

EDUCATION WEEK

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U.S. Math, Reading Achievement Edges Up, But Gaps Remain

By **Catherine Gewertz**

The reading and mathematics achievement of the country's 8th grade students improved in the last two years, but the performance of 4th graders remains stubbornly mixed, with progress in math, but not in reading, according to national test data released Thursday.

The results of the **2013 National Assessment of Educational Progress**, known as "the nation's report card," show that 8th graders' average score in math rose 1 point since 2011, the last time the test was given, and 3 points in reading on NAEP's 500-point scale. Fourth graders gained 1 point in math; there was no statistically significant gain in reading.

Larger shares of students reached the "proficient" level in 2013 than did so in 2011, and achievement was far higher than when the tests were first given in the early 1990s. But the numbers still painted a less-than-rosy picture of American academic strength: In grade 4, only 42 percent of students are proficient in math, and 35 percent are proficient in reading. In grade 8, 36 percent are proficient in reading and math.

NAEP scores fall into three categories on a 0-500 point scale: basic, proficient, and advanced.

Jack Buckley, the commissioner of the National Center for Education Statistics, which oversees NAEP, said during a call with reporters that while he was "heartened" to see some positive results, such as the gains in 8th grade reading, he was disappointed not to see more improvement. He singled out, in particular, the lack of progress closing racial and ethnic disparities in the test results.

Cornelia Orr, the executive director of the National Assessment Governing Board, which sets policy for NAEP, said that the stagnation in 4th grade reading scores suggests that "helping beginning readers to be stronger readers would be an area that needs more attention."

Notable Gains

Tennessee, the District of Columbia and U.S. Department of Defense schools had much to celebrate as the only three jurisdictions to produce NAEP gains in both subjects at both grade levels.

Scores in the District of Columbia ranked among the lowest three in the nation in both grades and

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subjects, but also saw the biggest improvements, with a 23-point increase across the four tests. Fourth graders gained 5 points in reading and 7 points in math, and 8th graders delivered gains of 6 points in reading and 5 points in math. Tennessee's average scores rose 22 points across the four assessments, and Department of Defense schools' scores improved 14 points.

How much of the NAEP gain in the District of Columbia was driven by charter schools is not yet known, since those breakdowns were not available. Charter schools—accounting for 44 percent of the District's enrollment—typically outperform traditional schools there. But Kaya Henderson, the chancellor of the District of Columbia school system, noted that traditional schools improved more quickly than did charters on the district's own tests last spring, so she expects district-level NAEP results—due out later this year—to show the same thing.

The 2013 math and reading scores echo improvements on the city's own tests, as well, Ms. Henderson said. She saw both sets of data as evidence that intense work in key areas is paying off: improving teacher quality through a new evaluation and compensation system; professional development, including the placement of instructional coaches in nearly every school; and reworking instruction and curricular materials to teach the Common Core State Standards in math and English/language arts.

"To see that we are among the top three growers in the country is just humongous for us," she said. "We still have a long way to go, but the only way we are going to get there is, one, we're growing, and two, we're growing faster than other people, and both of those things are true."

Noting that NAEP gains in the District of Columbia have far outstripped those nationally since 2007, when the mayor's office was put in charge of education, Ms. Henderson said the "political cover" that shift in control provided in the face of pushback to the district's education reform agenda was crucial to the test-score gains on its own tests and on NAEP.

Common-Core Effect

Tennessee Commissioner of Education Kevin S. Huffman credited much of that state's score gains to its ratcheting up of academic standards: in 2009, with its own new standards and tougher new tests, and again in July 2010, when it adopted the common standards. He also pointed to the state's weeklong intensive trainings for teachers on the common core, and the instructional feedback its teachers receive as part of the state's revamped teacher-evaluation system.

"These things are not magic, but they're hard work," he said. "They're hard to implement, and there's a lot of push back associated with raising standards. It's not easy, but it's not magic."

Some states lost ground: Massachusetts, one of the top three highest-scoring states in both subjects and grade levels, lost 4 points in 4th grade reading. Oklahoma fell 4 points in 8th grade math, and Montana lost 4 points each in 4th grade reading and 8th grade math.

Hispanic and black students improved their scores, but gaps between their performance and those of their white and Asian peers have not improved since 2011. Disparities between the achievement

of girls and boys persisted, as well.

In math, Hispanic students improved 2 points, and girls improved 1 point, since 2011 at both grade levels. Black students' achievement has been flat for the past two years. Asian students' scores rose only in 8th grade, by 4 points.

In reading, minority achievement was flat in the 4th grade, but in 8th, Asian students gained 5 points, Hispanic students gained 3 points, and black students gained 2 points. Boys' scores went up 2 points, and girls' rose 3 points.

Proficiency rates varied widely by race, ethnicity, gender, and income level. In 2013, 51 percent of Asian students and 46 percent of white students reached proficiency in 4th grade reading, compared with 20 percent of Hispanic students and 18 percent of black students. Forty-two percent of girls were reading at or above the proficient level in 8th grade, while only 31 percent of boys were doing so. Only one quarter of students eligible for free or reduced-price meals reached proficiency in 4th grade math, compared with 59 percent of their wealthier peers.

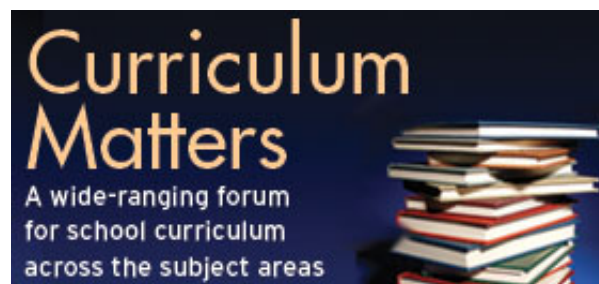
The rates at which states exclude special education students and those still learning English from NAEP testing continues to be an issue for the assessment. The National Assessment Governing Board, which oversees NAEP policy, adopted new goals in 2010 that are designed to include more such students in testing. Nationally, exclusion rates are dropping. In 8th grade reading, for instance, 31 percent of students with disabilities were excluded from NAEP testing in 1998, but by 2013, that number had dropped to 15 percent. Likewise, 29 percent of English-learners were excluded from NAEP tests in 8th grade reading in 1998, and only 10 percent are now.

But in some states, exclusion rates remain high. Maryland had among the highest rates in reading, with about 60 percent of English-learners and students with disabilities excluded at grade 8. Georgia, Kentucky, North Dakota and Tennessee all had 8th grade reading exclusion rates over 25 percent for students with disabilities. Ms. Orr said that when exclusion rates are high, it's often because NAEP doesn't provide the same kinds of testing accommodations that a given state does. The read-aloud accommodation is a prime example, she said.

Exclusion rates in math were lower. Maryland and Michigan had among the highest exclusion rates, with 17 and 16 percent, respectively, for English learners in 8th grade. North Dakota and California had among the highest exclusion rates for 4th grade students with disabilities, with 17 percent and 16 percent, respectively. Kentucky excluded 17 percent of its 8th grade students with disabilities.

Many states made big strides in reducing exclusion rates. The District of Columbia, which excluded 34 percent of its students with disabilities from the 8th grade reading NAEP in 1998, excluded only 5 percent this year. New Mexico excluded 44 percent of its English-learners from the 8th grade

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reading NAEP in 1998, but brought that number down to 7 percent this year.

The 2013 results offer extensive interactivity online, allowing users to create customized and comparison reports by grade, subject, student subgroup, and other factors.

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