Mary E Pilgrim* (pilgrim@math.colostate.edu) and Jessica Gehrtz (gehrtz@math.colostate.edu). Training Graduate Teaching Assistants to Use Evidence-Based Practices.

Evidence-based research in education supports the use of classroom methods that encourage student engagement in learning. Regrettably, mathematics courses are often taught in traditional, non-engaging, teacher-centered ways. At our institution GTAs serve as the primary instructor of foundational mathematics courses, such as Calculus. However, GTAs often receive little to no training in the use of evidence-based pedagogy and creation of an active classroom. Literature points out that teachers often teach in a style that is reflective of their own learning experiences, so when the learning experiences of a GTA do not reflect best practices it cannot be expected that they will have the capability to implement such strategies in an effective and meaningful way.

To address this problem, we have designed a model that incorporates evidence-based practices into (1) a pre-fall semester training workshop and (2) ongoing semester training activities. The framework of our model incorporates best practices outlined in Mathematics Education literature while balancing the time constraints that GTAs often have. We will describe our training model as well as the fall 2015 pilot with Calculus I GTAs. We will also discuss revisions, modifications for other courses, and future implementations. (Received August 11, 2015)