

Report: 8th-grade students still lag in science

May 10 2012, By DORIE TURNER , AP Education Writer

Eighth-graders in the U.S. are doing better in science than they were two years ago, but seven out of 10 still are not considered proficient, the federal government said Thursday.

What's more, just 2 percent have the advanced skills that could lead to careers in the field. That's from the 2011 National Assessment of Educational Progress, also known as the Nation's Report Card, released by the U.S. Department of Education. The average score was 152, up from 150 in 2009.

Gerry Wheeler, interim head of the National Science Teachers Association, said the results showed "minuscule gains" in student achievement in science.

"When you consider the importance of being scientifically literate in today's [global economy](#), these scores are simply unacceptable," Wheeler said.

Just 31 percent of students were considered proficient or better on the test, the data show.

The gap between minority and white students narrowed for both blacks and Hispanics, but both groups still lag far behind their white [classmates](#). Hispanic students scored 137, up from 132 two years earlier, while [black students](#) scored 129, compared with 126 two years earlier.

White students scored an average of 163.

The [Education Department](#) and states have been working to improve student achievement in science by bolstering the number of top-notch science teachers in schools. The department has a goal of preparing 100,000 new science teachers over the next decade through incentive programs and bonuses for teachers that get certified in the subject.

Some states, like Georgia, pay [science teachers](#) more than their colleagues in other subjects in hopes of encouraging more college students to go into the field.

"This tells me that we need to work harder and faster to build capacity in schools and in districts across the country," said [Education Secretary Arne Duncan](#), pointing to the stagnation in the numbers of top-scoring [science students](#) on NAEP. "We have to do things differently - that's why education reform is so critical."

The test was given last year to more than 120,000 eighth-graders from 7,300 schools. Of the 47 states that participated in the exam, 16 saw small increases in their scores. Most states had flat scores compared with 2009.

The national testing program mandated by Congress also tests fourth-, eighth- and twelfth-graders students in math, reading and other subjects.

The results also indicated there are significant differences between states.

In Mississippi, just 18 percent of students were proficient and no students scored in the advanced category, the worst performance in the country. Montana and North Dakota saw the best performance with 44 percent of students scoring proficient or better. California saw 22 percent of eighth-graders reach proficiency, compared with 30 percent in Georgia.

There are a variety of factors that likely contribute to the lackluster results, experts said. Many blame the results as an unintended side effect of the federal No Child Left Behind law, which puts more emphasis on math and reading than it does on science, history, arts and other subjects.

Others say the country's best college students majoring in science rarely go into teaching - instead choosing other, higher paying fields - which means children aren't getting quality instruction in the subject.

The exam tests knowledge and understanding of physical, life, Earth and space sciences. Students were asked to identify chemically similar elements on the periodic table, name a function of the human organ system and explain the effects of human land use on wildlife.

The test was also given in 2005, but it was changed significantly in 2009, making a comparison before then unreliable. The test was supposed to be given every four years, but federal officials moved it up so it can be compared to international tests given in the same year.

Results from the 2005 exam were also concerning: Only 29 percent of fourth- and eighth-grade [students](#) scored proficient or better, as did just 18 percent of 12th-graders tested.

More information: <http://nces.ed.gov/nationsreportcard/science/>

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