

Cultivating Active Learning through Campus Collaboration: A Case for the Math Faculty Xchange as Professional Learning

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Community college mathematics instructors working on increasing and improving their use of active learning instructional practices benefited from attending a Math Faculty Xchange at another college. This professional learning opportunity allowed participants to observe a variety of classes, interview the instructors they observed, and learn about the culture of the mathematics department. After the Xchange, the participants were able to consider concrete plans for borrowing and adapting activities, strategies, curricula, and classroom policies that could improve their own active learning practices. They reported a marked improvement in their confidence in implementing active learning and a desire to make department-wide changes to support active learning at their home institutions.

Keywords: professional learning, active mathematics learning, collaboration between community colleges, pedagogy



Allison W. Kenney is a research associate at RMC Research Corporation. She received her doctorate in sociology from Princeton University in 2018 and has a bachelor's degree in public policy studies from Duke University. She has also been a postdoctoral researcher with the National Center for Research on Gifted Education, an adjunct professor of sociology at Quinnipiac University, and Fulbright Germany Research Fellow. Her research interests span education and educational leadership, organizational sociology, and policy implementation.

Scott Adamson is an award-winning mathematics professor, who strives to help students develop mathematical reasoning and persistent problem solving as they work to make sense of big mathematical ideas.

He holds bachelor's and master's degrees in mathematics education from Northern Arizona University and a PhD in curriculum and instruction (emphasis on mathematics education) from Arizona State University. Scott currently teaches students at Chandler-Gilbert Community College, where he structures the classroom environment so that students are afforded the opportunity to actively make sense of mathematics, and he strives to develop enthusiastic learners in the classroom. He tells his colleagues and himself that we need to stop

teaching mathematics and start teaching students! Certainly, we will teach our students the beauty, wonder, and utility of mathematics, but we must realize that the positive relationships that we build with our students are most important! In 2017, Scott gave a keynote address at the opening session of the American Mathematical Association of Two-Year Colleges, which led to a TEDx Talk called "*Is it 1957 or 2018?*"





April Ström is a mathematics professor at Chandler-Gilbert Community College, one of the Maricopa County Community Colleges in Arizona, where she has taught for over 27 years. April received her PhD in curriculum & instruction (emphasis in mathematics education) from Arizona State University, and she holds MA and BA degrees in mathematics from Texas Tech University. April’s research background in mathematics education, coupled with her passion for teaching and learning, has prompted her to engage in various leadership roles in national organizations, such as the U.S. National Academies of Sciences, the Mathematical Association of America (MAA), and the American Mathematical Association of Two-Year Colleges (AMATYC). April currently serves as the Principal Investigator for the NSF-funded Teaching for Prowess project, which focuses on implementing active learning in the first two years of college mathematics. April also co-led the writing of the “*Classroom Practices*” chapter of the 2017 *MAA Instructional Practices Guide* and served on the steering committee for the 2018 AMATYC *IMPACT* guide, both of which aimed to elevate active learning in mathematics in higher education.