Investigating the connections between content-based professional development and teachers’ instructional choices.

What do teachers gain from sustained, content-based professional development (PD)? Three case studies of teachers who underwent an algebra course at a university are presented. The aim of this research is to understand how teachers form connections between content presented in professional development and the content they teach in class. Currently, literature about PD only begins to address how such courses affect teachers’ instructional choices in the classroom. After completing task-based interviews to map their content knowledge of algebra and being observed teaching those concepts in class, teachers contextualized this PD program within the greater narrative of their PD experiences. The connections teachers made between the PD content and classroom content could be classified as direct, indirect, and missed. These classifications characterize the new content knowledge that teachers’ gained during PD. However, these connections were only one part of the greater picture of teacher development. Other mediating factors include fluctuating beliefs about mathematics, previous PD experiences, and mathematical confidence. This study aims to contribute to the body of knowledge about PD by beginning to connect teachers’ experiences in PD with their instructional choices. (Received September 16, 2013)