

11 Facts to Know about the New Jersey Student Learning Standards for Science

1. The New Jersey Student Learning Standards for Science provide students with opportunities to engage in learning about fundamental questions about the world and how scientists have investigated and found answers to those questions. Throughout grades K-12, students will have opportunities to carry out scientific investigations and engineering design projects related to their science studies.
2. After a year of gathering public comments, the standards were adopted by the State Board of Education on July 9, 2014. The implementation timeline is as follows:
 - o Grades 6-12 to implement by the start of the 2016-2017 school year; and
 - o Grades K-5 to implement by the start of the 2017-2018 school year.
3. The standards were developed as part of a two part process.

Step One: Getting the Science Right The National Research Council, the staff arm of the National Academy of Sciences, began by developing the *Framework for K–12 Science Education*. The Framework was a critical first step because it is grounded in the most current research on science and science learning and identified the science knowledge and skills that all K–12 students should know.

Step Two: States Developing Next Generation Science Standards The standards were developed collaboratively with 24 other states and stakeholders in science, science education, higher education, and industry. Additional review and guidance were provided by advisory committees composed of nationally-recognized leaders in science and science education as well as in business and industry.

As part of the development process, the standards underwent multiple reviews from many individuals and groups, and two public drafts were produced for review. This maximized the opportunity for all who have a stake in science education to inform the development of the standards.

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4. The *Framework* and the standards were developed without the use of any federal or state tax dollars. The cost to develop the standards in New Jersey and other states was underwritten by the Carnegie Corporation of New York, the GE Foundation, the Noyce Foundation, The Cisco Foundation, and Dupont.
5. The standards are one way that New Jersey assures that our high school graduates enter an economy prepared to meet more challenging skills in science, technology, engineering and mathematics (STEM) than ever before.
6. The science standards differ significantly from prior standards. In the new science standards, the three dimensions of Science and Engineering Practices (SEPs), Disciplinary Core Ideas (DCIs), and Crosscutting Concepts (CCCs) are crafted into performance expectations from which educators will be able to measure competency. See the [How to Read the Standards video](#).
7. The goal of instruction goes well beyond having students memorize content. Content becomes meaningful to students when they see its usefulness — when they need it to answer a question. Therefore, in programs aligned to the science standards, an important component of instruction is to pique students' curiosity to help them see a need for the content.
8. New Jersey's Student Learning Standards for Science emphasize learning core ideas over memorizing a series of facts. This emphasis is based on research that shows that experts in science understand the core principles and theories in their fields, and can use them to make sense of new information or to solve problems.
9. The new standards link engineering, technology and science. Students will learn how this combination is needed to solve problems in everyday life and to address worldwide challenges such as generating clean energy,

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preventing and treating disease, and maintaining supplies of food and clean water.

10. The new standards make science accessible to all students. This represents a change in approach. It broadens the opportunities for every student to engage in sophisticated science and engineering practices.
11. New Jersey's Student Learning Standards for science allow students to learn science by doing what scientists and engineers do. When students understand how scientists and engineers work and have opportunities to carry out their own investigations and design solutions, they become more engaged in their learning of science.