

Today and Tomorrow with K-12 Mathematics and Science A Systems Approach

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Interdependence – Navigating the new resource landscape

- Federal Stimulus Coordination
 - Prepare for “Race to the Top” Grant
- Public and Private Partnerships
 - Leverage and expand existing regional systems
- Broadening our focus – STEM



Statewide Mathematics Alignment Standards – Curriculum – Assessment

Standards	Curriculum	Assessment
<ul style="list-style-type: none">• K-12 Revised Standards adopted July 2008• 18,000+ K-12 mathematics educators have received professional development on the revised standards since June 2008.	<ul style="list-style-type: none">• K-12 curriculum alignment work completed December 2009 (core and supplemental).• K-8 Core/Comprehensive Recommendations finalized January 2009.• High School Recommendations to be finalized late March 2009.	<ul style="list-style-type: none">• K-8 students assessed on revised standards beginning in 2010 and 9-12 students assessed beginning in 2011.

Statewide Science Alignment Standards – Curriculum – Assessment

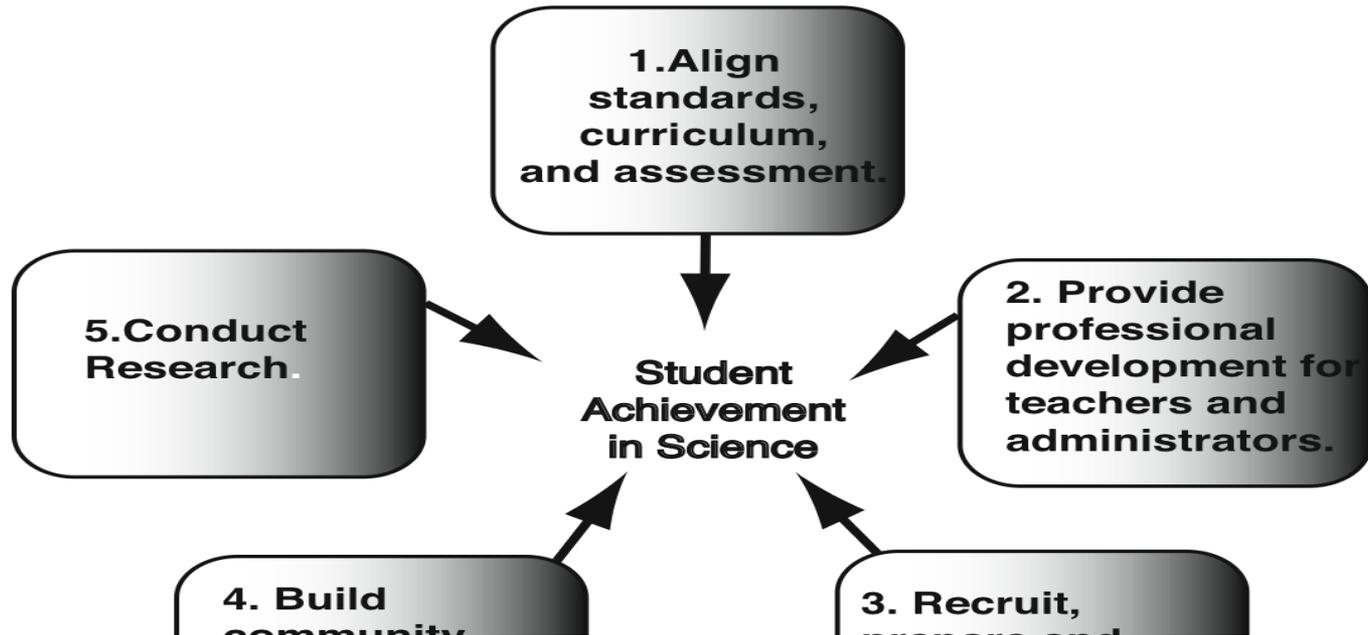
Standards	Curriculum	Assessment
<ul style="list-style-type: none"> • K-12 Revised Standards to be adopted in late April 2009 	<ul style="list-style-type: none"> • K-12 core review scheduled May 11-15, 2009 • Initial recommendations* to SBE by June 30, 2009 • SBE provides comment to OSPI within 2 months • K-12 supplemental review to follow 	<ul style="list-style-type: none"> • Pending decisions: <ul style="list-style-type: none"> • Graduation requirements • End-of -course assessments

***Note on Curricula Recommendations:**

•Elementary and Middle = 3 recommendations per grade band

•High school = 3 recommendations per major domains of science (Earth and Space, Physical Science, Life Sciences)

Science Strategic Plan



Goal: To build and implement a fully aligned science instructional system to best support student learning.

Future – Supporting Teachers Implementation

Math – Instructional Materials Alignment:

- ESD Math Coordinators and OSPI will be supporting “like-user” groups regionally across the state beginning in March 2009.
- OSPI and ESD Math Coordinators are considering feasibility of an online teacher-created repository of supplemental materials.

Science – Implementation of Revised Standards:

- Work with partners (ESDs, Laser, Higher Ed) to plan and deliver professional development on the new standards.
- Focus on standards awareness, depth of content, and instructional delivery.

Future – Supporting Districts Developing Teacher Resources

Depending on available resources we will:

- Continue statewide leadership in improving math and science instruction.
- Support teachers with formative assessment tools in math.
- Research current practice and supports needed to:
 - Increase time for science instruction in the elementary (Survey this spring for information on courses offered, material used and time spent on science instruction)
 - Share and implement best practices.

Future Support Teacher Recruitment

Provide support to PESB and Higher Ed for....

- **Developing a plan for recruiting, preparing, and retaining math and science teachers:**
 1. Recruit potential teachers from multiple sources
 2. Increased science content P.D. for elementary
 3. Encourage efforts to retain math/science teachers
 4. Increase teacher mentorship arrangements



Future Partnerships and Collaboration

- Facilitate efforts with key stakeholders in CTE and STEM areas to offer alternative paths for students to be successful in mathematics and science.
- Engage partners working in mathematics and science, both public and privately funded, to coordinate effective practices and supports in mathematics and science.
- Science: With partners, develop a tool kit of resources that can be used by educators, administrators, and the science leadership community to promote science education.

In Summary....

- Systems approach = recognizing and intentionally building on our interdependencies.
- Moving forward together, not alone.
- Goal to provide support to ALL students and increase student achievement statewide in mathematics and science.