Minnesota recently passed legislation requiring Algebra I for all eighth grade students. The State Department of Education initiated funding to train current middle school teachers in preparation for this change. Partners from the University of MN, Hamline University, and Normandale College created the professional development module to be used in the Twin Cities area. The project will train approximately 500 teachers from over 30 districts in the area during 2008-09.

The topics covered in the module are equality, patterns, ratio and proportion, solving equations, and modeling. While improving content knowledge among the teachers has been one goal, much of the training has focused on preparing each teacher to research their own students’ understanding of algebra. Each teacher investigated student understanding via a baseline questionnaire, interviews, and a follow-up. Results were shared among the teachers in professional learning communities (PLCs) within each building. This talk will describe the collaborative process by which the algebra module was created by university faculty and K-12 teachers, and describe the research support for the teacher-led classroom investigations. Some components of the training, including the role of the PLCs, will be discussed as well. (Received September 17, 2008)