

1086-M1-2009 **Priya Vinata Prasad*** (pvprasad@math.arizona.edu), 617 N. Santa Rita Ave., Tucson, AZ 85721. *Understanding Changes in Teaching Practice After Content-Based Professional Development*. Preliminary report.

How can researchers design professional development so that it has a profound and lasting effect on participating teachers? This study involves a group of middle-school teachers participating in a three-year masters program designed to develop their mathematical leadership. 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 in professional development has not fully addressed how such courses affect teachers' actual instructional choices in the classroom. Each teacher took part in a semester-long course in algebra designed specifically for this professional development program and then participated in a task-based interview designed to probe her understanding of the algebraic concepts covered in the course. Then, teachers were observed in their classrooms as they taught similar algebraic concepts. Teachers' content knowledge was explored again in a post-observation interview. Preliminary findings imply that this program did change teachers' perspectives on algebra and their ideas about teaching algebra, based on teachers' self-reporting, and that these changes percolated to the classroom in a variety of ways. (Received September 24, 2012)