

An Examination of Mathematics Self-Efficacy During Corequisite Remedial Coursework

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This study was conducted to determine if students enrolled in corequisite statistics coursework at a two-year public community college in the northern region of the United States demonstrate statistically significant gains in mathematics self-efficacy over the duration of the course. The study was performed using a mixed-methods design, in which students' mathematics self-efficacy was measured at two distinct points in time and compared, and students were interviewed about their experiences in the corequisite setting. The results of the study indicate students enrolled in corequisite statistics coursework experience a significant increase in mathematics self-efficacy, and these increases occur across a wide range of student subpopulations. Moreover, the study's results indicate that, during the span of the corequisite coursework, students recognize their growth in their mathematics confidence and attribute these improvements to the nonthreatening nature of the corequisite classroom and the collegial relationship with the corequisite workshop instructor.

Keywords: self-efficacy, corequisite statistics, developmental mathematics, mixed-methods research



Barry Garside received a bachelor's degree in mathematics from Framingham State College, a master's degree in mathematics from the University of Massachusetts, Lowell, and a doctoral degree in Higher Education Leadership from Maryville University. He previously worked as the Mathematics Chair at Nashua Community College and currently serves as the Associate Vice President of Academic Affairs at Nashua Community College, specializing in matters pertaining to accreditation, strategic planning, and the assessment of student learning. Exploring an abandoned house at age 12, he discovered John Holt's highly regarded book, *How Children Fail*, detailing the struggles of teaching mathematics. Barry took the book home and read, and reread!, it cover-to-cover, discovering his life-long fascination with mathematics education. He is married with four children, and, as one might have guessed, he met his wife in mathematics class.

Shelley Price-Williams, PhD, is an assistant professor of postsecondary education at the University of Northern Iowa. She holds two decades of experience in student and academic affairs, spanning program development and management, as well as academic advising, career counseling, and assessment. Price-Williams serves on several editorial boards, including the *NACADA Journal* and the *Journal for Student Affairs Research and Practice*. She serves as senior coeditor for the text series *Identity & Practice in Higher Education-Student Affairs* by Information Age Publishing.



Her research interests center on noncognitive factors of college student transitions and persistence, organizational justice, and structural equity. She teaches courses on integrating theory with practice, professional helping in student affairs, administration and finance, higher education law, and research design.