

## Women and STEM: Creating a Pipeline from Gateway Courses to STEM Programs for Talented Women at a Community College

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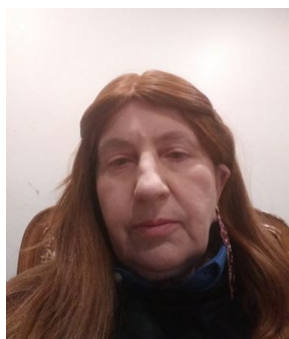
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The idea for this study was the result of two female community college mathematics professors, each with more than 15 years of experience teaching in higher education, lamenting the small number of women in their calculus and higher-level mathematics courses. However, they recognized the excellent grades that female students had earned in their college algebra courses. Do women perform as well as men in college algebra? Are fewer talented female students registering for precalculus than talented male students? Using a theoretical framework grounded in Bourdieu's theory of social and cultural capital and Walkerdine's reproduction cycle of gender inequality in mathematics education, two cohorts of students at a community college in the northeastern United States were followed for one year. Overall, more women were enrolled in college algebra, and female students were more likely to be minorities. Although women did as well as men in college algebra, fewer of these women subsequently enrolled in precalculus. Findings from this study can be used to create interventions to recruit and retain women in STEM programs.

Keywords: STEM education, college algebra, gateway courses, gender inequality in undergraduate mathematics, Bourdieu, Walkerdine, reproduction cycle of gender inequality, social and cultural capital



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