Looking Back and Moving Forward: AMATYC Standards

Mary Beth Orrange
Erie Community College

Julie Phelps
Valencia College, East Campus

Nancy Sattler
Terra Community College and Walden University

Abstract:

A strong spirit of collaboration among educational institutions and professional organizations allows these bodies to address the serious challenges facing mathematics education today. Various stakeholders are working with AMATYC to implement student-centered mathematics instruction that is both effective and efficient. Moreover, there is ample research evidence that engaging students in problem solving, reasoning, and sense making will yield improved mathematical proficiency, statistical proficiency, and quantitative literacy.

AMATYC’s new document, IMPACT: Improving Mathematical Prowess and College Teaching provides suggestions for improving the teaching and learning of mathematics for the primary purpose of increasing students’ mathematical PROWESS in the first two years of college. This guidance is intended to inspire faculty, departments, institutions, and policymakers to examine, assess, and take action to improve every component of mathematics education in the first two years of college. AMATYC and its membership will engage in this Renewed vision to positively impact undergraduate mathematics education.

Mary Beth Orrange serves as the chair of IMPACT and retired as a State University of New York Distinguished Service Professor after thirty-two years of teaching full-time at Erie Community College (ECC) and several years of teaching at high schools in the Western New York region. She has degrees in mathematics, computer science, and education from the State University of New York at Buffalo. Her interests include learning at a distance, active learning, and developmental education. She is a past AMATYC Executive Board Secretary, a Past President of NYSMATYC, and worked for ECC on accreditation, planning, and assessment. In 2007, she received AMATYC’s Teaching Excellence Award, Outstanding Contributions to NYSMATYC Award in 2007, and, in 2017, NYSMATYC’s Outstanding Contributions to Mathematics Education Award.
**Julie Phelps** is the chair of the newly created AMATYC Mathematics Standards in the First Two Years of College Committee and has served on the Steering Committee for *IMPACT*. She has served as a mathematics faculty member, developmental mathematics coordinator, and the Project Director of Achieving the Dream at Valencia College in Orlando, Florida, since 1997. Dr. Phelps continues to study ways to increase student engagement, learning, retention, self-efficacy, and success among developmental and front-door mathematics students.

**Nancy Sattler** serves as the cochair of *IMPACT* and has taught mathematics continuously since 1982 at Terra Community College in Fremont, OH, and for Walden University since 2007, teaching classroom teachers who wish to earn a master's degree in education with a concentration in mathematics. She has a Ph.D. in higher education with minors in educational technology and research and measurement. She is the 2013 Adjunct Faculty of the Year winner for the state of Ohio and is Dean Emerita for Terra. She is a Past President of AMATYC and the Historian of OhioMATYC, a founding member of the Ohio Mathematics and Science Coalition and current Treasurer. In 2005, Sattler won OhioMATYC’s Distinguished Service Award. Her areas of interest are teaching at a distance and student success.