

System-wide Mathematics Training for Teachers and Leaders Project Summary

Education Northwest and our partner, Education Development Center, Inc. (EDC), are preparing¹ for an opportunity to support a large scale project that includes mathematics training for PK–12 teachers and school leaders who work in a network of schools situated globally with locations in the United States, various U.S. territories, and parts of Europe and Asia. The schools have all adopted the Common Core State Standards for Mathematics (CCSSM) and have collectively requested a training program that will support implementation of the standards over a 4-year period, beginning in the 2015–16 school year (PK–5 in years 1-3; 6–12 in years 2-4). The schools are committed to successful CCSSM implementation through (1) strong instructional leadership in every school, (2) well-prepared teachers in every classroom, and (3) integrated approaches to curriculum implementation, educator preparation, and professional development. Therefore, the project will provide multiple types of training, resources, and support for mathematics teachers, teachers who support mathematics in other content areas, and school and district level leaders who lead implementation efforts.

Education Northwest and EDC will have designed a rigorous, collaborative, and sustained approach to build the capacity of PK–12 classroom teachers and leaders of mathematics to understand and implement the CCSSM through in-person professional learning and virtual support. Teachers will engage in professional development that enhances their knowledge of mathematics content, student learning, and instructional practice. To ensure the teachers' work is understood, reinforced, and actively supported, we will also build systemic capacity by providing training and resources for administrators, ancillary staff, school and district math leaders, parents, and community members. The professional learning will include in-person summer sessions with project-staffed facilitators, in-person quarterly sessions with district-staffed facilitators, and virtual communities of support with both experts from Education Northwest and EDC as well as peers from other schools throughout the world.

Face-to-Face Professional Development [Summer Sessions]

PK–12 classroom teachers will participate in intensive summer sessions prior to each school year that provide opportunities to build mathematics content knowledge and high-leverage teaching practices for implementing CCSSM. Summer sessions will be delivered by expert *Mathematics Facilitators*² provided by Education Northwest and EDC. The teachers will engage in authentic, problem-based lessons in the role of learners, thereby deepening their own mathematics understanding and allowing them to observe good teaching practices in action. The sessions will also provide direct connections to instructional practices, such as planning tasks and lessons and analyzing and discussing videos of instructional exemplars and student artifacts. These activities will prepare teachers to apply both the CCSSM content and practices in ways that promote the learning of rigorous, relevant mathematics by *all* students.

¹ At time of publication, the project is pending funding from a proposed federal government contract.

² Apply online by May 31, 2015, to be a PK-5 Mathematics Facilitator at <http://tinyurl.com/mathfacilitators>.

Starting in the second year, **school and district math leaders** will participate in summer workshops, also facilitated by Education Northwest and EDC experts, to build their mathematics content knowledge, their expertise in improving mathematics instruction, and their facilitation and leadership skills. These learning experiences will support the leaders as advocates who are responsible for the internal advancement of the vision for improving the teaching and learning of mathematics. In addition, all administrators and leaders will be invited to participate in the summer sessions and other professional development for the PK–12 teachers.

Quarterly Professional Development Modules

During each year of the project, **PK–12 classroom teachers** will receive sustained support for CCSSM implementation in the form of quarterly professional development modules that connects and extends the content and activities introduced in the summer sessions. The modules will be facilitated by district math experts who will use a training plan and materials provided by Education Northwest and EDC. The modules will incorporate effective adult learning principles and the use of multimedia to engage varied learning styles.

Similarly, **ancillary staff** will participate in quarterly modules to support the systemic implementation of CCSSM. These modules will provide ancillary teachers with knowledge of how the mathematics standards integrate into their programs and non–core content areas, how the standards assist students in the goal of college and career readiness, and how to use the mathematics high-leverage practices and essential teaching skills to promote deep learning in other content areas. The modules will be aligned with the content and design of the professional development for classroom teachers.

Virtual Support and Resources

PK–12 classroom teachers will access ongoing just-in-time support from a Virtual Support Network (VSN). The VSN will provide access to tailored classroom resources and emerging research and best practices, as well as opportunities to connect with peers. The VSN will include resources such as professional readings, instructional content, and grade-level forums (e.g., grade 1 math) that support classroom implementation. The forums will provide opportunities to collaborate and share ideas with teachers from other schools. They will also provide an opportunity to follow up on discussions that were started in the summer sessions so that learning can continue asynchronously online. Mathematics experts from Education Northwest and EDC will answer teachers' questions and contribute to forum discussions.

In addition to the VSN for classroom teachers, all stakeholders—**administrators, ancillary teachers, above school level and school math leaders, and parents**—will have online access to ongoing, timely information for the successful implementation of the CCSSM. These resources will be designed to enhance the role of each stakeholder in supporting the conditions that improve student learning. For example, administrators and math leaders will find resources such as research briefs, observation tools, or materials on how to manage change. Parents and community members will access materials that explain the CCSSM and include ideas for supporting the development of their children's mathematical thinking.