ANTHONY ROGERS: Hi, I'm Anthony Rogers, 6th grade math and science here at Anna Yates Elementary School in Emeryville, California.

LESLIE THORNLEY: I'm Leslie Thornley and I'm the math coach here at Anna Yates.

TRACY LEWIS: I am Tracy Lewis and I'm the second grade teacher at Anna Yates Elementary School.

CAMILLE PARIS: I'm Camille Paris, third grade teacher at Anna Yates School.

JAGUANANA LATHAN: Hi, my name is Jaguanana Lathan. I'm the principle of Anna Yates Elementary School.

LESLIE THORNLEY: Good morning.

TEACHERS: Good morning.

LESLIE THORNLEY: Thanks for being here today and I'm really pleased that we're going to get a chance to work with Tracy and watch her teach a lesson today. So I think before we get started and put our head around what we're going to be doing, and what we're going to be looking for in her classroom is just to spend a few minutes reviewing the mathematics that the kids engaged in. And then we'll have a chance to step back and talk about that in (???) day.

LESLIE THORNLEY: It sounds to me like I'm hearing you talk a little about that whole, you know, we've been talking about using pictures, numbers and words to explain our thinking and yet there are times when we ask them to...

TRACY LEWIS: To do something and using pictures, numbers, and words here is really, really challenging.

CAMILLE PARIS: Challenging in terms of...

TRACY LEWIS: In challenging...

CAMILLE PARIS: It's time consuming.

TRACY LEWIS: Well, yeah. It can be time consuming but if I pick up a piece of paper and a student has an answer being accurate or less accurate, I'm looking for how they thought about the problem. If I don't have that information, it's difficult for me as a teacher to clear up misconceptions or to, um, actually see maybe they discovered something new or something different. Like some of my students have discovered different ways because it was comfortable for them, so.

LESLIE THORNLEY: Okay. So why don't we take a minute and step back, and there's a copy of a protocol that we're going to more or less follow today in working with Tracy this afternoon. So before the observation, we're going to give Tracy a few minutes to talk about the mathematics and the experience that she's given her students with this task; and the work she's been doing this year, and the thought that she put into planning the lesson. And then she's going to give us a focus question. And when we go in and do the observing of the classroom, we'll be gathering data on what is that she's asking us to look

for. And I'll talk about that etiquette in a moment when we get into the classroom. So Tracy, why don't you tell us about the mathematics and...

TRACY LEWIS: Okay. So this is basically working with word problems. And one thing that we've noticed, our whole team has noticed is that when we work with 2nd graders with word problems, they're really comfortable going, "Ooh, I see this number, I see that number. Let me add them together. Bam, I have my answer" without really reading through the problem. Um, because that has been their experience from kinder, first, um, is a lot of work with either one to one correspondence and adding on to that. So when we get to 2nd grade and we start talking about word problems, a lot of them don't recognize that even though they might see the word more or they might see how many, it doesn't always mean that they're supposed to add, and try to figure out what is the problem really asking me about. Is it asking me, you know, how many all together? Is it asking me to take things apart? Um, this is a grade level where, at least where I've noticed is really starting to change for them. And they have to start really paying attention to the words and matching those words with operations that they really already know how to do. Um, so that's pretty much the math portion of it.

The question or this was actually done kind of in between the time when we started introducing word problems. This is a MARS task, so we were kind of just starting the explicit instruction on looking at a word problem and breaking it down. Um, I've been working with my students on always, you know, representing their thinking with some kind of picture representation, using numbers and using words. I mean, in the beginning that's pretty much what it was, just trying to get them to put something on the paper. Now I don't have problem with them putting anything on the paper; now the question is "Did what you write down, does it answer the question?" Because you can have a lot of information written down, but none of it will answer the question. So, or little parts of it here might answer the question, this might just be some extra information, or somebody might just decide "I want to draw another cute little picture," or something like that. Trying to really get away from that idea but getting them to make their numbers, and their words, and their pictures all relate in some way. Um, and you'll probably hear me tell them, "Okay, if I pick up your paper, will I understand what you did?" That's my goal for them to...when somebody picks up your paper, they should be able to see, "Okay, this person did this and they did that or they did this algorithm," or whatever it is they did. And then there should be some words to explain because maybe you didn't write, you know, 63 first, maybe you wrote 19 first; so giving us some picture on paper of what you actually thought in your head. Because in the beginning of the year the answers would be, when it says show your work, "I counted. I did it in my head." Well, what did you do in your head? What was going on in your head? What picture did you see because it may not be the picture that I see? Um, and then actually having the discussion around...allowing students to know that it's okay to be incorrect and have an incorrect answer, and how to work through the process of getting to a more accurate answer. I'm trying to actually get away from saying wrong. I mean, although there is an answer that is actually incorrect, but when you say, "Oh, that's wrong," a lot of kids, they start to shut down. Like, "I'm never going to get this right. I always get it wrong." So I've tried to introduce the vocabulary of more accurate, most accurate, least accurate. Which answer, um, more accurately answers the question? And did we actually answer the question? So that's pretty much what I'm looking at.

What I have noticed after we've done this task is that I still have students, god bless them, they still look at a problem, they will read the problem, and they'll go "One number, two number, add them together, that's my answer." And when I ask them, "Okay, that's how you got your answer, why do you think you were supposed to add?" They have no idea or they don't have an explanation for me. Um, so that's pretty much what I want to look at and in this re-engagement task, looking at how their pictures, their numbers, and their words work together, and that's it. And some of these are kind of challenging to get an actual picture for.