Questions and Answers About Using the California Standards Tests and the National Assessment of Educational Progress to Monitor Student Achievement

There is considerable public interest in using results from the California Standards Tests (CSTs) and the National Assessment of Educational Progress (NAEP) to examine the trends in achievement of California students. Both testing programs provide valuable information about the academic progress of California students. However, there are important and fundamental differences between these two tests, which need to be understood by those interested in analyzing results from these two tests. This document provides answers to questions about key areas where there are differences between these two tests. If applicable, similarities are noted, too.

What is the purpose of the CSTs and NAEP?

The CSTs were developed exclusively to measure how well California public school students in grades two through eleven are achieving the state content standards in English–language arts, mathematics, history–social science, and science. The CSTs are administered annually as part of the Standardized Testing and Reporting (STAR) Program, and the results are used to meet federal and state accountability reporting requirements.

NAEP is a broad testing program designed to measure national and state-level student performance in various subjects, including reading, writing, mathematics, and science. Different grades and subjects are tested each year on NAEP, and the results are not used to meet any accountability reporting requirements.

Do both tests provide state-level results?

Yes. The CSTs provide state-level results for California, as well as for the state’s counties, school districts, schools, and individual students. NAEP provides results for the nation, each state, and selected large urban school districts. Often it is the state-level results for both the CSTs and NAEP, from the same year, grade, and subject, which are the focus of analyses. Any interpretations based on such analyses need to take into consideration the differences described throughout this document.

Do the CSTs and NAEP for the same grade and subject test the same content?

No. While there may be some overlap in the content tested on selected CSTs and NAEP assessments for the same grade and subject, the two assessments have been developed independently and for different purposes. This has resulted in a number of distinct and important differences in the description, selection, organization, and weighting of content standards within each assessment. Any analysis of results from these two tests should begin with a thorough examination of the content covered on each test. The CST blueprints and the NAEP frameworks, which can be accessed from the Web pages provided at the end of this document, outline the content standards targeted by grade and subject.
Do both tests include the same types of questions?

Both the CSTs and NAEP include multiple-choice questions. The CSTs also include writing tasks in two grades. NAEP includes a broader range of question types, such as questions requiring short and extended responses, performance tasks, and hands-on experiments. Regardless of the types of questions included on the test, scores from the different question types are not reported separately in reporting CST and NAEP results.

Are there differences in the students tested on the CSTs and NAEP?

Yes. With very few exceptions, the CSTs are given to all public school students in grades two through eleven. Every eligible student is given the complete battery of CSTs. In each state, NAEP is administered to a sample of students designed to be representative of the state and the nation. Because NAEP only reports at a group level (i.e., not individual students), this program uses a matrix test design, which means any one student is tested in one subject (e.g., mathematics) and only takes a portion of the test in the one subject.

How do both tests report results?

In the reporting of results there are further key differences between the two tests as follows:

- The CST state-level scores are based on the entire population of students tested. NAEP state-level scores are estimates based on the sample of students tested.
- The CST scores are reported on a scale of 150 to 600 for all subjects tested. NAEP scores are reported on scales of 0 to 500 or 1 to 300, depending on the subject tested.
- The CSTs report by five performance levels and NAEP reports by four achievement levels. Even for levels where both assessments use the same label (i.e., proficient), there are differences in how the levels are determine and defined.

Any analysis of results from the CSTs and NAEP should only be done after carrying out a thorough examination of the differences between the tests so the limitations of the comparisons are well understood. Users should also understand that the CSTs and NAEP each provide unique and different perspectives on the academic progress of California students. Together, they help paint a more complete picture of our students’ academic accomplishments.

For more information…