Kindergarten Geometry Pre-Conference

(Before the Lesson)

TP: Tanya Paris, Kindergarten Teacher JL: Jenna Laib, Math Specialist

JL: What do you expect students will know following instruction?

TP: Students will be able to sort and classify shapes.

JL: ...like if we gave them a bunch of cut-out shapes...?

TP: Right. They would be able to not only sort them into categories based on appearance, but articulate what makes a triangle a triangle. What makes a square a square. I want to hear them talk about their definitions and use the mathematical vocabulary.

JL: Looking at the unit and thinking about your experiences, what misconceptions do you anticipate students might have?

TP: Students sometimes have difficulty telling the difference between a square and a rectangle, but this class seems pretty solid.

JL: I noticed that, during the last lesson, Tiya even said that "squares are in the rectangle family, but they're not all rectangles." What do you think has made the difference?

Jenna Laib - NCSM/NCTM 2024 - "Building Pedagogical Content Knowledge Through Collaborative Coaching" jennalaib.wordpress.com/ncsm-nctm-2024 page 1

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TP: I like that we are exploring discourse together. It's made me think a lot more about how I can get kids to talk about their math learning.

JL: I'm hearing so many great conversations! Have you noticed any students that seem to have confusion over naming the shapes we've done so far?

TP: It was really only two or three kids that seemed confused about squares and rectangles.

JL: Which kids?

TP: [redacted names]

JL: How do you think we could help clarify it for them?

TP: I wonder if they're overgeneralizing. Like we've focused so much on *rectangles* have four sides! 1-2-3-4!

JL: Oh, that's true! Do you think that would lead to any other misconceptions?

¹ Tanya had chosen 'discourse' as her goal for her work with math coach Jenna that year.

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TP: We have worked a lot on classifying shapes based on the number of sides, but we only do a limited number of shapes. I wonder if students think all 4-sided shapes are rectangles.

JL: Hmm... that's interesting. How do you think we could figure out if students are confused?

TP: Do you think I should introduce the rhombus? I usually do that in the unit on patterns.

JL: I wonder if that's now *another* shape to name, for kids that are already confused about the nuances of names.

TP: Oh, maybe.

JL: What if we created a weird shape? An irregular shape? But it still has four sides.