TRAINING TEACHERS IN THE EFFECTIVE MATHEMATICAL AND PEDAGOGICAL USES OF SOFTWARE

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Overview

Introduction	2:00–2:05
Dynamic Geometry in Classrooms	2:05–2:25
Dynamic Number	2:25–2:45
Questions and Comments	2:45–3:00
Small Group Discussions	3:00–3:30
Sharing	3:30–4:00

Discussion Questions

1. One distinguishing feature of technology-centered professional development is its association with changes that are taking place in the classroom, such as changes in the means of instruction. How can we leverage this change brought about by technology to convince teachers, at the same time, to consider changes in their instructional strategies, changes in the relation between them and their students, and changes in how they facilitate student learning?

2. Technological change may make teachers uneasy. Will this unease interfere with their ability to consider pedagogical changes? Or can we leverage it in some way, by providing teachers with strategies that they will find useful in coping with the new elements?

3. This presentation has focused on ways that technology training can be woven into professional development without making the nuts and bolts of the technology the focus of the training. What other ideas do you have for achieving this goal?

4. Our participant-centered, inquiry-based training method models the instructional ideas and strategies we'd like teachers to use. In particular, every exploration is followed by a discussion of "How will you teach this content in your classrooms?" This approach of integrating technology, mathematics, and pedagogy seems effective. Do you have ideas for how this approach might be improved?

5. Besides the issues addressed in this presentation, are there any other challenges associated with technology-centered professional development that you have encountered? What strategies did you take to overcome these challenges?

6. Technology-centered professional development provides a good opportunity for developing a measure of teachers' technological pedagogical content knowledge in a dynamic number/geometry environment. Do you have any comments and suggestions for what it would entail to measure such knowledge?