



Colloquium Series



Creating Interactive Classrooms Using the Flipped Model with Supplemental Instruction: Flipped Again by COVID

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Abstract: Successful mastery of concepts taught in mathematics courses proves essential to the pursuit of any STEM degree. Post-Secondary institutions play an important role in producing STEM professionals and Historically Black Colleges and Universities (HBCUs) play a major role in producing minority STEM graduates. Today, many students enter institutions with some fear and or deficits in mathematical skills and concepts. The flipped classroom approach was implemented in a pre-calculus course with the use of supplemental instructors to build math confidence, bolster student success and enhance students' meta-cognitive skill. During the Spring 2020 Semester, COVID flipped the flipped classroom and additional strategies needed to be implemented. Overall, students' who completed the Pre-Calculus course with the Flipped Classroom model had a higher GPA each semester in which the grades were collected for the evaluation. More specifically, when an Independent T-Test was conducted between Flipped and Non-Flipped grades at the .05 level of significance, results indicated that there was a statistically significant difference in course grades at the end of the Fall 2017, Spring 2019, Fall 2019 and Spring 2020 semesters, but not the Spring 2018 and Fall 2018 semesters.

Wednesday February 10, 1:05 – 1:50pm