Diana White* (diana.white@ucdenver.edu), Mathematical & Statistical Sciences, University of Colorado Denver, Campus Box 170, P.O. Box 173364, Denver, CO 80233. Math Teachers' Circles - Impacting Teachers' Mathematical Knowledge for Teaching.

As Math Teachers' Circles (MTCs) continue to spread across the country, a growing community of scholars is interested in researching their impact. This talk describes the results of a study from Summer 2010 in which MTC participants showed statistically significant gains on an instrument measuring their Mathematical Knowledge for Teaching. The study included approximately 50 teachers from three intensive summer workshops. The teachers took two subsections of the Learning Mathematics for Teaching (LMT) assessment developed at the University of Michigan. In previous research, higher LMT scores have been linked with a variety of positive outcomes, including presenting richer mathematics in the classroom and higher student achievement scores. After just one intensive week of participating in MTC activities, teachers' scores increased significantly on both subsections of the LMT assessment that they took. This result is novel given that the intensive workshops focused on problem solving and the mathematical process in general rather than on any specific content area. (Received September 22, 2010)