

Conceptual Framework for Science Education and the Next Generation Science Standards

State Board of Education Public Meeting

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Office of the State Superintendent of Education

DISTRICT OF COLUMBIA
MAYOR ADRIAN M. FENTY

Overview of Science Development Process

The Framework and Standards

- Impart a coherent and sharpened focus on the core ideas of the major fields
- Take into consideration the knowledge and skills required for science literacy, college readiness, and for pursuing further study in STEM fields
- Integrate conceptual knowledge and science practices
- Base decisions on evidence—to the degree possible—as well as on professional judgment
- Reflect the expectations that high-performing countries hold for students
- Provide a platform for the development of aligned, high quality assessments, curricula and instructional materials.

Two Phase Process

Conceptual Framework for Science Development

- Scientific community through the National Academies of Science provides key leadership in development
- Feedback from all stakeholders including states, K-12 educators, scientific community, higher education, business community and general public is being considered during development

Standards Development

- States and educators provide key leadership in development
- Feedback from all stakeholders including states, K-12 educators, scientific community, higher education, business community and general public will be considered during development
- National Academies' Committee members will check for fidelity of standards with framework

Phase I – NRC Process for Development of the Conceptual Framework for Science

- The National Research Council (NRC) is the education arm of the National Academies
- Build on current initiatives and past experiences
- Hold stakeholder meetings for informed input
- Conduct study committee and design teams
- Draft conceptual framework released July 12, 2010
- Seek public feedback
- Finalize draft in early 2011

Phase II – Achieve Process for Development of Next Generation Science Standards

After the final Conceptual Framework for Science is released by the NRC in 2011, Achieve will engage states and other key stakeholders in the development and review of the new standards

- Writing Teams
- Critical Stakeholder Team
- Strategic Advisory Team
- Comprehensive Feedback Loops
- State Involvement

Revision of multiple standards' drafts based on stakeholder and public input

NRC Study Committee members to check the fidelity of standards based on framework

What has OSSE done?

- Expressed our intent to join this effort
- Asked local science experts to review the public draft of the frameworks
- Based on the responses, provided feedback to NRC
- Joined the Council of State Science Supervisors (CSSS)

For More Information

- Please contact Tamara Reavis at tamara.reavis@dc.gov
- Conceptual Framework for New Science Education Standards
 - http://www7.nationalacademies.org/bose/Standards_Framework_Homepage.html
- Designing a Conceptual Framework for New Science Education Standards, Frequently Asked Questions
 - http://www7.nationalacademies.org/bose/Standards_Framework_FAQs.html
- News Release of Draft Framework
 - <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=07122010>



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