NAEP Innovations: Scenario-Based Tasks

Just like drivers need to keep their eyes on the road and check their mirrors, various types of assessments allow the nation to monitor educational progress. And just as today's automobiles become more efficient, our nation's education dashboard requires periodic updates to reflect new needs. To measure what American students know and what they can do, the National Assessment of Educational Progress (NAEP) includes an important and innovative tool: scenario-based tasks.

What is a scenario-based task?

Using videos and interactive graphics, scenario-based tasks ask students to demonstrate their knowledge and skills to solve problems within realistic situations. For example, one technology and engineering literacy task requires students to develop an online exhibit on water pollution. Each scenario includes several questions and takes between 10 and 30 minutes to complete.

Are scenario-based tasks the only kind of measure used in these NAEP subjects?

No. Well-designed tests typically include a variety of question formats to effectively measure knowledge and skills. In technology and engineering literacy, the scenario-based task questions are complemented by stand-alone multiple-choice and short-answer questions.

What are the benefits of scenario-based test questions?

These questions offer more ways to show what students know and can do. In science, the task might simulate a laboratory setting where students must select materials. Because several concepts are built into a single scenario, one task can cover a range of assessment areas and difficulty levels. Students who have taken these tasks find them engaging.

Do students have to take scenario-based tasks using computers?

Yes. The multimedia simulations require a digital platform. To ensure that test administration is standardized, NAEP administrators bring computers or tablets to school sites.

Do these assessments cost more than other standardized tests?

That depends. Standardized tests come in many formats and many factors affect costs. Scenario-based assessments are more expensive to develop than pencil-and-paper multiple-choice tests. However, they are less expensive to score than many performance-based assessments that ask students to develop a product or a portfolio.

Which NAEP subjects are assessed using scenario-based tasks?

Scenario-based tasks have been part of the science assessment since 2009. NAEP's first-ever technology and engineering literacy assessment in 2014 used more of these tasks, highlighting their potential. The National Assessment Governing Board plans to include scenario-based tasks in other NAEP subjects.

To learn more about NAEP's digital innovations, go to: https://nces.ed.gov/nationsreportcard/dba/.