

engage^{ny}

Our Students. Their Moment.

New York's Statewide Strategic Plan for Science and NYS P-12 Science Learning Standards

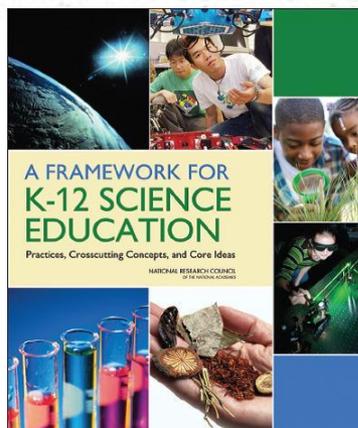
October 2014



Current NYS Science Learning Standards

- **Adopted in 1996 as the New York State Learning Standards for Mathematics, Science, and Technology**
- **Expectations presented as standards, key ideas, and performance indicators, which are benchmarked at elementary, intermediate, and commencement levels.**
- **Supported by core curriculum resource guides, which include specific major understandings**
 - **Elementary Science Core Curriculum Grades K-4**
 - **Intermediate Level Science Core Curriculum Grades 5-8**
 - **Physical Setting/Chemistry Core Curriculum**
 - **Physical Setting/Earth Science Core Curriculum**
 - **Physical Setting/Physics Core Curriculum**
 - **The Living Environment Core Curriculum**
- **All science courses should be aligned to standards 1, 2, 4, 6, and 7, as appropriate.**

Brief NGSS History



- Framework developed by National Research Council finalized in July 2011
- NGSS development was coordinated by Achieve, Inc.
 - 26 Lead State Partners
 - 41-member educator writing team (comprised of K-12 educators, higher education faculty, and content experts)
 - Support from numerous stakeholders (e.g., American Federation of Teachers, Council of State Science Supervisors, National Education Association, National Science Teachers Association)
 - Finalized in April 2013 following several rounds of public comment, including comments from the New York Statewide Leadership Team and individual New York educators.

Statewide Strategic Plan for Science

- **Developed by Department staff in collaboration with:**
 - the Science Content Advisory Panel (comprised of New York State K-12 educators and higher education faculty)
 - the Statewide Leadership Team (a team of New York statewide stakeholders convened to assist with the review of NGSS), and
 - representatives of the NYS Science Education Consortium
- **Designed to guide a comprehensive approach toward improving P-12 science education statewide**

Strategic Plan (cont.)

- **Includes mission and vision statements that will be achieved by simultaneously addressing six critical components:**
 - **Standards**
 - **Curriculum**
 - **Professional Development to Enhance Instruction**
 - **Assessment**
 - **Materials and Resource Support**
 - **Administrative and Community Support**
- **Each critical component is supported by a goal.**
- **Each goal is achieved by satisfying a number of objectives and associated specific activities.**

Strategic Plan (cont.)

Example from Community and Administrative Support:

Goal: Build the capacity to enhance science education and ensure career readiness by involving STEM stakeholder partnerships and alliances between school districts, institutions of higher education, science education professional organizations, business and industry, informal education organizations, government agencies, and the larger learning communities: local, regional, state, national, and international arenas.

Objective: Enhance public relations to heighten the importance and strengthen the presence of P-12 science education in New York State.

Strategic Plan (cont.)

Activities:

- Develop a statewide plan for improving communication with science stakeholders and the community at large about the benefits of STEM education.
- Develop a plan to build awareness regarding the importance of science education for citizenry and readiness for college and/or careers.
- Build support and enhance knowledge of the public and private sectors to promote effective implementation of science curriculum programming, instructional practices, and standards-based assessments that are aligned to the new P-12 NYS science learning standards.

Next Steps

If directed by the Board, NYSED staff and stakeholders will:

- Post a draft of the Statewide Strategic Plan for Science for public comment,**
- Present a final version of the Strategic Plan to the Board for adoption in January 2015, and**
- Move forward with a process to update and develop New York State science learning standards.**