

The Nation's Report Card: 12th-Grade Scores Lower in Math, Steady in Reading Since 2013; 37 Percent of Students Are Academically Prepared for College

WASHINGTON — Results from *The Nation's Report Card: 2015 Mathematics and Reading at Grade 12* indicate scores for high school seniors were 2 points lower in mathematics and remained unchanged in reading in 2015 compared with 2013; overall, scores were not significantly different in mathematics and were 5 points lower in reading since the first comparable assessment year — 2005 for mathematics and 1992 for reading.

The National Assessment of Educational Progress (NAEP), known as The Nation's Report Card, also shows that an estimated 37 percent of 12th-graders are prepared for college-level coursework in each subject. In 2013, the last time the assessments were given, an estimated 39 percent of grade 12 students were prepared for college-level mathematics and an estimated 38 percent for college-level reading.

"The 12th-grade NAEP results confirm the need to move swiftly to ensure that all students have access to high-quality programs that prepare them for success in higher education and the workforce," said Governing Board member Mitchell Chester, who is also commissioner of the Massachusetts Department of Elementary and Secondary Education. "Too many 12th-graders are unprepared for the world after high school."

The National Assessment Governing Board, which sets policy for NAEP, began using NAEP in 2013 to estimate the percentage of grade 12 students who possess the knowledge and skills in reading and mathematics that would make them academically prepared for first-year college coursework. The Governing Board has been conducting extensive research in this area since 2008.

NAEP results are measured at three achievement levels: *Basic, Proficient* and *Advanced. Basic* denotes partial mastery of knowledge and skills, *Proficient* denotes solid academic performance and *Advanced* represents superior work. To determine the percentage of students performing at or above the level indicating college preparedness, a single score is identified in each subject. These scores correspond closely with scores that define the *Proficient* level but were independently determined as a result of the Governing Board's preparedness research.

2015 Grade 12 Mathematics: The results are based on a nationally representative sample of 13,200 12th-graders from 740 schools. The mathematics assessment measures performance in four areas: (1) number properties and operations; (2) measurement and geometry; (3) data analysis, statistics and probability; and (4) algebra. Students earning a score equivalent to the national average were likely to be able to use proportions to calculate height but were not likely to be able to use an algebra model to predict cost with a calculator. Some key highlights:

- 25 percent of grade 12 students across the country scored at or above the *Proficient* level, including 3 percent who scored at the *Advanced* level, in 2015.
- The percentage of students performing at or above the *Basic* level in 2015 was lower compared with data from 2013; however, a higher percentage of students performed below *Basic*.
- 47 percent of Asian students, 32 percent of white students and 31 percent of students of two or more races scored at or above the *Proficient* level; 7 percent of black, 10 percent of American Indian/Alaska Native and 12 percent of Hispanic students scored at or above *Proficient* in 2015.
- English language learners scored higher in 2015 than in 2013, but native English speakers scored lower.
- Students whose parents did not graduate from high school or had only some education after high school scored lower in 2015 than in 2013. There was no change in scores for students whose parents had graduated from high school or from college when compared with 2013.
- There was no change in scores for students with disabilities, and scores for students who are not identified as students with disabilities decreased compared with 2013.

2015 Grade 12 Reading: The results are based on a nationally representative sample of 18,700 12th-graders from 740 schools. The reading assessment measures students' comprehension of two types of texts: literary and informational. Students earning a score equivalent to the national average were likely to be able to make an inference based on details in a reading text but were not likely to be able to recognize detail related to the purpose of a reading text. Some key highlights:

- 37 percent of grade 12 students across the nation performed at or above the *Proficient* level, including 6 percent who scored at the *Advanced* level, in 2015.
- 49 percent of Asian students, 46 percent of white students and 45 percent of students of two or more races scored at or above *Proficient*, while 17 percent of black students, 25 percent of Hispanic students and 28 percent of American Indian/Alaska Native students reached that achievement level in 2015.
- The percentage of students performing below *Basic* in 2015 was higher compared with 2013.
- Since 2013, scores have increased for students performing at the 90th percentile and have declined for students at the 25th and 10th percentiles.
- The achievement gap between black and white students was wider when compared with the first assessment in 1992.

During each assessment, 12th-graders were asked questions about their lives and specific habits to determine any relationships between students' experiences and NAEP performance. For both reading and mathematics, 42 percent of students said they had been accepted to a four-year college at the time of the assessment. In both subjects, students' NAEP scores increased as they reported reading more pages each day in school and for homework, in categories from five or fewer pages to more than 20 pages. In mathematics, students who took higher-level courses such as calculus performed better on NAEP than students who took lower-level mathematics courses. And in reading, students who read for fun every day or almost every day scored higher on NAEP than those who read for fun less often.

"A strong foundation in math and reading is essential to a student being prepared for college academics and for most careers, so this trend of stagnating scores is worrisome," Governing Board Chair Terry Mazany said. "We must examine how we're preparing students for life after high school, whether offering more students advanced math coursework, for example, or placing greater emphasis on reading for pleasure and for school. This is a crucial time in education, and there are many things each of us can do to help ensure every student succeeds."

To see more scores, visit <u>www.nationsreportcard.gov/reading_math_g12_2015</u>. To learn more about the Governing Board's research on college preparedness, visit <u>www.nagb.org/what-we-do/preparedness-research.html</u>.

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The National Assessment of Educational Progress is a continuing and nationally representative measure of trends in academic achievement of U.S. elementary and secondary students in various subjects. Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography and other subjects at grades 4, 8 and 12. Through The Nation's Report Card, NAEP informs the public about what American students know and can do in various subject areas and compares achievement among states, large urban districts and various student demographic groups. NAEP is a congressionally authorized project of the National Center for Education Statistics within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP. Follow NAEP on Facebook and Twitter.

The National Assessment Governing Board is an independent, nonpartisan board whose members include governors, state legislators, local and state school officials, educators, business representatives and members of the general public. Congress created the 26-member Governing Board in 1988 to oversee and set policy for NAEP. Follow the Governing Board on <u>Facebook</u> and <u>Twitter</u>.