1056-P5-1692 Rebecca H McGraw* (rmcgraw@math.arizona.edu), 617 N Santa Rita Ave, Tucson, AZ 85721, and Priya Prasad. Researching the Integration of Mathematical and Educational Perspectives in Mathematics Teacher Preparation. Preliminary report.

Improving mathematics teacher preparation requires the combined attention of faculty who teach future teachers – namely, mathematicians and mathematics teacher educators. However, jurisdiction over teacher preparation is often divided across separate and distinct academic units, and administrative and cultural barriers impede communication and joint work. The separation of these disciplines is reflected in the separation of mathematics learning from the learning of pedagogy in teacher preparation. Our research focuses on the work of mathematicians and mathematics teacher educators who attempt to overcome such barriers by co-teaching courses for future secondary mathematics teachers, with an explicit focus on integrating the learning of mathematics with the learning of pedagogy. The research is ongoing, however several themes related to collaborating across disciplinary boundaries have been identified, including (1) asymmetries in the structure and process of collaboration that may be due to differences in disciplinary cultures, (2) similarities and differences across disciplines with respect to the relationships among teachers, students, and course content, and (3) outcomes of collaboration, particularly the development of specific methods for integrating content and pedagogy. (Received September 22, 2009)