Project Title

Discipline-specific Quantitative Reasoning Contextualization in Learning Communities

Participating Faculty

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Abstract (200 words maximum):

Nationally, 60% to 70% of community college freshmen must take at least one developmental math course (Achieving the Dream, 2006; Bailey, Jeong, and Cho, 2010). At Kingsborough Community College, nearly 86% of the Spring 2013 entering freshman placed into developmental mathematics, with 50% placing at the level of basic arithmetic. Once in the developmental math sequence, students’ progress stalls because of math prerequisites for advanced courses or because students defer or repeat developmental courses. Furthermore, students’ struggles with basic math hinder successes in credit-bearing courses that involve quantitative reasoning.

Leveraging the success of our established learning community programs, we aim to improve the quantitative literacy of our students. Our Discipline-Specific Quantitative Reasoning Learning Communities will link a credit-bearing content course in a number of majors—one that depends on students’ ability to do basic math—with a contextualized quantitative reasoning seminar, focusing on relevant basic math skills. We hypothesize that students who learn quantitative reasoning in this setting will succeed in the content course at a higher rate than their peers in stand-alone sections of the same course without the quantitative supports. Moreover, we anticipate that success in contextualized mathematics will improve the students’ outlook towards quantitative reasoning in general.