Martina Bode* (bodem@uic.edu), Jenny Ross (jross19@uic.edu) and Matthew Lee (mattlee@uic.edu). Moving large lectures to collaborative learning in newly designed classrooms. Preliminary report.

Introductory math classes are often taught in large lecture halls. What happens when you move these classes into newly designed active learning spaces?

In response to low passing rates in introductory math classes, and 4-year graduation rates of 37%, we have been actively integrating active learning methods into our Introductory Calculus and Pre-Calculus classes.

Spring 2019, we opened a newly designed classroom designed to foster active learning in the classroom. This room seats 120 students at round tables. Each round table has a white board and an LCD screen. We moved all of our introductory Calculus I classes to the new classroom. Fall 2019, more active learning classrooms opened on campus. The designs are slightly different, but they are built with the idea of fostering active learning; some instructors even prefer the newer rooms.

This presentation will be a hands-on overview on designing and utilizing new learning spaces that allow moving away from traditional lecturing; best practices, benefits, challenges, and first outcomes. We saw improved pass rates, in particular impressive increases in students receiving an A or B in these courses, and significant higher pass rates for latinx students. (Received September 17, 2019)