Crafting Learning Experiences for Teachers: A Design Dilemma

Directions: Individually, review the scenario below and consider the questions that follow. Discuss with the group at your table.

You are leading a team of professional development designers. The team is charged with designing a series of PD sessions to develop middle school mathematics and science teachers' understanding of student thinking. The group of teachers varies considerably in every conceivable way—content background, teaching experience, and extent and nature of previous professional development. The team agrees that they want to have teachers analyze student work, but have differing views about how to approach it.

PD designer #1: We want teachers to be able to understand what their students are thinking as instruction progresses so they can adjust accordingly, but that is very hard to do in real time. Let's ask teachers to bring in samples of their students' work so they can talk about them with one another and get a sense of how their students are thinking about the targeted idea.

PD designer #2: One of the challenges we see in instruction is that teachers expect students to approach problems/questions in certain ways. I'm concerned that if teachers bring in work from their own students, the examples they select may not reflect the range of student thinking about the targeted idea. I think teachers need to experience the full range of student thinking when they analyze student work. Let's provide a full set of examples, even if we have to make up some of them ourselves.

PD designer #3: I have a different concern. What if some of the teachers can't answer the questions themselves? In that case, they'll be spinning their wheels trying to figure out how students are thinking. I think we need to provide an opportunity for teachers to try the tasks themselves.

The team has to decide what to do and in what order: (1) have the teachers bring in and discuss samples of their own students' work; (2) have the teachers discuss prepared samples of student work that the project provides; (3) have the teachers work on the problems themselves.

Discussion Questions: Which of these strategies would you recommend? In what order? Why?