Research-Practice Partnerships Workshop

William Penuel, School of Education, University of Colorado Boulder, william.penuel@colorado.edu
Phil Bell, College of Education, University of Washington, pbell@u.washington.edu

Abstract: This NSF-funded workshop is designed to support a community of STEM researchers, district and school leaders, formal and informal educators, and community coalitions engaged in building and sustaining *research-practice partnerships* to improve STEM education.

Focus of the Workshop

This NSF funded workshop aims to build a community of STEM researchers, district and school leaders, formal and informal educators, and community coalitions engaged in building and sustaining *research-practice partnerships* to improve STEM education. Research-practice partnerships are long-term collaborations between practitioners and researchers that are organized to investigate problems of practice and solutions for improving the outcomes of educational systems (Coburn, Penuel & Geil, 2012). In STEM education, Math and Science Partnership Program projects funded by the National Science Foundation are examples of design partnerships that bring together subject matter experts in higher education, mathematics and science education researchers, and school districts. There are also funded partnerships in which a network of formal and informal education organizations are linked together and with researchers to organize more robust and equitable learning ecologies for youth (Bang, Medin, Washinawatok, & Chapman, 2010; Falk et al., 2013).

Our aim for building a network of such partners is to *increase the capacity of the field for continuous improvement in STEM education.* Our specific objectives for this workshop are to:

- Build knowledge and skill of a network of doctoral and early career researchers (see RPP Workshop for Early Career and Doctoral students) who can form and maintain long-term partnerships with districts, informal education organizations, and community coalitions focused on STEM improvement.
- Create a network of mature research-practice partnerships focused on next generation mathematics and science learning and equity that produces resources and knowledge to benefit new partnerships.
- Develop knowledge about effective partnership strategies and about how best to support a network of scholars focused on partnership work and a network of research-practice partnerships.
-

Our basic premise for this work is that STEM improvement at scale requires new opportunities and infrastructures for fostering ongoing exchange between research and practice. This premise is grounded in conclusions from a recent consensus report that concluded that regular interactions between researchers and practitioners were the most effective strategy for promoting the use of evidence to guide policy (National Research Council, 2012).

References

Bang, M., Medin, D., Washinawatok, K., & Chapman, S. (2010). Innovations in culturally based science education through partnerships and community. In M. S. Khine & M. I. Saleh (Eds.), *New science of learning: Cognition, computers, and collaboration in education* (pp. 569-592). New York, NY: Springer.

Coburn, C. E., Penuel, W. R., & Geil, K. (2013). Research-practice partnerships at the district level: A new strategy for leveraging research for educational improvement. Berkeley, CA and Boulder, CO: University of California and University of Colorado.

National Research Council. (2012). Using science as evidence in public policy. Washington, DC: The National Academies Press.

Acknowledgments