

2) Build Capacity through Research-Based Professional Development

Build Regional Mathematics Leadership and Capacity

In order to sustain improvement in mathematics education, there must be strong leadership among all stakeholders. ESDs are supporting the development of leaders through a variety of activities that provide opportunities for collaboration, professional learning, and supportive practice.

Specific Outcomes

- Held Mathematics Leadership Institutes (piloted summer 2008): 4 ESDs participated in 2 locations.
- Formed regional alliances and leadership teams: 97 districts participated.
- Supported district mathematics coaches and teacher leaders: Attended 9 monthly training sessions; hosted monthly coaching networking sessions; held coaching cadre training events.

Provide a Vital Statewide Communication System

The keystone of an effective statewide system of mathematics education resides in our collaborative efforts to improve communication. ESDs acted as a conduit for gathering and disseminating information among stakeholders, providing a vital statewide informational network between OSPI and classroom teachers.

Specific Outcomes

- Disseminated mathematics information to the classroom level in a timely manner: 6 issues of regional newsletters in each ESD; emails to regional key communicator groups; regional and county informational meetings.
- Informed district leadership on state and regional mathematics issues and initiatives; monthly superintendent updates.
- Collected data from 281 districts through existing ESD networks and relationships in order to inform OSPI planning and extend ESD training.

Create Regional Partnerships and Local Collaborations

Strong partnerships are key to positively impacting mathematics education in our state. It is these partnerships – within and among ESDs, OSPI, higher education, school districts and classrooms – that foster a cohesive and rewarding mathematics experience for students, kindergarten through college. It is the ESD regional math coordinator's role to provide the necessary regional and local support and network where resources and instructional practices can be maximized to benefit students.

Specific Outcomes

- Formed 6 regional alliances.
- Established regional delivery system for revised mathematics standards.

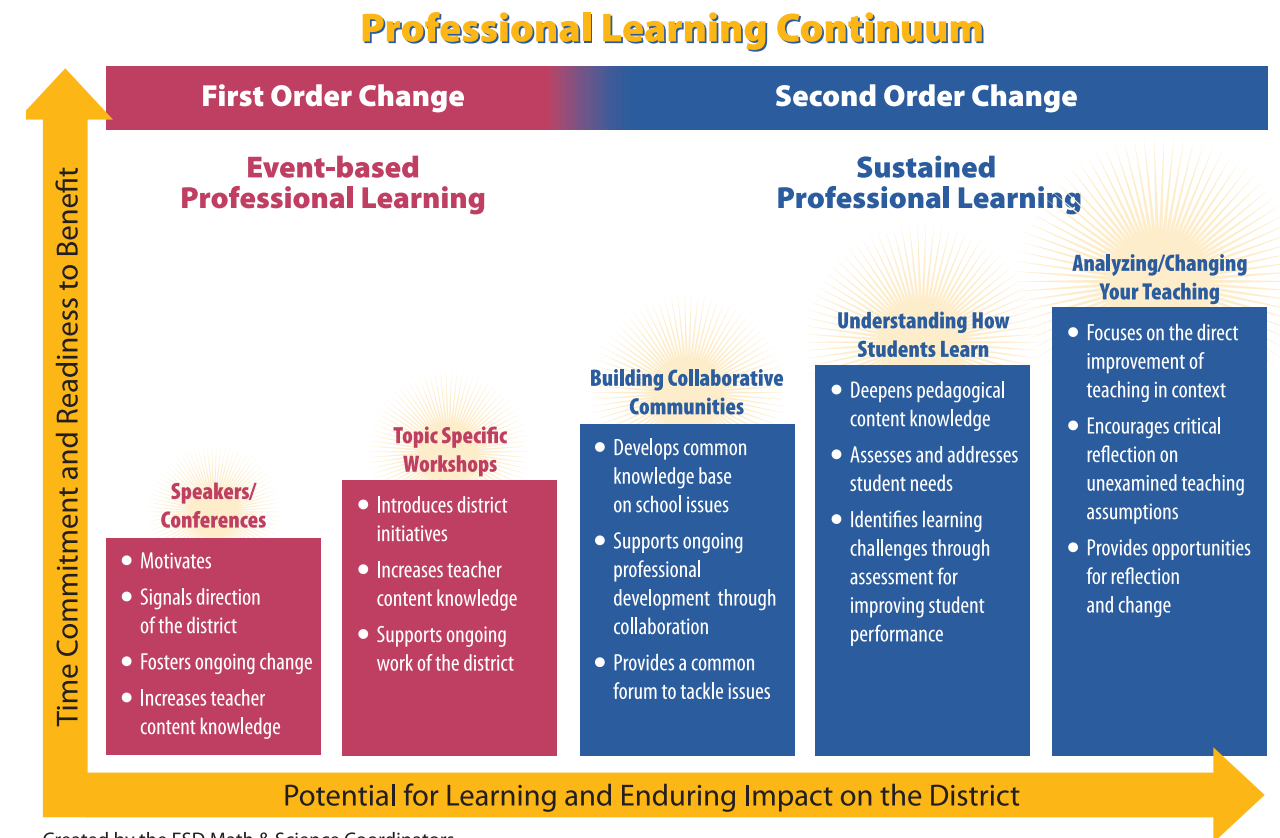
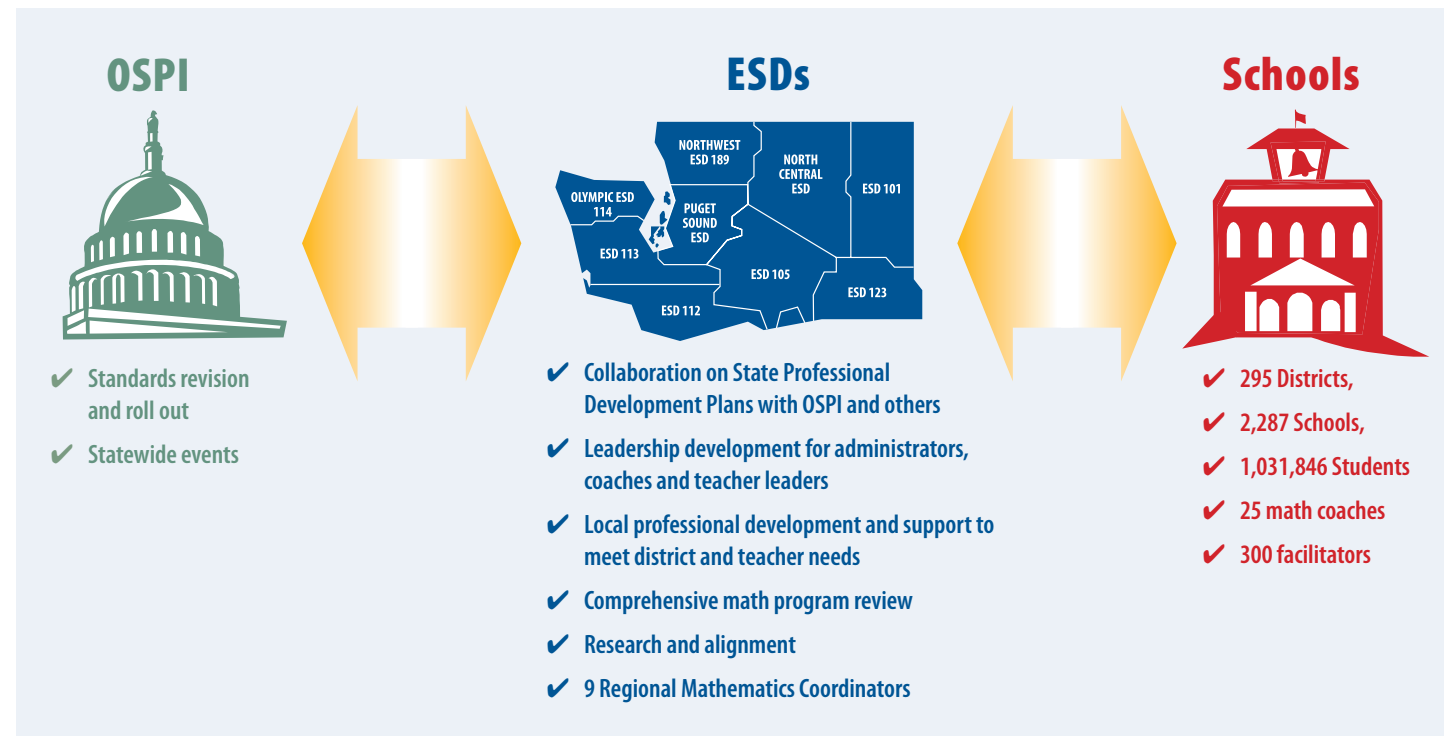
Research Effective Practices and Implement Strategies

A priority in Year One was to identify the most effective research-based professional development available for teachers of mathematics. The ESD Math Coordinators developed the Professional Learning Continuum to serve as the framework for their work (see diagram below). Based on research and needs assessment data, the following strategies were employed:

Specific Outcomes

- Provided guidance regarding professional development to districts and schools on using the appropriated mathematics and science funds from the state legislature.
- Leveraged resources to provide trainings across the state.
- Coordinated regional math standards workshops for K-8: 2,916 teachers trained at ESD workshops since August '08.
- Developed regional alliances to provide localized professional development: 2 formed '07, 3 formed Spring '08, 2 slated to begin winter '09.
- Increased professional development offerings in mathematics to specific audiences (e.g. teachers, math coaches, administrators, para-educators): Nearly 20,000 received training through coordinator activities.
- Created professional development models which increased teacher collaboration: Formed PLC Washington partnership.

“How do you make sweeping statewide changes in math standards, curricula, and teaching strategies in more than 2,250 schools? It takes an intense, regional professional development effort.”



Created by the ESD Math & Science Coordinators

“The Regional Coordinators created a vital statewide information network to support equitable access and alignment of mathematics instruction.”

“Nearly 20,000 educators received training in mathematics in Year One.”



Washington's Nine Educational Service Districts:

- ESD 101, Spokane
- ESD 105, Yakima
- ESD 112, Vancouver
- ESD 113, Olympia
- Olympic ESD, Bremerton
- Puget Sound ESD, Renton
- ESD 123, Pasco
- North Central ESD, Wenatchee
- Northwest ESD, Anacortes

3) Evaluate Results

The ESD Regional Math Coordinators have made significant changes in the way mathematics is taught and learned in Washington state.

- Important needs assessment and baseline data were collected. Gaps were identified and benchmarks established. 74% of districts responded to surveys.
- The foundation and support for a coherent and aligned statewide system was created around new math standards.
- A research-based regional and local professional development system was created and prioritized.
- Resources were leveraged to achieve cost-efficiencies and uniformity of access and delivery.
- Nearly 3,000 teachers trained on new math standards and content.
- Regional, district and individual school level collaborations are in place.

Year Two Evaluation Will Include:

- Comparisons of student achievement data for school systems receiving highest levels of support compared to those receiving little or no support.
- A series of follow-up surveys of teachers and district leaders who received support to evaluate transfer to practice.
- Focus groups of district personnel to determine impact of regional coordinators.

4) Plan for Year Two and Beyond

In Year Two, the Regional Coordinators will expand and build on the progress achieved in Year One. For 2008-09, the ESDs have received a funding allocation from the legislature for regional science coordinators. Nine new science coordinators – one in each ESD – will begin a parallel process for science standards and professional development.

A significant additional commitment on the part of the ESDs is the shared hiring of a math and science director who will guide the work of the nine math and nine science coordinators. With this additional support, efforts will include:

- Increase sustained professional learning through customized professional development aligned to state standards.
- Continue to work on equitable access to high quality professional learning.
- Expand support of revised mathematics standards and science standards.
- Provide training and support for instructional materials adoption.
- Expand regional mathematics leadership alliances for communication, support and delivery of professional development.
- Conduct needs assessment and research, establish benchmarks, and begin professional development for statewide system of science education.

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ESD Regional Mathematics Coordinators 2007-08 Accountability Report

The 2007 Washington State Legislature appropriated funding for a Regional Mathematics Coordinator in each of the nine Educational Service Districts. The ESDs were charged with providing regional professional development activities related to mathematics curriculum and instruction.

In order to create lasting systemic change, the ESDs worked collaboratively with OSPI to establish and support a statewide system of mathematics education.

This report highlights work completed in Year One (2007-08) and outlines strategies for Year Two (2008-09). It is organized by the four major actions of the Regional Mathematics Coordinators: **1) Identify Needs, 2) Build Capacity through Research-Based Professional Development, 3) Evaluate Results, and 4) Plan for Year Two and Beyond.**

1) Identify Needs

To inform data-driven decisions, the Regional Mathematics Coordinators collected data regarding the state of mathematics education in Washington. Online surveys of administrators and mathematics educators were conducted in fall, 2007, including answers to “How are you teaching math? In what context? What support do you need?”

A major problem identified was the lack of a coherent standardized system for teaching mathematics, elementary through high school.

While common needs were identified throughout the state, results showed that customized solutions within each region would be required to best address those needs. More than 80% of teachers indicated that collaboration with their peers greatly impacts their instructional practice.

Findings were used to build the foundation for current and future work. ESDs are committed to the continued use of authentic data from the field to guide our work.

ESD Needs Assessment Results

Survey Respondents:	
74% of school districts statewide	
218 administrators	
2,740 teachers	
Highest Need for ESD Services:	
Professional development related to the new math standards.....	92%
Professional development related to mathematical instructional leadership.....	71%
Showcase of diagnostic assessments.....	70%

ESD Regional Mathematics Coordinators

Mission:

To build capacity for equity and excellence in mathematics education in the state of Washington.

Vision:

A comprehensive, coherent and collaborative system of mathematics education that is research- and standards-based.

Beliefs:

1. A comprehensive system impacts classroom practice.
2. A coherent system responds flexibly to regional and local needs.
3. A collaborative system requires an equal partnership among stakeholders.

Goals:

1. Create common ground around the work of mathematics education based on valid and reliable research.
2. Define and implement common practices and leverage resources among the ESDs.
3. Disseminate information equitably across regions in a timely, coordinated manner.
4. Build regional leadership capacity in mathematics.

Actions:

1. Identify Needs
2. Build Capacity through Professional Development
3. Evaluate Results
4. Plan for Year Two and Beyond