



NOVEMBER 2003 AGENDA

SUBJECT California High School Exit Examination (CAHSEE): Re-Evaluation of the CAHSEE Passing Score	<input checked="" type="checkbox"/>	Action
	<input checked="" type="checkbox"/>	Information
	<input type="checkbox"/>	Public Hearing

Recommendation:

The State Superintendent of Public Instruction recommends that the State Board of Education (SBE) maintain the current CAHSEE passing scores at 60 percent of the items correct for English-language arts and at 55 percent of the items correct for mathematics.

Summary of Previous State Board of Education Discussion and Action

Senate Bill 2X authorized the California High School Exit Examination (CAHSEE). The purpose of the CAHSEE was stated in the bill. Senate Bill 2X stated that "local proficiency standards are generally set below a high school level and are not consistent with state adopted academic content standards. In order to significantly improve pupil achievement in high school and to ensure that pupils who graduate from high school can demonstrate grade level competency in reading, writing, and mathematics, the state must set higher standards for high school graduation." The SBE adopted the CAHSEE in September 2000.

In June 2001, the Superintendent brought the results from the first standard setting to the SBE to set the CAHSEE passing scores for the Class of 2004. At that time, the standard setting results were based on the volunteer ninth graders who took the test for the first time in March 2001. The Superintendent recommended setting a provisional passing score at 60 percent of the items correct for English-language arts and at 55 percent of the items correct for mathematics.

The student performance data on the March 2001 administration demonstrated that attaining these passing scores on the test would be very challenging for many groups of students. The SBE adopted the Superintendent's recommendations and, in doing so, stated that these provisional passing scores would be re-evaluated within two years.

Summary of Key Issue(s)

Several events occurred between 2001 and 2003:

- The Legislature changed the law to provide a census testing of all tenth graders once each year, not allowing ninth graders to volunteer to take the test (Assembly Bill 1609, Ch. 716, 2001).
- Assembly Bill 1609 also required the CDE, with the approval of the SBE, to contract with an independent evaluator to determine if the test development and standards-based instruction were implemented appropriately for a high-stakes test. A contract was entered into with the Human Resources Research Organization (HumRRO). The report from this study, known as the AB 1609 Study Report, was presented in May 1, 2003.
- In May 2003, based on the findings of the AB 1609 Study Report, the Superintendent recommended that the requirements to pass the CAHSEE as a condition of graduation from high school be postponed to the Class of 2006. SBE approved Superintendent's recommendation in July 2003.
- The Superintendent also recommended that the test be reduced from three days to two days. SBE approved Superintendent's recommendation in July 2003.
- Students in the Class of 2004 who had not passed the CAHSEE in 2001 continued to take the test and students in the Class of 2005 took the CAHSEE for the first time in spring 2003.

AB 1609 Study Report

The AB 1609 Study Report, presented to the SBE in May 2003, concluded that:

- The development of the CAHSEE meets all required professional standards for use as a graduation test.
- The CAHSEE has led to dramatically increased coverage of the English-language arts and mathematics content standards at the middle and high school levels, including the development of remedial or supplemental courses targeting students who did not pass the CAHSEE.
- High school passing rates are closely related to the reported coverage of the standards assessed by the CAHSEE in the high school curriculum.
- Not all high schools have fully implemented the standards.
- Students may not have had instruction in the prerequisite skills required for the standards based courses.

- Many factors suggest that the effectiveness of standards based instruction will improve for each succeeding class after the Class of 2004.

Based on the findings of this study and the totality of information presented to SBE, the SBE voted to postpone the requirement to pass the CAHSEE as a condition of graduation until 2006.

Review of the CAHSEE Blueprints

A common practice for monitoring the validity and reliability of a high-stakes test is periodically reviewing the test blueprints to ensure that the test is measuring what it is intended to measure (the academic content standards in English-language arts and mathematics) and that the test questions are aligned with this content. Reviewing the blueprints is also important because the CAHSEE is being used for No Child Left Behind (NCLB) for the assessment of what grade 10 students should know and be able to do. CDE reviewed the blueprints and made recommendations to the SBE for revisions. The test contractor working with CDE will align the measurement of the mathematics standards to be a more appropriate assessment of what the test is intending to measure. The items being deleted from the blueprints were either redundant and were tested elsewhere on the CAHSEE or were found not to be suitable for multiple-choice exams. Revised blueprints were presented to the SBE and were approved in July 2003.

Revisions for the English-language arts (ELA) portion of the test are listed below:

- Deleted one writing prompt, reduced the number of multiple-choice items from 80 to 72, and reduced the field test multiple-choice items from 12 to 7 in order to reduce the testing time from two days to one day.
- Deleted Reading standard 2.2 that requires students to prepare a bibliography of reference materials for a report.
- Deleted Writing strategy standard 1.3 that requires students to develop clear research questions and suitable research methods to elicit and present evidence from primary and secondary sources.
- Deleted Writing strategy standard 1.6 that requires students to integrate quotations and citations into a written text while maintaining the flow of ideas.
- Deleted Writing Conventions standard 1.5 that requires students to use appropriate manuscript requirements, including title page presentation, pagination, spacing and margins, etc.

Revisions for the Mathematics portion of the test are listed below:

- Increased the number of items assessed from one to three for the Grade 6 Statistics, Data Analysis, and Probability Standard 1.1 that requires students to

compute the mean, median, and mode of data sets.

- Deleted the Grade 7 Statistics, Data Analysis, and Probability Standard 1.2 that require students to compute the minimum, the lower quartile, the median, the upper quartile, and the maximum of a data set.
- Deleted the stem-and-leaf plot and box-and whiskers plot as examples of forms to display data from the Grade 7 Statistics, Data Analysis, and Probability Standard 1.1 that requires students “know various forms of display for data sets; use the forms to display a single set of data or to compare two sets of data.”
- Increased the number of items assessed from one to two for the Grade 7 Mathematical Reasoning Standard 2.1 that requires students to use estimation to verify the reasonableness of calculated results.
- Deleted the Grade 7 Mathematical Reasoning Standard 3.1 that requires students to evaluate the reasonableness of the solution in the context of the original solution.

September 2003 Standard Setting

Educational Testing Service (ETS) conducted a Bookmark standard setting workshop for CAHSEE on September 18-20, 2003, replicating the process conducted by the American Institutes for Research in 2001. The purpose of the standard setting was to ask the two different panels to look at the CAHSEE and to judge how many items students would have to get correct to demonstrate sufficient knowledge and skills to pass the exam. Four panels were recruited: two each in English-language arts and mathematics. Within each subject, there was one panel of 18-24 teachers and one panel of 18-24 business leaders, community members, and education administrators. These groups represented the wide range of demographics in California.

The panel members took an abbreviated version of the test on which they would be setting standards. They were given an introduction to the Bookmark process and had a chance to practice placing a bookmark. Each panel completed three rounds of reviewing the test items and determining at what point in the test book they felt that students have demonstrated sufficient knowledge and skills in that subject area to pass the CAHSEE. The test book was arranged from easiest to hardest items based on how grade 10 students in 2003 performed on each item. The panel members discussed their placements but each person placed his or her bookmark independently. The Panels' recommended scores are higher than the current pass scores. See Attachment 2 for each Panel's recommended median pass scores for ELA and mathematics.

The projected results are estimates for the Class of 2006 as first-time test takers and the results may vary slightly, either higher or lower. Based on the past history of student performance on the CAHSEE, as students have more opportunities to acquire the knowledge and skills on the standards assessed on the exam more will pass.

Recommendation

Given the AB 1609 Study Report findings and the results of the September 2003 standard setting, the Superintendent believes that it is too early to change the CAHSEE passing scores. The standards have been integrated into instructional materials and instruction in the past few years and the AB 1609 Study Report predicted "the effectiveness of standards-based instruction will improve for each succeeding class after the class of 2004, but the speed with which passing rates will improve is currently unknown." The Superintendent recommends maintaining the current passing score for the CAHSEE at 60 percent of the items correct for English-language arts and 55 percent of the items correct for mathematics.

Fiscal Analysis (as appropriate)

None.

Attachment(s)

- Attachment 1: [California High School Exit Examination \(CAHSEE\) Grade 10 Passing Results from 2002-2003 CAHSEE Administrations \(Pages 1\)](#)
- Attachment 2: [California High School Exit Examination \(CAHSEE\) Recommended Pass Scores for English-language arts and Mathematics Based on Revised Blue Prints \(Pages 2\)](#)

**California High School Exit Examination (CAHSEE)
Grade 10 Passing Results from 2002-2003 CAHSEE Administration**

Table 1. Grade 10 (Class of 2005) Pass Rates by Subgroup

	Passing Score/ Percent Correct	All Students	African Americans	Asians	Hispanics	Whites	English Learners	Special Ed. Students	Males	Females	Economically Disadvantaged (NSLP ¹)	Lowest 20% of Schools ²
English-Language Arts	60%	78%	69%	85%	66%	91%	42%	35%	74%	83%	64%	N/A
Mathematics	55%	59%	36%	83%	41%	76%	30%	16%	59%	59%	42%	N/A

1 NSLP – Students are identified as economically disadvantaged if they receive free or reduced lunch through the National School Lunch Program.

2 Lowest 20% of schools is determined by average school-level performance on the CAHSEE assessments and includes all students in the lowest performing schools, regardless of their individual scores.

California High School Exit Examination (CAHSEE)

Recommended Pass Scores For English-Language Arts and Mathematics Based on Revised Blue Prints

Table 1. Community Panel's Median Pass Scores For English-Language Arts and Mathematics and Consequence Data for Subgroups.

Projected Percentage of Students Passing at or Above Score Based on Grade 10 Spring 2003 Data

	Passing Score/ Percent Correct	All Students	African Americans	Asians	Hispanics	Whites	English Learners	Special Ed. Students	Males	Females	Economically Disadvantaged (NSLP)	Lowest 20% of schools
English-Language Arts	67%	68%	55%	77%	50%	84%	24%	28%	63%	72%	48%	18%
Mathematics	70%	47 %	24%	74%	28%	63%	19%	15%	47%	46%	29%	4%

Table 2. Teacher Panel's Median Pass Scores For English-Language Arts and Mathematics and Consequence Data for Subgroups.

Projected Percentage of Students Passing at or Above Score Based on Grade 10 Spring 2003 Data

	Passing Score/ Percent Correct	All Students	African Americans	Asians	Hispanics	Whites	English Learners	Special Ed. Students	Males	Females	Economically Disadvantaged (NSLP)	Lowest 20% of schools
English-Language Arts	64%	71%	58%	79%	54%	86%	28%	31%	66%	75%	52%	21%
Mathematics	66%	52%	29%	79%	34%	69%	23%	19%	52%	52%	35%	5%

Table 3. SUPERINTENDENT'S Recommended Pass Scores For English-Language Arts and Mathematics and Consequence Data.

Projected Percentage of Students Passing At or Above Score Based on Grade 10 Spring 2003 Data

	Passing Score/ Percent Correct	All Students	African Americans	Asians	Hispanics	Whites	English Learners	Special Ed. Students	Males	Females	Economically Disadvantaged (NSLP)	Lowest 20% of schools
English-Language Arts	60%	76%	66%	83%	62%	90%	37%	37%	71%	80%	60%	27%
Mathematics	55%	67%	47%	87%	52%	83%	40%	31%	67%	68%	53%	16%