

Illinois State Board of Education

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Background on the Development of the Next Generation Science Standards

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Illinois' previous science standards were adopted in 1997. Since then, our country has seen major advances in the field and expanded our understanding of how students learn science. Illinois' 1997 science standards needed to be updated accordingly.

In January 2014, the Illinois State Board of Education (ISBE) adopted the Next Generation Science Standards (NGSS) as the Illinois Learning Standards in science. These standards replaced the 1997 standards and became effective statewide Feb. 27, 2014, with full implementation set for the 2016-17 school year. These standards are a key component toward advancing high-quality teaching and learning in science for all students in Illinois. They are not a curriculum. The standards articulate what students should know and be able to do at the end of each grade level from kindergarten through high school graduation to be successful in college and careers.

The NGSS were created from "A Framework for K-12 Science Education," released in 2011. The framework was developed by the National Science Academies to provide a broad set of expectations for K-12 science education. This provided the first step in a process to produce new science standards.

The NGSS were developed through a collaborative, state-led process. In 2011, Illinois became one of 26 state partners to guide the standards-writing process, gathering and delivering feedback from state-level committees to address common issues and challenges. Achieve Inc. coordinated the states' efforts. As a lead state, Illinois convened the Illinois Lead State Review Committee, a broad-based team charged with providing feedback to the NGSS Writing Team and guidance to the state throughout the standards-development process. Three Illinois educators were selected to be on the writing team: Dr. Carol Baker, Rita Januszyk, and Chris Embry Mohr. The science supervisors from each state worked with the writers to provide feedback from the Illinois Lead State Review Committee. This committee consisted of state leaders; Gil Downey and Pam Stanko from ISBE; and representatives from the K-12 education, education policy, scientific, postsecondary education, and informal science communities.

Teams of Illinois science educators, higher education representatives, and business and industry partners then reviewed and revised multiple drafts of the NGSS. This helped ensure that the new science standards are relevant to college and career readiness as well as connected to the Illinois Learning Standards in math and English language arts based on the Common Core State Standards. The public had the opportunity to comment on the proposed NGSS during two public review periods, resulting in feedback from more than 10,000 people. The final NGSS were officially released in April 2013.

The Illinois Learning Standards in science based on the NGSS offer a new vision for K-12 science and engineering education. The standards set the stage for a significant shift in how those subjects may be viewed and taught in Illinois and across the nation.

To learn more about the NGSS, visit http://www.nextgenscience.org/. More information about the Illinois Learning Standards in science is available at www.isbe.net/nils/science/default.htm.