Sarah Wolff* (wolffs@denison.edu). Introducing Inquiry-Based Mathematics Learning Materials into South African Public Schools. Preliminary report.

This talk will discuss joint work with Johann Engelbrecht and Caroline Long at the University of Pretoria in South Africa. We partnered with the Ukuqonda Institute to help integrate and monitor new inquiry-based mathematics learning materials in South African public schools. Specifically, the project included a small-scale but in-depth study that involved introducing and observing the use of the materials in the classroom at Bogkoni Technical School in the Attredgeville Township. This study served as the pilot phase for an ongoing project of larger scope.

The Ukuqonda workbooks were developed under a theoretical framework centered around the themes of richness, pro-activeness, vitality, and variety. Above all, the materials are meant to promote conceptual understanding and inquiry-based learning, while still being acceptable to an audience of traditionally-oriented teachers. From this study we determined that while the materials promoted some inquiry and self-guided learning, this was largely dependent on how the teacher shaped his or her class around the materials. In this talk we will discuss the reactions of South African teachers and students to inquiry-based learning materials and the necessity of teacher training to accompany the introduction of such materials. (Received September 21, 2015)