

SPEAKER: Thank you very much. I thought that moment of the "If we turned it this way, it would be a different kind of angle" was really powerful. Just having to elicit that. One of the questions that came out of the research lesson this morning was how can we create something in our classroom where those misconceptions are voiced comfortably, and I thought it was a really beautiful moment for that. Seeing the visual, it seemed to affect Juju's thinking.

One thing that I've just been puzzling about is, I was so hungry for measurement all during it, and I was so glad you didn't tell them to measure. Why didn't the students ... They actually said it at that front table, "We should measure," but they didn't do it. They didn't do it informally, they didn't do it formally, they didn't do it for angles, they didn't do it for lines. I was really hungry for them to want that measurement for the precision.

I just had this sort of hypothesis, which may be wrong, but I wondered in Juju's case, when that angle was turned, if someone had thought to put a right angle up against it, would that have helped him get that conservation of shape. Because I don't think that was there, I don't think ... So what is it that helps you get conservation of angle if you don't have it. It was really a great opportunity to ... Gets the kids thinking. Thank you.

SPEAKER: I was wondering if the students might have benefited from seeing the visual models. Kind of like at the end, the kids who went up and showed, because then they could have shown their proof as well. I felt like for some of the students, especially for students who didn't talk at all throughout the lesson, if maybe that might have been advantageous for them. That's something I was wondering about.

SPEAKER: Going back to Max and him convincing the girl. What he said was ... What I heard was that, he said if the slant length came down, it would be longer. I thought for him to visually see that was amazing. Absolutely amazing. To be able to springboard that into hypotenuse and triangle inequality, it's amazing. Knowing that sum of angles was 180, it's so great. I was ... They're gonna bust out the Pythagorean theorem pretty soon.

SPEAKER: I'd be curious to know how you made the choices for each question and kind of where they came from, but I did notice, it was interesting how it required students to call upon their understanding of shapes in general to know which shape would allow for which kind of triangle. I thought that was really interesting, but I'm wondering if you had tomorrow to teach the students, what would the follow-up of those questions be, in terms of pushing on that understanding for what shapes allow for which kinds of triangles and why? And what that says about those triangles? I don't know if you even consider what the next step of that might be, but that's something I'm curious about.

PETA ROBINSON: [inaudible] question came up, partly in the conversation that happened in lesson last week, because they did bring up the "I don't think you can have a triangle with two 90-degree angles with it." Because Bennet brought it up in the lesson last week. "I don't think ... You can't have a triangle" In one of the explanations, he brought up that you couldn't have a triangle with two right angles or more than one obtuse angle and things like that. I think part of it was seeing if they would build upon that today, remembering what we did last week and still continuing to ... Can you come up with a reason

why, because we also had the two boxes over there that didn't have any triangles and also, culminating with that in terms of why can't you have those. With everything you know about the triangles that you know now, why can't we have those as well? That was part of it.

HILLARY LEWIS: But I think she was getting to the right isosceles. Is that what you were ... like the specific triangles that we were asking them to make? Is that what you're ...

SPEAKER: I was interested ... Yeah, and just the way that that connected to the shapes of the [inaudible] triangles that you could make those with. I didn't know if there was a deeper [inaudible] that students might see when they choose between which shape ...

HILLARY LEWIS: Well, we did, and I ... By choosing the square and the rectangle first, that was deliberate in placing those in terms of would they connect what they know about squares and rectangles with the right angle and the 90 degrees, and I think they did, but I'm not ... I didn't hear them talk about it.