National Research Council Releases Science Frameworks

Framework for K–12 Science Education Will Serve as Foundation for State-led Effort to Create Next Generation Science Standards

JULY 19, 2011—The National Academy of Sciences released a framework today that will serve as the foundation for the creation of Next Generation Science Standards. The Framework for K–12 Science Education describes key ideas and practices in the natural sciences and engineering that all students should be familiar with by the time they graduate from high school.

The Framework was developed by a committee representing expertise in science, teaching and learning, curriculum, assessment and education policy. The National Research Council (NRC), the staffing arm of the National Academy of Sciences, coordinated the development of the Framework, which will be used as the basis for a state-led effort to create new K–12 science standards. Achieve will manage the process for developing the new standards.

“The National Research Council, working with the science and education communities, has done an excellent job creating a framework for the next generation of science education standards,” said Michael Cohen, president of Achieve. “This was a thorough and rigorous process and the NRC is to be congratulated.”

Earlier this month, the U.S. Department of Commerce released a report showing that jobs in Science, Technology, Engineering and Mathematics (STEM) fields have grown at a much faster rate than non-STEM jobs over the past 10 years and will continue to do so for the foreseeable future.

“In order to be scientifically literate and compete for the jobs of the future, our students must have a rigorous science education,” Mr. Cohen said. “This Framework is an important step in making sure all students have the opportunity to pursue postsecondary education and meaningful careers.”

Over the next year, content experts from states across the nation will work together to create science standards based on the Framework. The process will include the opportunity for input from those in the field, including K–12 educators, the scientific
community, higher education, business leaders and the general public. The new standards should be released in late 2012.

“Creating the next generation of science standards will be a state-led process that takes into account the views of all stakeholders while staying firmly rooted in the NRC’s Framework,” said Stephen Pruitt, vice president for Content, Research and Development at Achieve. “The goal is to create a strong educational foundation in science so our students have the scientific background they need to be competitive in the 21st century.”

For more information on the Framework for K-12 Science Education, visit http://national-academies.org/.

Created in 1996 by the nation’s governors and corporate leaders, Achieve is an independent, bipartisan, nonprofit education reform organization based in Washington D.C. that helps states raise academic standards and graduation requirements, improve assessments, and strengthen accountability. Achieve is leading the effort to make college and career readiness a national priority so that the transition from high school graduation to postsecondary education and careers is seamless. In 2005 Achieve launched the American Diploma Project Network. Starting with 13 original states, the Network has now grown to include 35 states educating nearly 85 percent of all U.S. public school students. Through the ADP Network, governors, state education officials, postsecondary leaders and business executives work together to improve postsecondary preparation by aligning high school standards, assessments, graduation requirements and accountability systems with the demands of college and careers. For more information about the work of Achieve, visit www.achieve.org