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Research Title:

Designing Accessible Approaches for Student Success: An Online First-Year Seminar for Students Enrolled in Developmental Mathematics

Abstract of Proposed Plan of Research:

First-year seminars are offered at most colleges and universities and can support skill development but special sections of these seminars are rarely offered to developmental students nor do most colleges and universities require developmental students to take these courses (Young & Hopp, 2014). Further, Black and Hispanic students are overrepresented in developmental courses (Adelman, 2008) and students who enroll in developmental course are less likely to persist to graduation (Bailey et al., 2016; Levin & Calacagno, 2008). This study proposes to develop a special section of the first-year seminar with the purpose of enhancing the academic performance of students enrolled in developmental mathematics. Additionally, this study will develop and deliver the seminar in an online and condensed (7 week) format to provide timely delivery of academic and study skills to students. The use of online delivery is consistent with the goals of the state’s 2012-17 Developmental Education Plan (DE Plan) and higher education strategic plan (60 x 30TX) which includes evaluating the effectiveness of online and hybrid developmental education interventions (THECB, 2012).

This study will be guided by the following research questions:

1. How is participation in an online first-year seminar related to learning behavior (i.e., need for cognition, self-efficacy, motivation)?
2. To what degree does students’ performance in developmental mathematics and subsequent gateway courses vary based on participation in an online first-year seminar?
3. How does the performance of Black and Hispanic students in developmental mathematics vary as a result of participation in an online first-year seminar?