



Science Education for a New Generation

Next Generation Science Standards Fact Sheet

What are the Next Generation Science Standards?

The Next Generation Science Standards (NGSS) are a set of science education standards being developed based on a vision for science education established by the *Framework for K-12 Science Education* published by the National Research Council in 2011. Publication of the Framework was the first of a two-step process to produce a set of Next Generation Science Standards for voluntary adoption by the states.

How are the NGSS Being Developed?

Twenty-six state partners are working together to develop the [NGSS](#) as part of a collaborative state-led process that involves K-12 teachers, state science and policy staff, higher education faculty, scientists, engineers, cognitive scientists and business leaders.

What is the Timeline for the Development of the NGSS?

The first draft of the new standards is due in spring 2012 and will be open to public comment. The general public as well as educators are encouraged to strategically review the standards and provide feedback. All input is valued and will be an important part of the development process. A second draft and public comment period will be scheduled for late Fall of 2012 with the goal of publishing a set of high quality, college-/career-ready science standards in Spring 2013.

How Does the NGSS Relate to the Common Core State Standards?

The NGSS is not being developed by the same process, nor by the same organizations. The NGSS is a state-led initiative that is being funded by the Carnegie Corporation of New York. No federal, state or local funds are being used for the development of the NGSS.

The NGSS will make explicit connections to the Common Core State Standards (CCSS) in English Language Arts/Literacy and Mathematics and will align with the Common Core Literacy Standards for Science & Technical Subjects in grades 6-12, and the Standards for Mathematical Practice.

Why Do We Need New Science Standards?

The United States is increasingly falling behind in the scientific achievement of our students.

- The U.S. ranked 14th in reading, 17th in science, and 25th in mathematics on the 2009 PISA assessment. Less than ten percent of U.S. students scored at one of the top two of six performance levels.
- The United States is 12th in high school graduation rate among the 36 OECD countries for which data is available.
- Over a third of eighth-graders scored below basic on the 2009 NAEP Science assessment.
- 78% of high school graduates did not meet the readiness benchmark levels for one or more entry level college courses in Mathematics, Science, Reading, and English.

New, rigorous science standards are a necessary part of our efforts to reverse the current economic trend.

How will the NGSS Impact Science Education?

The NGSS will integrate the disciplinary core ideas, crosscutting concepts, and science and engineering practices established in the Framework. They are designed to:

- Provide the basis for a rigorous science curriculum for every student at every school.
- Develop 21st-century skills (critical thinking and problem solving, communication, collaboration, and creativity and innovation) that apply to all careers as well as everyday life.
- Prepare every student for the workplace and ensure he/she is globally competitive.
- Support the creation of science, technology, and engineering jobs in the economy through the preparation of a scientifically literate workforce.
- Equip all students for living in a society that demands an increasing level of science, mathematics, and technology literacy.

Where can I find the NGSS?

Information on the progress of the NGSS (including drafts for public review as they are released) is available at <http://www.nextgenscience.org>