

# Value Of Science Education Examined

March 18 2010, By Audrey Hoffer

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The new blueprint for a revamped Elementary and Secondary Education Act -- commonly referred to as the No Child Left Behind Act -- is raising concerns among science and education experts.

Department of Education secretary Arne Duncan presented the Obama Administration's updated education blueprint on Wednesday to the House Education and Labor Committee.

The committee is currently rewriting the law.

The [science education](#) community noted the lack of an emphasis toward the importance of science-related instruction for students.

According to the blueprint, "states will continue to implement statewide science standards ... and may include such assessments ... in their accountability systems."

The phrase challenged by scientists is 'may include', which they believe should read as 'must include'.

"When we do not include science among the areas that are emphasized and assessed, we run the risk that little focus will be put on science in the school curriculum," said Shirley Malcom, director of education and human resources for the American Association for the Advancement of Science.

According to Christine Bertrand, executive director of the California

Science Teachers Association, California has rigorous science education standards that starts during kindergarten and continues through high school with increasingly complex content that provides a solid scientific foundation for students.

"But what we're finding is that in many cases elementary [school](#) teachers are instructed not to teach anything but reading and math because those are the subjects that are tested ... It's not benign neglect; in some cases it's deliberate." Bertrand said. "And, there's no penalty for not teaching science."

Research supports the idea that reading skills are enhanced through science instruction.

"I strongly support teaching science to all, and if testing will encourage K-12 schools to do that, then I support testing," said Robert Rosner, professor of physics and astrophysics at the University of Chicago. "It's in the interests of our country to have a technologically educated citizenry and to achieve that does require teaching science."

"There are those who say we can't afford to invest in science, that it's a luxury at a moment defined by necessities. I could not disagree more. Science is more essential for our prosperity, our security, and our health, and our way of life than it has ever been," said President Barack Obama in October of 2009 while awarding the National Medal of Science and Medal of Technology and Innovation.

Francis Eberle, the executive director of the National Science [Teachers Association](#), said that science provides a way to think of the world and enables people to be more thoughtful in making decisions.

"From cars to healthcare, from energy to pharmaceuticals, all these issues require knowledge of a complex world," Eberle said. "It's not

necessarily our mission to make the world full of scientists but we do want people to be more science-aware."

"At the end of the day, what is assessed is taught!" Malcom said. "I can't imagine trying to manage one's life in a world where the rules are perceived to be based on luck and chance rather than scientific principles that are knowable."

Source: Inside Science News Service

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