Alfred Dahma, Timothy B. Flowers* (flowers@iup.edu) and Yuliya Melnikova. Bridging Developmental Mathematics with College Algebra: A Study Using ALEKS and Homework Time Requirement.

In the fall of 2014, Indiana University of Pennsylvania instituted a complete redesign for the developmental mathematics courses in order to improve student retention and the DFW rate. Through the redesign, the Intermediate Algebra course is now taught using a Wed-based assessment and learning system (ALEKS) in an emporium-style setting. By using ALEKS and requiring a weekly time requirement, the DFW rate has improved, and the program is considered to be succeeding in its goals.

We are now focused on the follow-up course, College Algebra. In particular, we want to know how students are transitioning out of the developmental course and into their subsequent college mathematics courses. During the Spring 2016 semester, a study was designed to try to investigate this transition and ways to improve student success. Out of the 12 sections offered, 7 served as a control group and 5 as part of the experimental group. The experimental group was further split into two other groups. In this talk, we will give an overview of our experimental design and report on the results. (Received September 20, 2016)