Karen Koellner's background information

Commentary on PD EM Representations & Tools Session 1

CLIP #1 FOR LEARNING CONFERENCE

VIDEOS:

VIDEO THE PARTICIPANTS WATCHED – RANDY AND JENSEN – SOLUTION METHODS

VIDEO OF TEACHERS DISCUSSING RANDYS SOLUION (REPRESENTATION SESSION 1 PD00003.3MOV

Background
Teachers had completed a math task (Representations & Tools PPT, Session 1, slide 6) in preparation for viewing the Randy and Jensen clip (Representations & Tools PPT, Session 1, slide 7).

In the excerpt, the teachers just finished watching the clip and are discussing the video debriefing prompts (Representations & Tools PPT, Session 1, slide 8). Students completed Hannah's Triangle Problem.

Facilitators Commentary
My intent in this module was to encourage teachers to become aware of the mathematical significance of how representations and tools are used. In this discussion, after one teacher identified that Randy was solving the problem by finding the center of dilation, I probed further by posing a question about the mathematical foundation on which such a solution approach is built.

The teachers' comments that followed seemed to indicate two developments in their thinking. The first, teachers were beginning to understand how a dynamic view of similar figures enabled the students to justify claims about the triangles based on the distances from the center of dilation to corresponding vertices. In this case, the representations and tools supported the students' processing. And second, the teachers were becoming more reflective about their own understanding/thinking about the mathematics.

Throughout the LTG training, I have hoped teachers would be open to a more dynamic view of the mathematics involved without feeling they are being criticized for having taken a traditional approach in their teaching.