

Update on OSPI Math and Science Initiatives

Presented by:

*Jessica Vavrus, Director of Teaching and Learning
Greta Bornemann, Teaching and Learning Mathematics Director
Office of Superintendent of Public Instruction*

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Our current context....

- **Collaboration is critical for building statewide capacity.**
 - Regional Educational Service Districts (ESDs)
 - Higher Education
 - Public/Private Partnerships
 - Career and Technical Education
 - District and School Improvement
- **Aligning statewide efforts to provide a coherent system is crucial.**
- **Clear definition of OSPI's role and capacity.**
 - OSPI has limited staff and fiscal resources to implement and scale initiatives "alone".

Recommendation #1

Focus on improving core classroom instruction in mathematics and science.

- 1. Develop and deliver supports for implementing current math and science standards, instructional materials, and assessments.**
 - ✓ Current math and science efforts supporting implementation of standards and instructional materials
 - ✓ Targeted support for preparation for end-of-course math assessments
- 2. Pilot, refine, and scale the *mathematics improvement framework*.**
 - ✓ Collaboration with District and School Improvement participating districts, and ESDs
- 3. Align with common core standards and assessments.**
 - ✓ Statewide and inter-state collaborations

Recommendation #2

Ensure that all elementary education teachers, new and veteran, have strong content knowledge and instructional practice in math and science. Increase district hiring and alternative route preparation of recent math and science graduates and professional early in their career.

- 1. PESB to continue streamlining rules that govern teaching certification for math and science professionals entering teaching.**
- 2. Recruit math and science majors to become teachers.**
- 3. Support improved pre-service training – focus on elementary.**

Recommendation #3

Recommend that science be taught at minimum according to the guidance below:

- 100 minutes per week in Grades 1 and 2
- 150 minutes per week in Grades 3–5
- 200 minutes per week (or one instructional period per day) in Grades 6–8

Recommendation #4

Support district implementation of stronger math and science programs by increasing professional development of teachers through leveraging public and private resources to expand statewide system improvement initiatives.

1. Support for developing Elementary Mathematics Specialty endorsement.

- ✓ Collaboration with PESB, ESDs, and Higher Education

2. Aligned statewide professional development and support of math and science coaches, mentors, teacher-leaders.

- ✓ Collaborations with ESDs, Higher Education, National Boards, Center for Strengthening the Teaching Profession

Recommendation #5

Introduce policy initiatives that will support new programs designed to promote early learning in math and science.

- 1. Develop a math training program for early learning providers that focuses on numbers, geometry/spatial thinking, and measurement.**
- 2. Bolster support for early numeracy development within existing and evolving early learning initiatives.**
 - ✓ Collaborations with Department of Early Learning, Thrive by Five Washington, ESDs, etc.

Recommendation #6

Make it easier for districts to join multi-district cooperatives for the purposes of beginning a STEM focused high school, irrespective of existing district boundaries, and continue to promote program development at skill centers that focus on STEM-related training.

- 1. Continue to support creative ways to incentivize innovative models across the state.**



Thank you.