Do Our High School Seniors Have the Academic Knowledge and Skills They Need for College?

What NAEP Can Tell Us

A wide array of state and national leaders has recognized the importance of knowing whether our nation’s high school graduates are academically prepared for college, or for other types of education and training they need for their chosen career path. As the only source of nationally representative 12th grade student achievement results, the National Assessment of Educational Progress (NAEP), also known as The Nation’s Report Card, is in a unique position to provide this critical information. But can NAEP reliably indicate seniors’ academic preparedness for college and job training?

In 2004, the National Assessment Governing Board, an independent, bipartisan organization that oversees NAEP, began investigating the potential of the grade 12 NAEP tests in reading and mathematics to fulfill this need. In 2008, the Governing Board launched a comprehensive research program, and the first phase of research is now complete. Its central conclusions are:

- NAEP can be used as an indicator of academic preparedness for first-year, credit-bearing college coursework.
- The average NAEP scores associated with the research findings represent a level of academic preparedness reflecting solid academic performance, rather than a “minimal” level of academic preparedness.
- Based on the reading scores of 12th graders who took the NAEP in 2013, an initial estimate is that 38 percent of seniors have the knowledge, skills and abilities in reading that would make them academically prepared for college. This represents the percentage of 12th graders nationally who scored at or above 302 on NAEP in reading, which matches the Proficient level or above.
- Based on the mathematics scores of 12th graders who took the NAEP in 2013, an initial estimate is that 39 percent of these seniors have the knowledge, skills and abilities in mathematics that would make them academically prepared for college. This represents the percentage of students nationally who scored at or above 163 on NAEP in mathematics, which lies between the cut scores for the Basic and Proficient achievement levels.
- Using grade 12 NAEP scores as an indicator of academic preparedness for college at the national level is supported by the research conducted so far. But not enough information has yet been collected to support NAEP as an indicator of academic preparedness for job training or for interpreting state-level results.

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39% of students scored at or above 163 in 2013
More on the Governing Board’s Research

The Governing Board commissioned more than 30 research studies to draw conclusions about high school seniors’ academic preparedness (see Figure 1 below). The research findings, compiled into an online preparedness report, were generally consistent across studies and years. The online preparedness report provides details about the studies and findings.

Taken collectively, the five types of studies compare 12th grade NAEP content to tests used for college admissions and placement, including the SAT, ACT and ACCUPLACER. They also compare NAEP performance to the SAT and ACT college readiness benchmarks as well as postsecondary outcomes, such as first-year GPA and placement into remedial vs. non-remedial coursework.

This first phase of research allowed the calculation of reasonable initial estimates of the percentage of students who possess the knowledge, skills, and abilities that would make them academically prepared for college. The research supports the central conclusions described on the previous page regarding NAEP performance and academic preparedness for first-year college coursework.

Where the Board’s Preparedness Research Program Goes from Here

This research represents an important first step. It is being shared with the public to help add meaning to the NAEP 12th grade results.

The Board is conducting a second phase of preparedness research using NAEP data collected in 2013 to show whether these new data support the conclusions from the first phase. This additional research will also help the Board determine whether NAEP can be used to report academic preparedness at the state level, by demographic subgroups, and for job training.