PUT DOWN YOUR PENCILS: THE NATION’S REPORT CARD IN THE DIGITAL ERA

How do we know what students know in the 3 “R’s”? In 2017, the National Assessment of Educational Progress (NAEP) was administered to students in grades 4 and 8 in three different subjects: mathematics, reading, and writing. Students’ knowledge and skills in these three subjects were assessed on tablet devices. This transition from paper to digital assessment represents the culmination of the extensive work of psychometricians, statisticians, assessment developers, content experts, researchers, scientists, Governing Board members, and National Center for Education Statistics (NCES) staff who researched, piloted, and checked every aspect of NAEP to ensure minimal hitches and glitches.

Computers Aren’t New; What’s the Big Deal?

Technology is rapidly changing the way students learn and how their learning is assessed. The content the NAEP reading and mathematics assessments measure is in essence the same, but the digital environment allows for innovative ways to tap students’ knowledge and skills. For instance, a reading passage is presented with vivid illustrations and a means to refer back to the text when answering questions. On the mathematics assessment, a calculator embedded on the screen appears when requested by the student and is hidden when not needed to avoid unnecessary distraction when working on items that may require calculator use.

Transitioning NAEP in reading and mathematics from paper and pencil to digital incorporates careful research and thoughtful monitoring of how technology can be most effectively used. NCES took every step to ensure that (1) the digital tablets work well and are accessible for both test administrator and test-taker; and (2) this approach maintains the privacy of students’ responses. All students benefit from the universal design that is the foundation of the NAEP digital assessment platform. This approach allows all test-takers, regardless of age or ability, to participate in the assessment with ease.

Every effort has been taken to make this transition to the digitally based assessment gradual so as to represent NAEP content faithfully while keeping NAEP at the forefront of assessment.
The Trend Is Trending

Monumental work led to this monumental achievement of the 2017 administration, but the story does not end here. The Governing Board and NCES are not done yet. The 2017 NAEP results are collected, and now elaborate, careful data analysis is underway.

One unique value of NAEP is its stability. NAEP provides high-quality, consistent, and comparable student assessment data to states, select large urban districts, and the nation—showing progress over time. That means that, even though items may change from one administration to the next, NAEP can report if student achievement is trending up or down or staying the same.

The transition to digitally based assessments requires careful analysis to compare student performance on these new digital assessments with performance on the traditional paper-and-pencil assessment. Extensive research, with careful, detailed, sophisticated analyses by national experts, about how the digital transition affects comparisons to previous results is ongoing and has not yet concluded.

For the NAEP reading and math assessments in grades 4 and 8, NCES analyzes the results, then prepares and validates the Report Cards, typically within six months of when NAEP administration ends. Normally these results are released in late October. However, it is imperative that these experts complete the necessary extra steps to take NAEP across this digital transition. As soon as those in the know know, we will let you know.

For almost 50 years, NAEP has made objective information about the progress of student achievement available to educators, policymakers, and the public. The transition to digitally based assessments is just the most recent example of the long-standing commitment to quality and innovation found in The Nation’s Report Card. We eagerly await the results of the 2017 NAEP test administration and look forward to sharing them with you.