Paula A. Shorter* (paula.shorter@rockhurst.edu) and Mairead K. Greene (mairead.greene@rockhurst.edu). Creating Student Centered, Active Learning Classrooms in a Multi-Section Precalculus Course.

Each fall semester our department offers eight sections of precalculus. All sections share a common syllabus, common schedule, and common student materials in order to achieve a shared active learning experience for all of our precalc students. Student materials include in-class activities designed to engage students in active investigations that build deep understanding of concepts and a semester-long, multi-stage, modeling project. In the past, different sections have experienced varying levels of success in creating an effective active learning classroom. In this talk we will discuss the strategies that we have employed to provide our instructors with the support necessary to achieve the learning environment that we envision for all of our precalculus students. These strategies include a Precalculus wiki - where student materials, implementation suggestions, and teaching reflections are shared among all precalculus instructors, and weekly instructor meetings in which upcoming content and activities are discussed and modified. Also included in this presentation will be analysis of data from ongoing studies in our department over multiple sections of precalculus on student learning using common exam questions and the PCA, student attitudes, and student population data. (Received September 22, 2009)