Adapting General Education Mathematics Courses to Support Underprepared Students. Preliminary report.

This session is designed to accompany the sessions regarding implementation of the co-requisite model for general education (GE) mathematics and statistics courses at California State University, Monterey Bay (CSUMB). The monumental shift from traditional remediation to a co-requisite structure means that many students are not considered proficient in pre-college mathematical skills prior to beginning their GE mathematics courses. Therefore, in addition to developing effective co-requisite courses, it is also crucial to adapt GE courses to ensure successful experiences for underprepared students. This does not mean that GE courses are “watered down,” but rather that appropriate pedagogy must be implemented to create an equitable learning environment for a diverse group of students. This talk will discuss how CSUMB GE courses have implemented Reading Apprenticeship (supporting mathematical literacy and apprenticing students into mathematical problem-solving) and Complex Instruction (a combination of pedagogical strategies that attend to problems of social inequality in the classroom) to effectively support student learning. We will present sample participation structures, group-worthy tasks, and course-embedded reading assignments across the four-course curriculum. (Received September 20, 2018)