



CSTA Members Brief: Proposed Statewide Summative Assessment System for California NGSS

As of September 7, 2016

Timeline of Significant Events:

March 9, 2016: California State Board of Education (SBE) voted to approve the proposed design plan for the California Next Generation Science Standards General Summative Assessment. (Now known as CAST – California Science Test)

May 11, 2016: SBE approved a “placeholder” in the state’s new accountability for performance on the new science assessment to be included along with the ELA and math assessments. This inclusion will occur only after reporting information and other information is available to determine the feasibility of including this data in the accountability system.

July 13, 2016: SBE approved conceptual design for the CA-NGSS Alternate Assessment. (Now known as CAA for Science – California Alternate Assessment for Science.)

July 13, 2016: SBE authorized the California Department of Education (CDE) to submit a waiver request to the federal Department of Education to not report test scores on the science assessment for two years while the state conducts pilot and field tests on the new assessments. Approval of the waiver would mean that students in grades 5, 8, and 10 will no longer take the old CST.

California’s New Science Assessment timeline:

Year	CA NGSS general assessment	CA NGSS alternate assessment
2017	Pilot test	Pilot test
2018	Field test	Pilot test
2019	Operational test	Field test
2020	Operational test	Operational test

Who Will Participate in the Pilot and Field Tests?

California students in grades 5, 8, and a sampling of high school students will participate in full-census pilot testing and field testing of new state assessments during the 2016–17 and 2017–18 school years.

What and When Will They Be Assessing?

The proposal calls for assessments to be administered in grades 5, 8, and either 10, 11, or 12.

Testing Time

The assessment will take no more than 2 and one half hours to complete – including time for instructions.

Test Format

The CAST will be computer-based only, with some adaptive elements. The CAA for Science will consist of a collection of embedded performance tasks.



Summary of Proposed Design for CA NGSS Summative Assessments

Table adapted from Item 2, Attachment 2, Page 12 of the March 2016 California State Board of Education Meeting Agenda <http://www.cde.ca.gov/be/ag/ag/yr16/documents/mar16item02.doc>:

	Segment A	Segment B	Segment C
CA NGSS PEs measured by grade/grade span	Gr. 5: 5 th grade PEs Gr. 8: 6-8 PEs Gr. 10/11/12: High School PEs	Gr. 5: 5 th grade PEs Gr. 8: 6-8 PEs Gr. 10/11/12: High School PEs	Gr. 5: K-5 PEs Gr. 8: 6-8 PEs Gr. 10/11/12: High School PEs
Scope & Depth of Measurement	Wide breadth – measures a broad sample of CA NGSS PEs	Deep measurement of targeted sample of 1-2 item sets (multiple CA NGSS SEPs and CCCs per item and one or more DCIs each as specified by task models)	Broad and deep – full range of measurement of PEs for each grade span
Type and Number of Items	Selected response, machine-scoreable items primarily independent but some organized in sets. Number: 25–35 items	Item sets which require students to solve a series of complex problem sets in discipline-specific contexts. Number: 1–2 item sets	Will emulate item types presented in Segment A or B. Number: 25–35 items or 1–2 item sets (similar to those proposed for Segment B)
Parallel Forms to All Students across Grade	Yes —All students will be tested on the same content standards, although by items that may differ adaptively in level of difficulty.	No —The item sets administered will be based on CA NGSS DCIs that provide a student with the best opportunity to demonstrate his/her level of performance.	No —The items administered will vary widely across students in order to measure the full science domain both broadly and deeply at the group level.
Reporting Level	Contributes to Student and Group Score	Contributes to Student and Group Score	Contributes to Group Score

New Assessment Design Features (CAST)

- The assessment will be a computer-based, two-stage adaptive assessment.
- The PEs assessed will be rotated over a three year cycle
- Assessment items will assess the three dimensions of NGSS. Every item will assess a CA NGSS DCI and at least one of the other two CA NGSS dimensions: one SEP or one crosscutting concept (CCC). Wherever possible, all three dimensions will be assessed within a single item.
- Design will make use of a diverse range of item types.
- The independent items as well as item sets will be used.
- Presentation of content may use dynamic stimuli and other types of new media (e.g. Animations.)
- The assessment will be in three segments described in the table above.

New Assessment Design Features (CAA for Science)

Embedded performance tasks may be collected through: (1) locally developed classroom tasks/assignments that are aligned with state assessment academic objectives; (2) state-developed classroom tasks/assignments that are aligned with state assessment academic objectives; or (3) a combination of these two approaches. In each approach, the California assessment academic objectives would be linked to the California Next Generation Science Standards (CA NGSS) by the Core Content Connectors (Connectors).