

Learn, Experience, Apply in a Regional Network (LEARN) Mathematics!

Abstract

Learn, Experience, Apply in a Regional Network (LEARN) Mathematics! is a phase II Mathematics and Science Partnership (MSP) project involving Maine Mathematics and Science Alliance, University of Maine Farmington, United Technologies Center, Regional School Unit #34, Brewer School Department, and Bangor Christian Schools. Teacher and student activities in LEARN Mathematics! extend the professional development model refined in the phase I CNECT-Math network of MSP projects.

The vision is a learning environment where students experience standards-aligned lessons that integrate application and theory, and educators collaborate to deepen content and pedagogical expertise in a student-centered curriculum.

The goals of LEARN Mathematics! are:

1. To improve teacher content knowledge, content specific pedagogical knowledge and skills, and instructional practices in the areas of measurement and approximation, data analysis and statistics, and probability.
2. To increase capacity for lateral collaboration in a regional Professional Learning Community.
3. To improve student achievement in the areas of measurement and approximation, data analysis and statistics, and probability.

Teachers collaboratively plan and co-teach multiday lessons that integrate mathematical concepts and theory with practical, hands-on applications. Self-reflection and feedback from colleagues helps teachers make sustained improvements to their practice. Phase II welcomes more Career and Technical Education teachers and one new private school to the Professional Learning Community. Students have the opportunity to carry out investigations, collect data, and/or perform research to demonstrate achievement as they complete individual or group projects. Experienced teacher leaders from the phase I CNECT-Math MSP project mentor teachers new to LEARN Mathematics!