Meeting: 1003, Atlanta, Georgia, MAA CP G1, MAA Session on Drawing on Our Students' Thinking to Improve the Mathematical Education of Teachers

1003-G1-665

Tracy Bibelnieks* (bibelnie@augsburg.edu), 2211 Riverside Avenue, Campus Box 276, Minneapolis, MN 55454, and Matthew J Haines (haines@augsburg.edu), 2211 Riverside Avenue, Campus Box 28, Minneapolis, MN 55454. Enhancing the Mathematical Preparation of K-6 Teachers.

The Augsburg College Mathematics Department is working to improve the mathematical preparation of K-6 teachers through restructure and revision of mathematics content courses for pre-service teachers. An internal study revealed that preservice students/alumni (i) did not see the relevance of breadth and depth of mathematics content knowledge to the practice of K-6 teaching, (ii) were not cognizant of the mathematics curriculum used in K-6 classrooms, and (iii) resisted learning mathematics beyond the level that they perceived as necessary for K-6 teaching. In addition, these students were contextual, hands-on learners who did not necessarily respond to the teaching and learning styles traditionally found in mathematics discipline-based courses. The presentation will be an overview of rationale for and revision of the mathematics courses with specific illustration(s) of unique features and pedagogical interactions with pre-service students that inform/enhance the teaching of the courses. (Received September 27, 2004)