

ON THE CREATION OF RESEARCH-PRACTICE PARTNERSHIPS TO SUPPORT MATHEMATICS TEACHING AND LEARNING

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Given the depth and complexity of challenges in education broadly and mathematics education more specifically, scholars have recommended collaborative approaches known as research-practice partnerships (RPP) (Coburn & Penuel, 2016). RPPs create a new space for collective work that requires us to abandon the *research to practice continuum* metaphor and, instead, view research and instructional efforts as bidirectional, with researchers, K-12 educators, and community stakeholders capitalizing on their complementary areas of expertise learning from each other and forging new ways to improve mathematics teaching and learning. Importantly, RPPs use intentional strategies to foster productive relationships among researchers, K-12 educators, and community stakeholders so that research is relevant to all involved.

In this poster presentation, we draw on three projects to make sense of our learning in developing such partnerships. One project focuses on a mathematical professional development design and implementation involving elementary teachers in a rural school district (“Math Counts”). A second project is ongoing and involves community engagement supporting the integrated-mathematics learning of students and their families (“STEMhub”). A third project is ongoing and involves recruiting and supporting the preparation of secondary mathematics teachers for rural schools districts. All projects take place in the context of the Appalachian region of the United States. These projects draw on different research methodologies. However, they all leverage research-practice partnerships in different ways. For the purpose of this poster presentation, we make sense of our learning across these projects in terms of initiating, developing, and establishing research-practice partnerships. Preliminary analyses indicate that the themes of intentionally designing key artifacts and norms for communication, developing taken-as-shared ideas about the key constructs such as learning and mathematics, and positioning K-12 educators and community stakeholders as experts of their own experiences with mathematics and community challenges are significant aspects of establishing research-practice partnerships.

References

Coburn, C. E., & Penuel, W. R. (2016). Research–practice partnerships in education: Outcomes, dynamics, and open questions. *Educational Researcher*, 45(1), 48-54.