use a structured talk to communicate orally, their understanding. Part of the lesson will be writing down their answers to show me, in written form, how many are hiding and how many are on top. As well as their Math Message books in the morning for their warm-ups, they will be also writing down their strategies to re-name that number.

KRIS ACQUISTI: And what would you like my role to be today?
LIZ O'NEAL: I would like you to do, as usual, to walk around checking for student understanding. If I leave something out go ahead and add it. I don't care if you put that in. But, you know, if there is something important that, or if a student says something I couldn't hear, please bring it to the attention of the class...So that we can all share in that.
KRIS ACQUISTI: I'm looking forward to it today.
LIZ O'NEAL: Me too.

