

PUBLICATIONS | DRK-12 RESEARCH ON RURAL K-12 STEM EDUCATION

These citations were listed in project outcome reports (PORs) submitted to NSF at the conclusion of the associated DRK-12 projects.

Persistence of Teacher Change in Rural Schools: Assessing the Short- and Long-term Impact of Professional Development on K-2 Science Instruction

Sandholtz, J. H., & Ringstaff, C. (2014). Inspiring instructional change in elementary school science: The relationship between enhanced self-efficacy and teacher practices. *Journal of Science Teacher Education*, v.online.

Matlen, B., Sandholtz, J. H., & Ringstaff, C. (2016). The influence of contextual factors on the sustainability of professional development outcomes. *Journal of Science Teacher Education (JSTE)*.

Sandholtz, J. H., & Ringstaff, C. (2015). Temporary fix or lasting solution? Investigating the longitudinal impact of teacher professional development on K-2 science instruction. *The Elementary School Journal (ESJ)*.

Researching the Expansion of K-5 Mathematics Specialist Program into Rural School Systems

Campbell, P.F. (2012). Coaching and elementary mathematics specialists: Findings from research. In D. Blount & J. Singleton (Eds.), *Professional collaborations in mathematics teaching and learning: Seeking success for all* (pp. 147-159).

Ellington, A. J., Whitenack, J. W., Inge, V., Murray, M., & Schneider, P. (2012). Assessing K-5 teacher leaders' mathematical understanding: What have the test makers and the test takers learned? *School Science and Mathematics*, 112, 310-324.

Blount, D., & Singleton, J. (2013). Building a case for mathematics specialist programs. *The Journal of Mathematics and Science: Collaborative Explorations*, 13, 191-207.

Blount, D., & Singleton, J. (2013). Strong support for mathematics specialists in Virginia. *The Journal of Mathematics and Science: Collaborative Explorations*, 13, 245-253.

Campbell, P., & Malkus, N. (2014). The mathematical knowledge and beliefs of elementary mathematics specialists-coaches. *ZDM: The International Journal on Mathematics Education*, 46.

Whitenack, J., & Ellington, A. (2015). Lessons from the field: Challenges we face when coaching teachers. *National Council of Supervisors of Mathematics Journal*.

Synchronous Online Professional Learning Experiences for Middle Grades Mathematics Teachers in Rural Contexts

Choppin, J., Amador, J., Callard, C., & Carson, C. (2018). Development and use of a conjecture map for online professional development model. 40th Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics.

Amador, J., Callard, C., Choppin, J., Gillespie, R., & Carson, C. (2019). Transitioning face-to-face mathematics professional development to synchronous online implementation: Design considerations and challenges. *Journal of Mathematical Education Leadership*, 20, 15.

Amador, J., Carson, C., Gillespie, R., & Choppin, J. (2019). Online video coaching: An analysis of teachers' and coaches' noticing. Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, 1904.

Carson, C., Callard, C., Gillespie, R., Choppin, J., & Amador, J. (2019). Bridging the distance: One-on-one video coaching supports rural teachers. *The Learning Professional*, 40, 66.

Choppin, J., Amador, J., Carson, C., & Callard, C. (2019). Exploring qualities of a community of inquiry in a synchronous online course. Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, 1841.

Gillespie, R., Amador, J., & Choppin, J. (2019). Exploring the discursive differences of mathematics coaches within online coaching cycle conversations. Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, 442.

Amador, J., Choppin, J., Carson, C., & Gillespie, R. (2021). Coaches' and Teachers' Noticing through Annotations: Exploring Analytic Stance Across Coaching Cycles. Forty-second Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.

Callard, C., Foster, G., & Kruger, J. (2020). Maintaining High-Quality Professional Learning in an Online Space. *The Learning Professional*, 40, 66.

Science, Technology, Engineering and Mathematics Teaching in Rural Areas using Cultural Knowledge Systems

Topkok, S.A., & Loon, H.P. (2021). Uvatuq Naluallangniaqtugut (I humbly hope we run into game): An Inupiaq research process. *The Morning Watch*, 47(1), 6-15.