

>> So when I was doing the number talk, Cesar got his compensation mixed up.

>> Oh yeah, tell me about that.

>> So he was starting to subtract, and I really liked how he just kinda, he got to here, and he went, "Oh, wait a minute, I'm gonna get a 102, which was one of the answers that somebody else got," and I know he knew that was -- I know he was like, "Oh wait." And so he switched, and he switched to the Australian method, which was kind of cool. And then, we've been talking about where the numbers are, because it's very similar to the standard algorithm. And ...

>> So you asked them -- it was in Spanish ...

>> Yeah.

>> So we're just gonna have to back up a little bit. Noemi had done hers sort of using this standard algorithm, and Monse and Griselda [inaudible] said that they [laughs] also did the same thing.

>> Yes, they did the same thing.

>> Okay, so then when Cesar first started, he tried to compensate by adding three to each one ...

>> To make a friendly ten, yeah.

>> So, when you're subtracting ...

>> That works.

>> Than works, so that's really interesting to sort of explore, how compensation is different in the different operations.

>> Well, and we've been talking about friendly tens in addition, but you get them in different ways, you don't -- you don't -- I guess you could kind of compensate, I'm gonna have to think about that.

>> Well, what kind of model could you use to show compensation, you know, not just using symbols like this, but I mean like, um, maybe ten frames or a number line, or like some of the other models that they're used to using, maybe you could help them see that.

>> Yeah.

>> The differences.

>> Yeah, but then ...

>> I'll let you think about it.

>> Yeah, no, I'm gonna have to think about it, I'm not really sure how I'm gonna do that. But I like how, then Cesar switched to this and he, he could, he knew where the 16 was on the standard algorithm.

>> So we have to explain. This Australian way, so um, when we first started talking about this way, it was a way that I had learned from watching Doug Clarke or Larney, who was a coach from Australia, so I don't know that it's actually Australian [laughs].

>> [laughs] Well, but that's what we call it in here.

>> Okay, so that's good. [laughs] Okay so, just to clarify ... okay, so, so, so really interesting -- in Spanish, you asked them what is the same about what Noemi did and what Cesar did when he used this ...

>> And what's different. I asked them what's different, yeah.

>> Same and different. So, you asked them to compare and contrast that. So what kind of things were they?

>> Well, they told me they were the same numbers, and that things were stacked up on each other, but that there was more writing here, and that if they ever got confused doing the standard algorithm they knew they could do the Australian method, and that it was easier to do. And then I said, "Well, where is the 16?" And so they said, "Oh, well, it's right here," and he pointed, and I said, "Where is it on the other one?" That took a while for them to find but they did find it, which I think is -- I want them to see that it's really very similar.

>> Yeah, it was so interesting when um, when she said that this was the 16.

>> Yeah.

>> Like this is 16 and this is 16, but they didn't necessarily see those together, or ...?

>> Well, and then she pointed to the 6, and I was like "That's 6."

>> Yeah.

>> And she said "Oh, and the 1," and then somebody else said, "Well that's a 10," which is nice that they know that, so I wonder if writing that ...

>> Yeah, it's nice that they're saying that rather than you.

>> Mm-hmm. And, like, Hector first said -- said he could add 5 and 3 and get 80, and I was like, "Wow, what's 5 and 3, I get 8." So then I talked to him, "Oh, because it's really 50."

>> And so what do you think about in this first example, the idea that we talked about last week, about how you show the decomposition?

>> Oh, and I did it again, didn't I. [laughs]

>> Well ...

>> [laughs] Yeah, um, yeah, but he was thinking about how to decompose the 7, because I think in his mind, he just moved 1 over and he didn't really decompose it.

>> Ah, yeah.

>> I think he just said, "Oh, it'd be the same thing as 36 plus 60. I'm not gonna ..."

>> Oh, interesting.

>> Because then when I said, "Well, how did you decompose the 7?"

>> Has he used that strategy before?

>> Well, yeah, but not probably for a couple of months. He's like, "Oh, 3 plus 4. No, 5 and 2. No. Oh, 6 and 1," so he was trying to figure out what, because he had just kinda skipped that and said it was 36 plus 60.

>> Right. I had forgotten about that. So he -- at first, he said when he broke apart 7, it was 3 and 4, and it was so funny because everyone was like, "What? That's not how you get a 1." [laughs] So they sort of came together to the conclusion that they were gonna break it into 6 and 1. So what would it look like if you used the other recording strategy? Not for Hector, who clearly knows.

>> Yeah.

>> But for maybe others ...

>> Yeah, I need to draw another branch to my tree there and write a 30, and then a 6 and the 1. Do you want me to draw it on there?

>> Yeah, could you? I wanna see what it looks like. Sorry.

>> I would just, I would do this. So it would be like, a three-part tree instead of a two-part. So this comes from this number, so I'd have 37.

>> So um, the alternative, and I'll leave this up to you, but the alternative is to show it like this.

>> Ooh.

>> And then show this broken down again.

>> Ooh, okay.

>> And I don't know, I don't know with, um ...

>> Because I've done it this way before. But that, yeah, this is a little more obvious.

>> Does it feel more obvious to you?

>> Yeah, I think so. Because we've done, we've broken it into two before so then it's like expanded notation, so they'd see  $30 + 7$ , and then we could break the 7 down.

>> So just in terms of recording, those are two options that maybe even trying it both ways. I mean, they didn't seem any worse for wear. I mean, they really did understand what you were saying.

>> Oh yeah, I think so.

>> It's just, it might be nice for those kids who are still just struggling a little with the decomposition, maybe.

>> Mm-hmm.

>> To see like, the entire thing.

>> Okay.

>> So um, do you have any idea on what you will do for the next one? Like have you picked numbers, like were you getting ideas for that while you were doing this?

>> I wanna go back to big numbers. I wanna work some more ...

>> Oh, you can't --

>> Mm-mm.

>> Well  $59 + 37$ , some would argue that's pretty big for 2nd grade.

>> Yeah, but when I asked them what a really big number was, nobody said -- I think Vanessa said a small number was 97, and a big number was 500.

>> Oh, okay.

>> And I was like, "Oh, so do you mean 97 is small? Or do you mean this is a really easy number and I don't have to think too much?"

>> And what was --

>> And she said it was easy. It's like, oh.

>> So that's a nice little assessment. You asked them what's a big number and what's a small number to get an idea of what range they were working in.

>> And most of them said, like, a big number would be like between 5 and 18 -- 5 and 800, and most of them said small numbers were 0, 1, 2. Cesar said ...

>> 5 halves. [laughs]

>> No, he said 1,500, and then negative 1,500.

>> [laughs]

>> So a negative number. I was like "Yes, Cesar, okay."

>> Yeah, so that was awkward during the lesson [inaudible].

>> Yeah. But he's really trying to figure this out.

>> Yeah, he's really, yeah, he is.

>> And, um.

>> Bless his heart.

>> Yeah.

>> Okay.

>> That's okay. And I'm sure it'll come back.

>> So was there anything else you wanted on the number talk? [inaudible]

>> We have one minute till the end of recess.

>> So tell us, cause we can get, we can get um ...

>> Mia.

>> Mia, whatever her name is, we can get her anytime. So why don't you either tell us about what you want, tell us about the class. Why don't we get ...

>> Well, when I got on this year, I thought, "This is gonna be really challenging." Their number sense is really good, and I started out ...

>> Really good?

>> Yeah, it's really good. And I -- I know, and sometimes I think they're not doing what they should be doing. But I started out the year using my standard things to help them figure out numbers, and they were all over it. It took them about ten minutes to write a number chart to 100, with little squares of papers and construct it from scratch, and I've had classes take an hour.

>> At the beginning of the year.

>> At the beginning of the year, and these guys are all over it. We counted to 1,000 by 10s in like the end of September, and they just like, they get it, you know, "How many 10s are in 130? Oh, 13," "It's like you didn't even think? No, I don't have to think, I know," so their number sense is just amazing. And then we get to things like this and frac-- we get stuck on fractions.

>> Well, fractions ...

>> Are hard.

>> It's a good place to get stuck. [inaudible]

>> Yeah, well, we're stuck.

>> So, so tell us about the makeup of the class. So we were speaking both in Spanish and English ...

>> So all of my kids ...

>> And I'm sorry I kept calling it "orbeja," which I mean, they're so cute, they were like, "Like what are you talking about?" And then one time I called it an "orejas." I'm like, how many ears does your dog have? [laughs] So the translation's a little wonky so I'm sorry, they were so cute.

>> [inaudible]

>> Yeah.

>> Well, they didn't know you spoke Spanish.

>> And then [inaudible] compadre, "Turn to your compadres."

>> Yeah, that was cute. So my class is, I have nineteen students, four 1st-graders and fifteen 2nd-graders, and they're all English language learners. I have three or four level twos, and a whole slew of level threes, I don't know exactly.

>> These are your SALT levels.

>> Yeah, these are my SALT levels. And I have Haley, who is an IFEP. She was considered fluent in kindergarten but her parents wanted her in the bilingual program so she is here.

>> And does she speak Spanish at home?

>> Yes -- well they speak both at home. The parents speak both. And a lot of my parents speak both, they -- I just, I discover it later because they don't speak to me in English, and so I'm never really sure who speaks English and who doesn't speak English at home. But like, I know, like Hector has, I've had his three older sisters and they all speak English and Spanish and they're really, they're really fluent.

>> And so we were talking a little bit about the placement. How do you get placed in a bilingual class?

>> It's parental, it's what the parents want. They get to choose the program. In the fall of kindergarten, they can choose SEI, which is English only, or they can choose bilingual. At this school, those are their two choices.

>> So SEI stands for Sheltered English Immersion?

>> Sheltered English Immersion, uh-huh.

>> Where they would typically need a [inaudible], or zero.

>> Mm-hmm.

>> Okay, so, so when you are planning a lesson, do you usually ... So there's a map -- the district has a master plan about how much English and how much Spanish they would get, so it's 2nd grade, when you're planning a math lesson. Do you typically teach it in English or Spanish?

>> Spanish. I start out in Spanish. Everything I -- when I introduce a new concept, it's always in Spanish.

>> Okay.

>> Even when I'm teaching English language development, I will often explain something in Spanish because they know how a language works in Spanish, and then I'll ...

>> So you can make that connection?

>> So I can make the connection, and help them make the connection.

>> Okay, so you're using Spanish -- about how much, what percentage of the time do you think?

>> It's about 70% of the time. But I -- one day won't be 70%.

Could you wait just a second please? Okay. Cierra la puerta. Afuera, y cierra la puerta.

>> Bye.

>> Ahí nos vemos. Is this your ELD class?

>> Yes.

>> So after this recess, she doesn't have her class back, so they're a little squirrely.

>> Yeah. And they're squirrely. Um, so it doesn't work out 70% every day. You know, some days I'd probably more 90% Spanish and 10% English, and then other days it flips. It depends on what I'm doing.

>> So if you're introducing a lot of new concepts, you're gonna be doing a lot in Spanish.

>> Do more in Spanish.

>> And then you gradually move them over to the English vocabulary for that concept.

>> Like the word "constraint," tomorrow we'll talk about it in Spanish. It's a cognate so it's the same in both languages.

>> Constreñimientos.

>> Uh-huh. And we'll, I'm sure we'll have a long discussion about why it's a cognate and we'll add it to our list.

>> Nice, okay. Thank you, Katy, for having us.

>> You're welcome. Yes, thank you.