MOVING LARGE LECTURES TO COLLABORATIVE LEARNING IN NEWLY DESIGNED CLASSROOMS

M. Bode, J. Ross

University of Illinois at Chicago (UNITED STATES)

Abstract

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 building a Learning Assistant program in Introductory Calculus and Pre-Calculus classes. Learning Assistants work in the classroom as extra helpers, and hold drop-in hours outside the classroom in our Math and Science Learning Center.

We opened a newly designed classroom, Spring 2019, 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.

This workshop will be a hands-on overview on designing and utilizing new learning spaces that allow moving away from traditional lecturing; best practices, benefits and challenges.

The workshop will start with modeling the group learning in an active learning environment. There will be a short group assignment on the definition of active learning, how to engage students in a lecture hall setting, followed by explorations of the possibilities that a new class room design might offer.

We will share and reflect on our best practices of teaching Calculus to 120 students in our new learning space, and how the Learning Assistant program integrates with the new space.

Keywords: Active Learning, Innovative Classrooms, Learning Assistants, In class hands on activities, Round tables for group work in large classrooms.