

Independent Evaluation of the California High School Exit Examination: 2015 Evaluation Report

Prepared for: California Department of Education
Assessment Development and Administration
Division
1430 N Street, Suite 4401
Sacramento, CA 95814-5901

Prepared under: Contract Number CN100235.6

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Date: February 19, 2016



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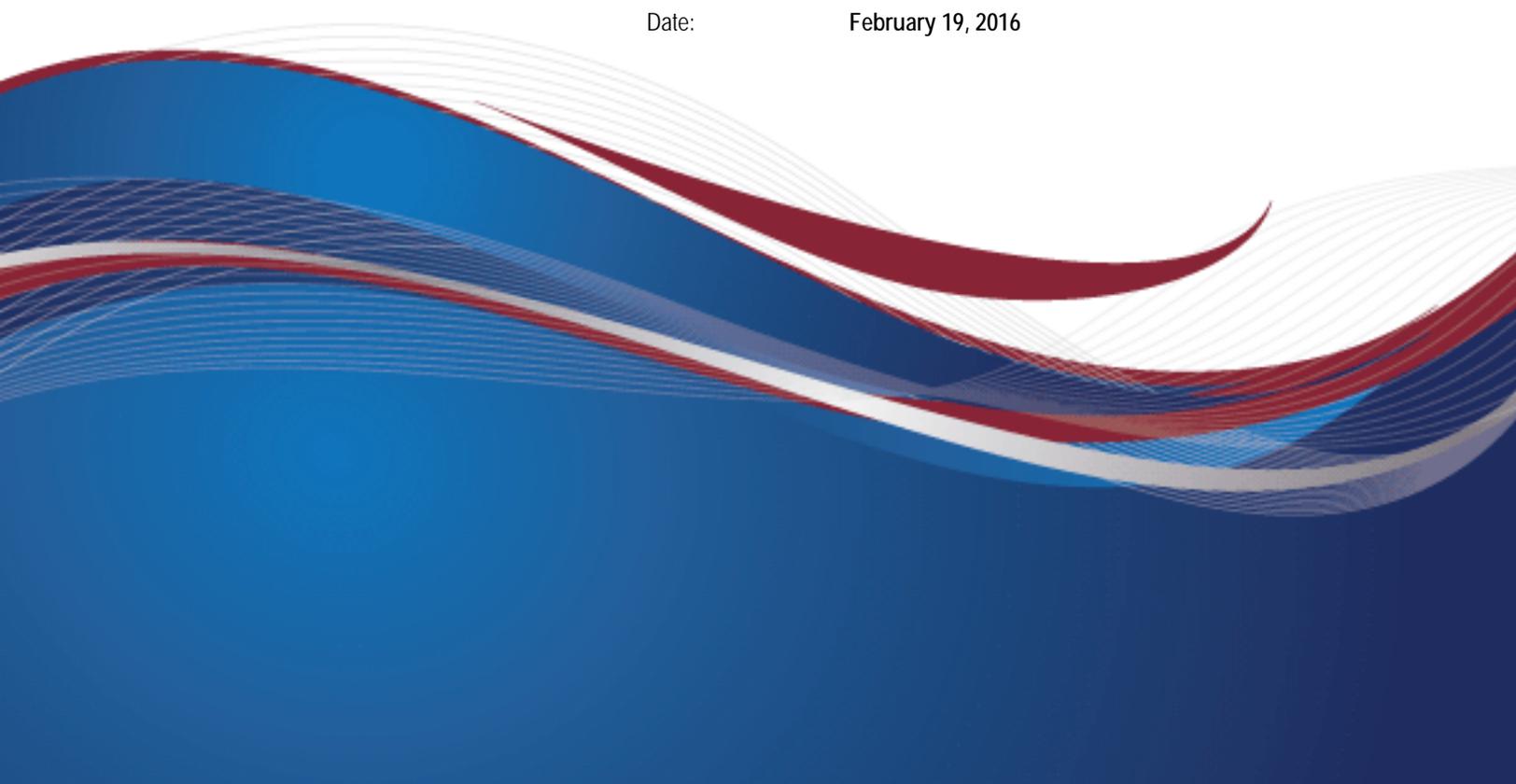
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Executive Summary

Lauress L. Wise, Michele M. Hardoin, D.E. (Sunny) Becker

Background

An independent evaluation of the California High School Exit Examination (CAHSEE) is required under California *Education Code (EC)* Section 60855(a). The evaluation is required to assess both the quality of the CAHSEE tests and the impact of the CAHSEE requirement. The Human Resources Research Organization (HumRRO) has served as the independent evaluator of the CAHSEE since January 2000. Over the past 16 years, HumRRO has gathered, analyzed, and reported a wide range of evaluation information. Copies of our annual and biennial evaluation reports may be found on the California Department of Education (CDE) Independent Evaluation Web page at: <http://www.cde.ca.gov/ta/tg/hs/evaluations.asp>.

The 2015 annual evaluation report covers analyses of test results and other evaluation activities conducted from July 2014 through June 2015. Our evaluation included several routine activities we conduct each year:

- Analyzing test quality and test results.
- Analyzing student questionnaire responses.
- Evaluating trends in educational outcomes, including graduation and dropout rates, participation in advanced coursework, and such factors as SAT, ACT, and Advanced Placement test results, as evidence of possible impacts of the CAHSEE requirement.

Additionally, the current report describes results of a special study conducted in 2015 to investigate the relationship between student performance on the CAHSEE and the Smarter Balanced high school Field Test.

Key findings and our overall recommendations are described briefly in this Executive Summary with references to more detailed discussions in the body of the full report. Chapter 6 (Findings and Recommendations) includes more detailed discussions of each of the findings.

Key Findings

As described in Chapter 2, *Analyses of CAHSEE 2014–15 Test Results*, the following findings emerged from our observations of test administration procedures, our analyses of scoring and test difficulty data, and our analyses of CAHSEE test results:

Key Finding 2.1: In general, test administrations are conducted in accordance with standard procedures.

Key Finding 2.2: HumRRO found no significant problems with test scoring. The reuse of test forms did not result in problems, and the test forms had equivalent difficulty.

Key Finding 2.3: Performance on the CAHSEE continues to improve, but remains low for English learners (ELs) and students with disabilities (SWDs). Gaps persist, as passing rates for economically disadvantaged, Hispanic or Latino, and Black or African American students also continue to be significantly lower than passing rates for White and Asian students at all grade levels.

Key Finding 2.4: A significant number of students who do not meet the CAHSEE requirement in four years continue to try to pass the CAHSEE in their fifth year.

Key Finding 2.5: More high school students are taking mathematics courses beyond Algebra I, although gaps among student demographic groups persist.

Key Finding 2.6: The effectiveness of English language development programs appears to be improving.

Key Finding 2.7: CAHSEE gains for SWDs have been mixed.

As described in Chapter 3, *Student Questionnaire Responses*, the following findings were derived from analyses of student responses to questionnaire items at the end of each test:

Key Finding 3.1: Student responses to questionnaire items were generally positive and became more positive over time. Most students reported having exposure to CAHSEE content and were confident they would pass the CAHSEE and earn a diploma. Most grade ten students had plans to attend a community college or 4-year college or university after graduation.

Key Finding 3.2: Traditionally disadvantaged student subgroups reported less familiarity than other students with CAHSEE content and question types.

Key Finding 3.3: Many students who are still attempting to meet the CAHSEE requirement in grade twelve are increasingly concerned with the possibility that the CAHSEE will be a barrier to graduating, compared to their concerns in grade ten. Also, most grade twelve students still attempting to pass the CAHSEE no longer plan to attend a four-year

college compared to the proportion who planned to do so in grade ten, but many now expect to attend community college.

As described in Chapter 4, *Comparing Student Performance on CAHSEE and Smarter Balanced*, the following findings were derived from analyses of CAHSEE test scores and scores from the Smarter Balanced high school field test:

Key Finding 4.1: While student performance on the Smarter Balanced field test and the CAHSEE were highly correlated, the Smarter Balanced performance levels are more rigorous than the CAHSEE performance levels.

Key Finding 4.2: Preliminary investigations provide some evidence that variations among districts and schools in technology preparedness were unrelated to student performance on the computer-based Smarter Balanced examination.

Key Finding 4.3: California might consider using the Smarter Balanced high school examination or a test comprised of Smarter Balanced high school items as the new graduation requirement. New cut points would have to be established and could be more rigorous than the CAHSEE requirement, if desired.

The following findings were derived from continuing analyses of trends in key educational outcomes, described in Chapter 5, *Trends in Educational Achievement and Persistence During the CAHSEE Era*:

Key Finding 5.1: Graduation rates have continued to improve while the decline in dropout rates slowed in the Class of 2014. Over time, more students persisted into grade twelve and beyond. While gaps between demographic groups on all these measures are shrinking, substantial differences remain.

Key Finding 5.2: The percentage of students completing a college preparation curriculum continued to increase.

Recommendations

California has reached a critical juncture with respect to its testing programs. On August 2, 2010, the California State Board of Education (SBE) adopted the Common Core State Standards (CCSS), a set of educational standards that describe what students should know and be able to do in reading and mathematics at each grade. The SBE and the CDE acknowledged at the outset that full implementation of CCSS would occur over multiple years and would include three phases: awareness, transition, and implementation. Each local educational agency (LEA) is responsible for its own implementation plan.¹ In the

¹ CDE's CCSS Systems Implementation Guide is at <http://www.cde.ca.gov/re/cc/ccssguide.asp>.

2014–15 school year a new battery of Smarter Balanced English language arts/literacy (ELA) and mathematics assessments, aligned with the CCSS, was administered to students in grades three through eight and eleven.

The CAHSEE, first administered in 2001, was aligned to content specified in the California State Standards adopted in 1997. It was designed, in part, to encourage implementation of effective curriculum aligned to those standards, which preceded California’s adoption of the CCSS. As districts align their curriculum to the CCSS, the alignment between instructional content in California schools and the CAHSEE is diminishing. During the 2014–15 school year, California high school students took both the Smarter Balanced ELA/literacy and mathematics assessments (in grade eleven) and the CAHSEE examinations (in grade ten and, as needed, grades eleven and twelve) in ELA and mathematics.

Since 2006, students who receive a California high school diploma have had to demonstrate competency in the specific California content standards assessed by the CAHSEE, though exemptions or waivers were in place in many of those years for SWDs. During the past several years, the CAHSEE Program has operated in a maintenance phase, without new item development, while revisions to the CAHSEE blueprints or to the requirement itself were considered.

Subsequent to the initial drafting of this report, Senate Bill 172 (Liu) was signed by the Governor to suspend the administration of the CAHSEE and the requirement that students pass the CAHSEE to receive a high school diploma for the 2015–16, 2016–17, and 2017–18 school years. The law requires that schools grant a diploma to any student who completed grade twelve in the 2003–04 school year or a subsequent school year and met all applicable graduation requirements other than the passage of the high school exit examination. The law further requires the State Superintendent of Public Instruction to convene an advisory panel to provide recommendations to the Superintendent on the continuation of the high school exit examination and on alternative pathways to satisfy the high school graduation requirements pursuant to *EC* sections 51224.5 and 51225.3. The law will become effective on January 1, 2016. In response to this law, HumRRO reviewed and slightly modified our recommendations.

Prior to 2013, our evaluation reports included a variety of detailed recommendations. Given the current shift in California to instruction and assessment aligned to the Common Core State Standards in elementary and middle school grades, accompanied by the suspension of the CAHSEE requirement, it seems appropriate to focus again this year, as we did in 2013 and 2014, on the broader need to revise the graduation requirement in response to these changes.

Long Term Considerations

California should first decide whether and how to continue a statewide requirement that students demonstrate essential skills to receive a high school diploma. Based on our evaluation of the academic improvements associated with the CAHSEE requirement and the CAHSEE assessments over the past 15 years, we believe there is reason to continue with at least a basic competency requirement.

Recommendation 1. California should continue to require students to demonstrate basic competency in ELA and mathematics as a requirement for graduation.

Instruction in the content covered by the CAHSEE has improved dramatically. Since the CAHSEE requirement was implemented, the proportion of grade ten students able to meet minimum requirements in ELA and mathematics has gone from less than half to more than three-quarters. This indicates progress toward the overriding goal for the CAHSEE requirement, that schools would teach and students would learn basic ELA and mathematics skills. Also, many of the more significant concerns about the CAHSEE requirement, most notably that dropout rates would increase dramatically, have not been realized. In fact dropout rates are down and graduation rates have increased compared to the years before the requirement was implemented.

Given the recent suspension of a statewide requirement, there may be concerns with equity as LEAs may vary in their diploma requirements. Some LEAs could establish lower diploma requirements that would allow students without basic competencies to graduate, leaving such students unprepared for post high school endeavors. Additionally, in the absence of a standardized graduation examination students would be unaware of their deficits and would also lack the opportunity for remediation in these skill areas. Hence there is every reason to consider some sort of statewide requirement. Policymakers must, however, choose among a number of different options if it is decided to continue a test-based graduation requirement.

Option 1. Reinstate the exit examination requirement with only minor content changes.

With minor to moderate revisions to former CAHSEE blueprints, California could resume administering a grade ten test that does not cover all of the CCSS high school standards but covers selected middle and high school standards from CCSS (i.e., covers material included in CCSS-aligned curriculum). Students who do not pass in grade ten could continue to have multiple opportunities to pass in grades eleven and twelve and also after their scheduled date of graduation. This option would require testing using an assessment that is not currently within the California Assessment of Student Performance and Progress (CAASPP) System and it would allow CAHSEE requirements to be expanded to cover some high school course content.

One argument for this option is that students who have not reached required skill levels by grade ten would be identified and provided with additional support for mastering these skills prior to receiving a diploma. In addition, the success of programs to help students reach required skill levels by grade ten would continue to be monitored.

Option 2. Test for mastery of basic competencies at an earlier point.

The CAHSEE requirement covered skills that are now nearly all taught by the time students complete grade eight. If it is decided to keep the current levels of skill requirements, it should be possible to use Smarter Balanced grade eight tests that are aligned to new curriculum based on the CCSS to identify students who have not yet learned the required skills. Advantages of this approach are that (a) most students would demonstrate the target level of mastery by grade eight and thus not have to participate in further testing and (b) those students who needed additional help would be identified early and have sufficient time to receive and benefit from remedial help during high school. It would be necessary to determine an appropriate passing level on the Smarter Balanced grade eight assessments for this purpose, and possibly identify a subset of the content that would contribute to a score, to be comparable to the historical CAHSEE graduation requirement. Using Smarter Balanced grade eight tests would eliminate the need for a separate exit examination.

Option 3. Increase the rigor of the high school exit examination requirement.

When CAHSEE passing levels were adopted by the SBE, it was suggested that the rigor of these requirements be increased over time, as the effectiveness of ELA and mathematics instruction improved. A much higher level has been identified for students to be considered college and career ready based on course content aligned to the CCSS and the content and cut points for the Smarter Balanced high school assessments. The Smarter Balanced high school assessments within the CAASPP System might be appropriate for measuring whether students have met these higher standards, and it might be desirable to establish a passing level for graduation that is different from the existing achievement levels used for school accountability. Using Smarter Balanced high school tests, or tests comprised of Smarter Balanced high school items, would eliminate the need for a separate exit examination. Alternatively, end of course tests (EOCs), particularly in mathematics, might be used. Because students would not typically have an opportunity to retest, it would be necessary to create different ways for students who do not pass the high school assessments in grade eleven to demonstrate adequate proficiency during grade twelve. For example, students might be required to take and pass a remediation course, with some verification of the rigor of course content to indicate that passing this course would demonstrate proficiency levels comparable to those required to satisfy the graduation requirement.

Option 4. Suspend the exit examination requirement permanently and consider diverting cost savings toward remediation for struggling students.

With the passage of SB 172, the exit examination requirement for a high school diploma is suspended for students through the Class of 2018. As stated above, if this option is chosen and the suspension is made permanent, questions of equity will be raised if LEAs differ significantly in their required levels of skills in ELA and mathematics. While the Smarter Balanced high school assessments would shed some light on possible

inequities, there would not be a complete measure of the extent to which each student has achieved at least minimum skill levels by the end of high school. However, the time and funds saved by no longer administering the CAHSEE could be used to target remediation of students who are shown to be behind based on their Smarter Balanced grade eight test performance.

Timeline Considerations

Option 1, reinstating the exit examination, will take time to implement. It would take at least three years to secure a testing vendor, begin test development, field test new test questions, construct forms that meet revised or altogether new blueprints, and establish passing standards.

For any of the first three options that include an examination requirement, it may take some time to demonstrate that students have adequate opportunity to learn the content covered by the new test before students are held individually accountable and subject to suffering high-stakes consequences for failing the test.

For Option 2, use of the Smarter Balanced grade eight tests might be implemented as early as spring 2017, after reviewing content requirements and setting appropriate minimum passing scores. The requirement could therefore apply to students in the high school classes of 2021 and beyond.

For Option 3, use of the Smarter Balanced high school tests or other tests such as EOCs as a graduation requirement would likely require two or more years to review content, set passing levels, and verify that students will have had adequate opportunity to learn the more rigorous material before students are held individually accountable and subject to high-stakes consequences. During this time, the CDE could also develop alternative pathways for students who do not pass the high school assessments in grade eleven to allow them to demonstrate adequate proficiency during grade twelve. At the earliest, the new requirement could be implemented during the 2017–18 school year and applied to the high school classes of 2019 and beyond.

Requirements for Students with Disabilities

Recommendation 2. The Legislature and the SBE should establish consistent expectations and requirements for SWDs, as part of long term changes to the graduation requirement.

The CAHSEE requirement was initially deferred for two years for SWDs (Classes of 2006 and 2007) and it was deferred again for SWDs in 2010, until such time as alternative means to the CAHSEE could be implemented or deemed infeasible. While each exemption was in place, teachers, parents, and students were uncertain as to what was truly expected of them in high school. All SWDs took the CAHSEE in grade ten but when exemptions were in place SWDs did not need to pass the CAHSEE to graduate. The grade ten census testing provided some information on educational trends.

CAHSEE passing rates (through grade twelve) increased dramatically for SWDs when the initial exemption was removed. Since then, passing rates have been relatively flat as waivers and further exemptions have been introduced allowing SWDs to graduate without passing the CAHSEE. In addition, grade ten SWDs were more likely than any other subgroup besides ELs to report that they were unfamiliar with some CAHSEE content and item types. This finding could be a further sign that many SWDs are not being provided instruction in all of the content covered by the CAHSEE because they were exempt from the CAHSEE requirement.

Plans for revising the graduation requirement must take into account the needs and unique characteristics of SWDs. It is urgent that California develop and communicate a clear and consistent set of expectations for high school SWDs, ending years of unresolved debate over the appropriateness of the CAHSEE requirement for these students. The requirement for SWDs could provide for appropriate alternative ways to demonstrate required knowledge and skills, and might include identifying appropriate goals for students who are not able to participate in regular academic instruction.

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Independent Evaluation of the CAHSEE: 2015 Evaluation Report

Chapter 1: Introduction

D. E. (Sunny) Becker

The educational landscape in the United States has undergone major shifts in recent decades, perhaps most notably at the secondary level. Through approximately the first decade of the 21st century, many states across the nation moved toward implementing high school exit examinations to ensure all high school graduates obtained a certain level of knowledge and preparedness for postsecondary pursuits. Beginning with the Class of 2006, California has required that students pass both the English language arts (ELA) and mathematics portions of the California High School Exit Examination (CAHSEE) to obtain a diploma. By 2012, California was one of 26 states that withheld or planned to withhold diplomas from students who did not pass the exit examination; three states had end-of-course tests that students were required to take, but not necessarily pass, to graduate; and one additional state planned to require students to take an exam starting with the Class of 2020 but had not yet determined whether students must pass the exam in order to graduate (Center on Education Policy [CEP], 2012).

Meanwhile, through the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO), states developed the Common Core State Standards (CCSS), which include college- and career-readiness standards. California adopted the CCSS in August of 2010, although districts throughout the state are at differing stages of implementation of the new standards. According to the CEP, 2013:

Ensuring that students are prepared for college or careers by the time they graduate from high school is a major purpose of the Common Core State Standards (CCSS), which outline the knowledge and skills that students in grades K–12 should master in English language arts (ELA) and mathematics. The number of students who enter postsecondary education without the knowledge and skills they need to be successful and then require some form of remediation to “catch up” continues to be a challenge at postsecondary institutions (Bettinger & Long, 2009; Sparks & Malkus, 2013). Recognizing this problem, the governors and chief state school officers leading the Common Core initiative have sought to make the new standards more rigorous than most states’ previous standards. As of August 2013, the CCSS have been adopted by 45 states and the District of Columbia in both subjects and by one additional state in ELA only.

CEP, 2013, page 1

With the move toward the CCSS, California and other states were faced with the need to update their statewide assessment systems to align with current instructional content. Two multi-state consortia joined forces to develop new assessment systems aligned with the CCSS: the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (Smarter Balanced). It is

unclear at this time how many states will adopt the PARCC or Smarter Balanced high school examinations, or whether those who do will use those exams as a graduation requirement.

California became a Smarter Balanced governing state. The state participated in the Smarter Balanced field tests in 2013–14 and included the Smarter Balanced operational tests, beginning in 2014–15, as components of the new California Assessment of Student Performance and Progress (CAASPP). The state continued to administer the CAHSEE to all grade ten students through 2015. At the time of this report, legislation to suspend the existing CAHSEE requirement, Senate Bill (SB) 172 (Liu), has been passed by the Legislature and is under consideration by the Governor². Until there is a legislative change, the CAHSEE requirement remains in the California *Education Code (EC)*, and local educational agencies (LEAs) are still required to administer the CAHSEE.

As California is poised to embark on a new chapter for high school graduation requirements, the experience gained through the “CAHSEE years” will provide a valuable basis for informed decisions in pursuing this new direction.

History of California High School Exit Examination

In 1999, the California state legislature enacted the requirement that, beginning with the Class of 2004, students pass a graduation examination in ELA and mathematics (SB 2X, written into the California *EC* as Chapter 9, sections 60850–60859). This requirement was modified in 2002 through the passage of Assembly Bill (AB) 1609. The revised legislation gave the State Board of Education (SBE) authority to postpone the CAHSEE requirement, based in part on the results of a study that examined the extent to which both test development and standards-based instruction met standards for this type of examination (Wise et al., 2003a). In July 2003, after completion of the 2002–03 CAHSEE testing, the SBE voted to defer the CAHSEE requirement to the Class of 2006. It has been in effect ever since.

The requirement for students with disabilities (SWDs), however, has varied over time. In 2002, a lawsuit (Kidd et al. vs. O’Connell et al., formerly referred to as the Chapman case) was filed on behalf of SWDs. While the suit was pending, the parties agreed that SWDs in the classes of 2006 and 2007 could receive a diploma even if they did not pass the CAHSEE, as long as they met all other local and state requirements. Many of these students continued to take the CAHSEE despite the dispensation. A final settlement was reached in March 2008 reinstating the requirement that SWDs pass the CAHSEE and requiring the California Department of Education (CDE) to conduct a study of SWDs who are unable to pass. On September 30, 2008, the Legislature enacted AB 2040, establishing *EC* sections 60852.1 and 60852.2, which require an advisory panel be established to develop findings and recommendations for alternative means (from the CAHSEE) for eligible SWDs to graduate. In 2009 the AB 2040 Panel,

² SB 172 was signed by the Governor subsequent to the drafting of this report and suspends the CAHSEE requirement for all students in the classes of 2016, 2017, and 2018.

an advisory panel of educators and others with experience in assessment or in working with SWDs, developed recommendations that addressed the components of the AB 2040 statute requirements, including the definition of eligible students, specific options, scoring, uniformity, cost, and level of administration. In 2011, the CDE contracted with Educational Testing Service (ETS) to conduct a pilot study of the proposed alternative means to the CAHSEE. In 2012, the SBE determined that implementation of the alternative means was not yet feasible, and the permanent CAHSEE regulations were approved to extend the exemption for students in special education. In September of 2014, Governor Brown signed SB 267 (Pavley) which revised *EC* Section 60852.2 to remove the July 1, 2015 implementation date of the alternative means to the CAHSEE. Since the continued availability of the exemption provided in *EC* Section 60852.3 is based on the implementation of the alternative means, this change in law effectively extends the exemption until the SBE determines that alternative means are not feasible or are implemented.

For the 2014–15 school year, an eligible SWD with an active individualized education program (IEP) or a Section 504 Plan³ could satisfy the CAHSEE requirement by one of the following means:

- Passing the CAHSEE
- Meeting the exemption requirements described above (*EC* Section 60852.3)
- Receiving a local waiver (*EC* Section 60851(c)(1))

Independent Evaluation of the CAHSEE

The original legislation mandating the requirements for the graduation examination specified an independent evaluation of the CAHSEE. The CDE awarded the evaluation contract to the Human Resources Research Organization (HumRRO). The original contract period operated from 1999 through 2004; a second contract was awarded to HumRRO to continue the evaluation through 2007; a third contract continued the evaluation through 2010; and a fourth contract has been extended to continue the evaluation through December 2016.

HumRRO's efforts have focused on analysis of data from tryouts of test questions and from the annual administrations of the CAHSEE. Reports have included analysis of trends in student performance, retention, graduation, dropout, and college attendance rates, although no direct causal relationship between the CAHSEE and these various outcomes is assumed. The legislation also specified that evaluation reporting would include recommendations to improve the quality, fairness, validity, and reliability of the examination. The legislation required an initial evaluation report in June 2000 and

³ Students are determined to have a disability under Section 504 of the Rehabilitation Act of 1973 if they have a mental or physical impairment that substantially limits one or more major life activities, such as eating, breathing, caring for oneself, performing manual tasks, hearing, speaking, walking, and learning.

biennial reports to the Governor, the Legislature, the SBE, and the CDE in February of even-numbered years.

In addition to the legislatively mandated biennial evaluation reports, the contracts for the evaluation required an annual report of evaluation activities. In fall of 2014, HumRRO issued a report that meets the contract requirement for a report of activities and findings during the 2013–14 evaluation (Becker, Hardoin, Wise, & Watters, 2014). That report adds to results and recommendations included in prior evaluation reports (Wise, Hoffman, & Harris, 2000; Wise, Harris, Sipes, Hoffman, & Ford, 2000a; Wise, Sipes, George, Ford, & Harris, 2001; Wise et al., 2002b; Wise et al., 2003; Wise et al., 2004a; Wise et al., 2004b; Wise et al., 2005; Wise et al., 2006; Becker & Watters, 2007; Becker, Wise, & Watters, 2008; Becker, Wise, & Watters, 2009, Volumes 1 and 2; Becker, Wise, & Watters, 2010a; Becker, Wise, & Watters, 2010b; Becker, Wise, Hardoin, & Watters, 2011; Becker, Wise, Hardoin, & Watters, 2012a; Becker, Wise, Hardoin, & Watters, 2012b; and Becker, Wise, Hardoin, & Watters, 2013). All of these reports are available on the CDE Independent Evaluation Web site at <http://www.cde.ca.gov/ta/tg/hs/evaluations.asp>.

Summary of Findings from Prior Evaluation Activities

To provide a context for the current report, in this section we summarize key findings that emerged after 15 years of evaluation activities. The following findings were noted in our 2014 annual report (Becker, Hardoin, Wise, & Watters, 2014)

- Key Finding 2.1: In general, test administrations are conducted in accordance with standard procedures; however, improvements in providing test variations could be made.
- Key Finding 2.2: HumRRO found no significant problems with test scoring. Scoring consistency remained at acceptable rates and test forms had equivalent difficulty.
- Key Finding 2.3: Performance on the CAHSEE continues to improve, but remains low for English learners (ELs) and SWDs.
- Key Finding 2.4: A significant number of students who do not meet the CAHSEE requirement in four years continue to try to pass the CAHSEE in their fifth year.
- Key Finding 2.5: More high school students are taking mathematics courses beyond Algebra I.
- Key Finding 2.6: The effectiveness of English language development programs appears to be improving.

- Key Finding 2.7: CAHSEE gains for SWDs have been mixed, and the availability of an exemption or waiver to the requirement appears to influence passing rates.
- Key Finding 3.1: Student responses to questionnaire items were generally positive; students reported feeling prepared for the CAHSEE, having exposure to CAHSEE content, and being optimistic about post-high school plans.
- Key Finding 3.2: Many students who are still attempting to meet the CAHSEE requirement in grade twelve are increasingly concerned with the possibility the CAHSEE will be a barrier to graduating, compared to their concerns in grade ten. Also, most grade twelve students still attempting to pass the CAHSEE no longer plan to attend a four-year college compared to the proportion who planned to do so in grade ten, but most still expect to attend community college.
- Key Finding 4.1: A large proportion of a surveyed sample of EL coordinators, principals, and teachers (81%) reported having at least a moderate degree of familiarity with the 2012 California English Language Development (ELD) Standards (Table 4.11).
- Key Finding 4.2: A substantial proportion of a surveyed sample of EL coordinators, principals, and teachers are not at all or only slightly familiar with the overlap between content measured by the CAHSEE tests and content taught in middle school (46% for English language arts (ELA), 40% for mathematics) (Tables 4.42 and 4.43).
- Key Finding 4.3: One third of LEA EL coordinators, middle school principals, and middle school EL coordinators indicated that they have a local policy or procedure in place specifically to encourage reclassification of long term English learners (LTELs) (Table 4.25).
- Key Finding 4.4: Most LEA EL coordinators, middle school principals, and middle school EL coordinators believe their local reclassification criteria are appropriate, but some believe they may be too rigorous.
- Key Finding 4.5: Higher-effective LEAs differed from lower-effective LEAs with regard to local requirements for three of the four EL reclassification criteria: minimum overall California English Language Development Test (CELDT) score, minimum score for basic skills in English, and teacher evaluation.
- Key Finding 5.1: Graduation rates have continued to improve and dropout rates continue to decrease. Over time, more students persisted into grade twelve and beyond. While gaps between demographic

groups on all these measures are shrinking, substantial differences remain.

- Key Finding 5.2: Participation in SAT and ACT college entrance examinations, as well as the percentage of students reaching key cut points, continued to increase over time. The percentage of students completing a college preparation curriculum continued to increase as did participation and success in Advanced Placement (AP) courses.

Organization and Contents of 2015 Annual CAHSEE Evaluation Report

The 2015 Annual CAHSEE Evaluation Report covers activities performed in the independent evaluation from July 1, 2014 through June 30, 2015. Included in this report are results from CAHSEE administrations through the 2014–15 school year as well as findings from a special study to determine the comparability of CAHSEE and Smarter Balanced test scores.

Chapter 2, *Analyses of CAHSEE Test Results*, presents results from the 2014–15 CAHSEE administrations, reporting results for grade twelve students in the Class of 2015 and comparing their passing rates to those of grade twelve students in the classes of 2006 through 2014. In addition, we report passing rates for grade ten students in the Class of 2017 in comparison to passing rates for grade ten students in previous classes, and passing rates for grade eleven students in the Class of 2016 as well as further analysis of those who did not meet the CAHSEE requirements during their sophomore year. This chapter also analyzes the rates of persistence and progress of students from the classes of 2010 through 2014 who did not meet the CAHSEE requirement in time to graduate with their classes. This chapter also includes an analysis of test forms that were reused from previous administrations; this process was necessary because of the cessation of new test item development.

Chapter 3, *Student Questionnaire Responses*, investigates the challenges and impacts of the CAHSEE Program from the student perspective. Brief questionnaires were administered to students upon completion of each CAHSEE test. Analyses include comparisons of the 2015 test taker responses to previous years' response patterns, as well as comparisons among distinct groups of students (e.g., demographic groups, students who passed the CAHSEE versus those who did not).

Chapter 4, Comparing Student Performance on CAHSEE and Smarter Balanced, presents results from a special study comparing student performance on the 2014 Smarter Balanced field test and CAHSEE operational testing. These comparisons are designed to inform SBE and CDE decisions about the implications of replacing the CAHSEE with Smarter Balanced tests.

Chapter 5, *Trends in Educational Achievement and Persistence During the CAHSEE Era*, presents trends in educational achievement and perseverance through analyses of data on year-by-year high school enrollment trends, graduation and dropout rates,

college preparation, and AP test achievement. While these do not directly reflect effects of the CAHSEE, trends over time can be informative in assessing shifts in student achievement. These analyses draw on publicly available data from external sources such as the CDE's DataQuest.

Finally, Chapter 6, *Findings and Recommendations*, presents our overall summary based on the data analyses and results presented in previous chapters.

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Chapter 2: Analyses of CAHSEE 2014–15 Test Results

Lauress L. Wise and Michele M. Hardoin

Introduction and Brief History of CAHSEE Testing

The legislation establishing the California High School Exit Examination (CAHSEE) called for the first operational forms of the examination to be administered in spring 2001 to grade nine students in the Class of 2004. At the first administration grade nine students could volunteer, but were not required, to take either or both portions of the examination. Students who did not take or did not pass the examination in that administration were required to take the examination as grade ten students in spring 2002. Preliminary results from the CAHSEE spring 2001 and 2002 administrations were reported in the 2001 and 2002 evaluation reports (Wise et al., June 2001; Wise et al., June 2002b). Results from the 2001 administration were reported more fully in the first biennial evaluation report to the Legislature, the Governor, the State Board of Education (SBE), and the California Department of Education (CDE) (Wise et al., 2002a).

The CAHSEE was administered six more times from July 2002 through May 2003 to students in the Class of 2004 who had not yet passed one or both parts. In addition, students from the Class of 2005 were required to take the CAHSEE for the first time as grade ten students in March or May of 2003. Analyses of results from these administrations were reported in the 2003 evaluation report (Wise, et al., 2003) and in the second biennial evaluation report (Wise et al., 2004a).

Subsequent to the 2002–03 administrations, the requirement to pass the CAHSEE was deferred to the Class of 2006. In the 2003–04 school year, the CAHSEE blueprints were modified slightly and new forms were administered in spring 2004 to all grade ten students in the Class of 2006. Results from the 2004 administrations were reported in Chapter 2 of the 2004 evaluation report (Wise, et al., 2004b).

The 2004–05 administrations included both grade ten students in the Class of 2007 taking the CAHSEE for the first time and grade eleven students in the Class of 2006 who had not passed the CAHSEE as grade ten students. The grade eleven students took the CAHSEE one or more times in September and November 2004, or February, March, and May 2005. The grade ten students participated in the February, March, or May 2005 administrations. In addition, a small number of adult education students took the CAHSEE during the 2004–05 school year. Analyses of results from the 2004–05 administrations were reported in Chapter 3 of the 2005 evaluation report (Wise, et al., 2005).

The 2005–06 CAHSEE administrations included grade ten students in the Class of 2008, grade eleven students in the Class of 2007, and grade twelve students in the Class of 2006. Except for students with disabilities (SWDs) who could meet the CAHSEE requirement in other ways, grade twelve students who still had not passed the CAHSEE by the end of the 2005–06 test year were denied diplomas. Analyses of

results from the 2005–06 administrations were reported in Chapter 2 of the 2006 evaluation report (Wise, et al., 2006).

The 2006–07 CAHSEE administrations were more complex still. Three separate classes of high school students, 2007 through 2009, as well as many students from the Class of 2006 who had not passed the CAHSEE by the end of their senior year, took the tests. Essentially, all grade ten students in the Class of 2009 were tested for the first time in February, March, or May of 2007. Grade eleven students in the Class of 2008 who had not yet passed the CAHSEE had multiple opportunities to take the CAHSEE in the July, October, November, or December 2006 administrations and in the February, March, or May 2007 administrations. Grade twelve students in the Class of 2007 who still needed to pass the CAHSEE had as many as three opportunities to take the CAHSEE during these same administrations. In addition, many students from the Class of 2006 continued to take the CAHSEE, either as students repeating grade twelve or as adult education students. Analyses of results from the 2006–07 administrations were reported in the 2007 evaluation report (Becker and Watters, 2007).

In 2002, a lawsuit (Kidd et al. vs O'Connell et al., formerly referred to as the Chapman case) was filed on behalf of SWDs. While the suit was pending, the parties agreed that SWDs in the classes of 2006 and 2007 could receive a diploma even if they did not pass the CAHSEE, as long as they met all other local and state requirements, although many of these students continued to take the CAHSEE. A final settlement was reached in March 2008 reinstating the requirement that SWDs pass the CAHSEE and requiring the CDE to conduct a study of SWDs who were unable to pass. Analyses of results from the 2007–08 and 2008–09 CAHSEE administrations, including passing rates for SWDs in the classes of 2008 and 2009 were reported in our 2008 and 2009 annual reports (Becker, Wise, and Watters, 2008; Becker, Wise, and Watters, 2009).

With the exception of an extension of the exemption for SWDs introduced in 2012 and remaining in place while the state determines the feasibility of implementing alternative means for these students to demonstrate competency, the 2009–10 through 2012–13 administrations were essentially the same, with six administrations open to grade twelve and adult education students, five of these also open to grade eleven students, and the last three, February through May, open to grade ten students. Results from each of these administrations were reported in our 2010 through 2013 annual reports (Becker, Wise, and Watters, 2010; Becker, Wise, Hardoin, & Watters, 2011; Becker, Wise, Hardoin, and Watters, 2012; Becker et al, 2013). All of these reports are available on the CDE Independent Evaluation Web site at <http://www.cde.ca.gov/ta/tg/hs/evaluations.asp>.

At this time, legislation is pending that would suspend CAHSEE testing and defer the CAHSEE requirement while instruction shifts to cover the new Common Core State Standards (CCSS).⁴ Thus, the analyses of CAHSEE test results presented here could well be the last, at least for a period of time. In addition, if the CAHSEE administration is discontinued, it is likely that the CAHSEE evaluation will also be suspended. The

⁴ SB 172 was signed by the Governor subsequent to the drafting of this report and suspends the CAHSEE requirement for all students in the classes of 2016, 2017, and 2018.

current evaluation contract is ending and there are no current plans to issue a new request for evaluation proposals.

Chapter Scope and Organization

This chapter presents results from the current year of CAHSEE testing and integrates these results into the cumulative history of more than a decade of CAHSEE testing outcomes. The chapter is organized into three main sections. The first section describes our observation and review of CAHSEE administration and scoring procedures. The second describes processing steps in creating data files for the analyses of 2014–15 test results and procedures used to estimate passing rates. The final section of the chapter describes test results for each high school class, including a number of descriptive analyses of student groups, both those that have and those that have not yet met the CAHSEE requirement.

Evaluation of CAHSEE Test Administrations

Auditing of CAHSEE test sites is conducted by a subcontractor to Educational Testing Service (ETS), the operational test vendor. A small percentage of high schools are visited to determine compliance with criteria for pre-administration activities, administration plans, testing facilities, administration activities, and post-administration activities. HumRRO conducts test administration site visits to complement ETS's audits. The validity of test results is strengthened by adherence to clearly established security and administration protocols. Our small number of independent observations allows for a broad examination of how administrator training connects to administration materials which, in turn, connect to the actual administration.

HumRRO consulted with the CDE and ETS to select high schools in two different local educational agencies (LEAs) that were not being audited to visit in 2015. The CAHSEE coordinators of the selected LEAs facilitated our site visit arrangements, informing school site personnel several weeks prior to test administration about the purpose and procedures for the visit. HumRRO observed a census administration on February 3–4, 2015 at an East Bay high school and another on March 17–18, 2015 at a Southern California high school. Each school was observed for both the English language arts (ELA) and mathematics tests. Our goals for the site visits were to use observation and test site coordinator interview outcomes to: (a) evaluate the procedures followed at each test site relative to the procedures described in the administration manuals published by ETS and (b) make quality assurance recommendations that could improve standardization or achieve greater efficiency or security.

As has been customary in the past, HumRRO conducted the site visits in such a way as to avoid interfering with the operational administration. Our data collection methods involved observing from a distance (e.g., remaining seated at the back of the testing classrooms for the duration of each session without interacting with students), “looking over the shoulder” (e.g., to see how test materials were handled), and inquiring about particular aspects of the administration (e.g., asking test examiners about

accommodations provided). We also conducted a structured interview with each test site coordinator about security, test examiner training, test variations, and general site logistics.

Key findings from our observations of the census test administrations and our interviews with test site coordinators are described below. Our evaluation is based on the following July 2014–May 2015 versions of ETS’s California High School Exit Examination manuals, which communicate requirements for all aspects of test administration to district and school site personnel:

- *Local Educational Agency and Test Site Coordinator’s Manual*
- *California High School Exit Examination Directions for Administration*
- *California High School Exit Examination Directions for Administration – Special Test Versions*

Testing Environment. For grade ten students, assessment took place in classrooms at both observed sites. This facilitated the operational logistics and enabled teachers familiar to the students to serve as their examiners. The March site included an examiner and at least one proctor per classroom, meeting the required 1:25 ratio of proctors to students. The February site, however, provided only a single examiner and no proctor per classroom. Approximately 100 grade eleven and twelve students were tested in the gym at one site, while the 50 grade twelve students at the other site used classrooms. At one site, English learner (EL) students of all grades were tested in separate classrooms with other EL students, and English Language Development (ELD) teachers were examiners, providing a supportive atmosphere. Both sites used separate classrooms for testing SWDs. All observed examiners established a tone of encouragement, focus, and discipline appropriate for the assessment. Overall, testing conditions at both sites (e.g., lighting, writing surface for each student, minimal noise) were in compliance with the *Directions for Administration*.

Test Materials Distribution/Collection. Both sites used Pre-ID answer documents, which saves time during test administration by avoiding the need to hand-mark student demographic information. At the February site, however, EL students who were enrolled in a particular type of English language development course were mistakenly omitted from the Pre-ID file, requiring their answer documents to be completed entirely by hand. Examiners in classrooms knew their students, so they did not check each student’s individual identification, although examiners asked students to verify they had an answer document with their name on it. Copies of the inventory control sheet were used by the test site coordinators and examiners to monitor the security of test materials, and test security overall complied with the *Directions for Administration*.

Directions, Timing, and Monitoring. Test examiners at both high schools read the *Directions for Administration* script verbatim, emphasizing that use of cell phones or other electronic devices was forbidden and would cause a test to be invalidated. Examiners at both sites each followed a protocol for collecting electronic devices and keeping them out of student use for the duration of testing including breaks. At the

February site, students placed all electronic devices in their backpacks; at the March site, examiners collected cell phones and stored them in a bin. Examiners also reminded students several times that they were not allowed to go back to session 1 after starting session 2.

As the CAHSEE is an untimed but not unlimited time test, the sessions were observed to be adequately conducted, for the most part, with respect to the approximate testing times listed in the manuals, with allowance for additional time as needed by individual students or early dismissal when all students were finished. At the February site, however, two examiners mistakenly concluded the English language arts (ELA) testing after administration of session 1 only; students from these classrooms were sent to the cafeteria after lunch to complete session 2, along with other students who needed more time to finish the ELA test. About 90 students in all needed additional time to complete the ELA test, but an insufficient number of proctors, just two, were observed monitoring.

Examiners watched students to ensure they were complying with the directions (e.g., not communicating with other students); however, at the site where the examiner was not supported by a proctor, the monitoring was less effective, and a student was observed hiding a cell phone. At both schools the examiners and proctors were observed responding quickly to students' questions.

Student Motivation. Most students seemed to approach the tests seriously and appeared to be concentrating on their work and quietly responding to CAHSEE questions. While in a classroom where grade eleven and twelve SWDs were taking the mathematics test, the observer heard a student ask the examiner, "Is it true if you have an IEP you don't need to pass?" The examiner responded, "This test is a way to show you can do what's needed as adults, so you should try your very best." The observer noted that the same student did not respond to any test items.

Maintaining Security of Materials. Test site coordinators we interviewed provided controlled access to a secure locked storage area or room for testing materials at the school; they ensured all examiners had signed the Test Security Affidavit. At all sites, the test materials were monitored in a secure manner during the period of Human Resources Research Organization (HumRRO) observation.

Providing Testing Variations, Accommodations, and Modifications. At the February site, the observer noted that most grade ten SWDs in a classroom setting were using dictionaries during the ELA test. Use of dictionaries is permitted if it is a modification specified in the student's individualized education program (IEP) or Section 504 Plan. The test coordinator at the March site stated that, for the first time, the school facilitated a student-prepared glossary for EL students. A list of testing terms in English was given to students so that they could create a handwritten glossary that translated testing terms into their primary language for use during testing.

Consistency in Scoring the Essay

We analyzed data on essay scoring results to determine the degree of consistency in the scoring of the student essays used with the 2014–15 CAHSEE administrations and compared the results to indicators of scoring consistency from 2004–05 through 2013–14. Prior to the 2003–04 school year each student taking the ELA test was required to write two essays, the first involving analysis of an associated text and the second in response to a freestanding question that did not involve textual analyses. Beginning in 2004, the ELA test was shortened and students were required to write only one essay. In the 2004–05 test year the type of essay prompt (text-based versus stand-alone) varied across administrations. In the 2005–06 through 2014–15 testing years, stand-alone prompts were used in each administration.

As in prior years, each essay was graded by at least two different readers (scorers) using a four-point rubric that indicated the essay response characteristics required for each score level. Four was the highest score; a score of zero was assigned to responses that were off-topic, illegible, not written in English, or left blank. Because different topics were asked about in different administrations, except as described below, we monitored the level of agreement between independent readers for the question used with each administration. Table 2.1 shows agreement rates, by grade, for each of the 2014–15 test forms. Agreement is measured by: (a) how often (what percentage of the time) there was exact agreement versus and (b) how often there was a difference of more than one score point. Whenever there was an initial difference of more than one score point, the essay was read again by a third, more experienced reader and that score became the student's score of record.

As shown in Table 2.1, we again analyzed scoring consistency separately for students in grades ten, eleven, and twelve. For each administration the questions and the scoring process were identical for these groups; the quality of the papers they produced was not. Tenth grade students generated many more essays rated as 3 or 4 in comparison to grade eleven and twelve students, none of whom had passed the CAHSEE ELA when they were in grade ten. The greater range of scores increases the possibility that readers may disagree by more than one point, leading to lower exact agreement rates for the grade ten essays. The Kappa statistic⁵ shown in Table 2.1 takes differences in chance agreement rates into account. The statistic has a value of 1.0 when there is perfect agreement and a value of 0.0 when agreement is at chance levels.

⁵ See Cohen, Jacob (1960). "A coefficient of agreement for nominal scales." *Educational and Psychological Measurement* 20 (1): 37–46.

Table 2.1. 2014–15 Scoring Consistency¹ for Student Essays by Administration and Grade

Admin.	Grade Ten			Grade Eleven			Grade Twelve		
	Percent Exact Agreement	Percent > 1 Score Point Different	Weighted Coefficient Kappa	Percent Exact Agreement	Percent > 1 Score Point Different	Weighted Coefficient Kappa	Percent Exact Agreement	Percent > 1 Score Point Different	Weighted Coefficient Kappa
Jul 2014	n/a	n/a	n/a	n/a	n/a	n/a	82.6	0.1	0.57
Oct 2014	n/a	n/a	n/a	78.1	0.2	0.60	79.8	0.2	0.62
Nov 2014	n/a	n/a	n/a	78.1	0.2	0.62	80.3	0.2	0.66
Dec 2014	n/a	n/a	n/a	74.7	0.0	0.50	85.3	0.1	0.63
Feb 2015	69.2	0.7	0.55	82.9	0.4	0.66	83.6	0.3	0.66
Mar 2015	70.8	0.4	0.54	84.3	0.1	0.64	85.0	0.1	0.67
May 2015	71.2	0.7	0.65	79.8	0.2	0.66	83.0	0.2	0.68
All 2014–15	70.5	0.5	0.55	80.0	0.2	0.63	82.0	0.2	0.65

¹ Consistency is indicated by exact agreement rates and inconsistency by the percentage of scores differing by more than one point. The remaining percentage, scores differing by exactly one point, is not shown here.

Agreement rates were consistently high across grades and administrations/test forms, with weighted Kappa values ranging from about .54 to .68. Agreement rates were somewhat lower for grade ten students, particularly in the two main census administrations. The grade ten administrations included all students. Essay scores for these students spanned the full range of possible score points. Students in the grade eleven and twelve administrations were struggling to reach passing levels. Most had essay scores near the bottom of the score point range. Since the grade ten scores spanned the full range of the rating scales, there were many more opportunities for significant rater disagreements and obtaining exact agreement was more difficult in comparison to scoring for the grade eleven and twelve students.

Unlike prior years, CDE’s contract with ETS for the 2014–15 administrations of the CAHSEE included the reuse of previously administered test forms for five administrations, as shown in Table 2.2. Choosing tests that had first been used three years prior greatly reduced the likelihood that grade eleven or twelve students, even those who repeated one or more grades, had previously taken the test form and might recall test content. Administering each reused form in the same month as it had first been used, and therefore at the same point during the school year, reduced possible ability differences between the new and prior populations of examinees, enabling ETS to investigate possible test exposure by comparing mean scores.

Table 2.2. Schedule of Reused Test Forms in 2014–15 by Administration

2014–15 Administration	Original Month and Year of Test Form Administration
July	n/a
October	n/a
November	November 2011
December	December 2011
February	February 2012
March	March 2012
May	May 2012

With concerns for possible exposure of test content minimized, the reuse of essay prompts still posed a technical concern affecting fairness and reliability: potential reader drift. That is, the human readers for the reused essay prompts might score student responses more or less leniently than readers who rated student responses the first time the prompts were used. If the reader drift was significant, the “old” conversion tables could not be reused. ETS presented several options for evaluating whether essay reader drift occurred in 2014–15, and the CDE approved a process that would keep costs minimal while maintaining psychometric quality. The quality control process ETS conducted was to analyze mean scores after preliminary scoring for each administration, before release of results, with the need for post-equating and a new raw-to-scale score conversion table to be determined with the CDE if the analysis showed evidence of significant reader drift. For the census administrations, HumRRO recommended that ETS conduct the pattern analysis by mean grade level scores as well as by overall mean scores. For all administration of reused forms, ETS found that the difference in mean essay item score between the two administrations of the same essay prompt was so small as to have little impact on the overall raw cut score, and little effect on the student’s passing status. The original conversion tables were therefore used for all reused test forms.

Table 2.3 describes the consistency of essay scoring on the first use and on reuse of the same essay prompt. In every case, the Kappa values are the same as or higher than those on the reused test form compared with the original test form, indicating greater reader consistency on the reused form.

Table 2.3. Comparison of Scoring Consistency for Reused Essay Prompts by Administration and Grade

Admin.	Grade Ten			Grade Eleven			Grade Twelve		
	Percent Exact Agreement	Percent > 1 Score Point Different	Coefficient Kappa	Percent Exact Agreement	Percent > 1 Score Point Different	Coefficient Kappa	Percent Exact Agreement	Percent > 1 Score Point Different	Coefficient Kappa
Nov. 2011	n/a	n/a	n/a	76.0	0.4	0.58	77.5	0.3	0.61
Nov. 2014	n/a	n/a	n/a	78.1	0.2	0.62	80.3	0.2	0.66
Dec. 2011	n/a	n/a	n/a	80.3	0.0	0.49	83.8	0.1	0.56
Dec. 2014	n/a	n/a	n/a	74.7	0.0	0.50	85.3	0.1	0.63
Feb. 2012	67.2	0.8	0.52	81.0	0.2	0.62	82.3	0.2	0.63
Feb. 2015	69.2	0.7	0.55	82.9	0.4	0.66	83.6	0.3	0.66
Mar. 2012	69.5	0.6	0.51	84.0	0.1	0.60	85.1	0.2	0.63
Mar. 2015	70.8	0.4	0.54	84.3	0.1	0.64	85.0	0.1	0.67
May 2012	71.2	0.6	0.65	77.3	0.3	0.61	80.4	0.2	0.62
May 2015	71.2	0.7	0.65	79.8	0.2	0.66	83.0	0.2	0.68

Table 2.4 provides a comparison of agreement rates across years. Across all three grades, the Kappa values used to assess agreement rates were improved compared to last year and were as high as they have ever been for all three grades. Similarly, the frequency of significant disagreements (more than one score point) at each grade level was as low as it has ever been. Taken together, the results of our analyses indicate that ETS is continuing to achieve modest improvements in scoring consistency. Kappa values were not computed prior to 2011.

Table 2.4. Essay Scoring Consistency Rates¹ from 2004–05 Through 2014–15

Admin.	Grade Ten			Grade Eleven			Grade Twelve		
	Percent Exact Agreement	Percent > 1 Score Point Different	Weighted Coefficient Kappa	Percent Exact Agreement	Percent > 1 Score Point Different	Weighted Coefficient Kappa	Percent Exact Agreement	Percent > 1 Score Point Different	Weighted Coefficient Kappa
All 2004–05	66.5	0.9	n/a	70.3	0.9	n/a	n/a	n/a	n/a
All 2005–06	66.9	0.7	n/a	73.5	0.4	n/a	73.6	0.4	n/a
All 2006–07	69.9	0.4	n/a	77.4	0.2	n/a	77.7	0.3	n/a
All 2007–08	67.2	0.9	n/a	76.8	0.4	n/a	77.9	0.4	n/a
All 2008–09	66.9	0.8	n/a	77.4	0.3	n/a	79.5	0.3	n/a
All 2009–10	66.6	0.8	n/a	77.1	0.2	n/a	80	0.2	n/a
All 2010–11	66.7	1.0	0.49	76.7	0.4	0.57	78.6	0.4	0.58
All 2011–12	69.0	0.7	0.52	78.5	0.3	0.59	80.2	0.2	0.61
All 2012–13	69.2	0.6	0.51	79.7	0.2	0.60	81.7	0.2	0.62
All 2013–14	69.9	0.5	0.52	80.0	0.2	0.61	82.4	0.2	0.62
All 2014–15	70.5	0.5	0.55	80.0	0.2	0.63	82.0	0.2	0.65

¹ Consistency is indicated by exact agreement rates and inconsistency by the percentage of scores differing by more than one point. The remaining percent, scores differing by exactly one point, is not shown here.

Tables 2.5 through 2.10 provide more detailed information on scores assigned by each of the two independent readers for grade ten students over each of the last five years respectively. If the first reader judged an essay to be unscorable (score level 0), it was not shown to a second reader. This year there were a very small number of instances where the second reader judged a paper to be unscorable even though the first reader had assigned a score.

There was generally good agreement on essays assigned to score levels 1 through 3. If the first reader assigned a score at one of these levels, the second reader was most likely to assign the same score. Agreement at the highest level was lower than at other levels. If the first reader assigned a score of 4, the second reader was most likely to assign a score of 3. Nearly all of the serious (more than 1 point) disagreements involved one reader assigning a score of 2 and the other a score of 4. In this case, the final score was assigned by a third, expert reader.

The average ratings have varied between 2.4 and 2.5 from 2010 through 2015, and the pattern of disagreement between independent readers has also been very similar across the same time period.

Table 2.5. Percentage of Grade Ten Essays Assigned Each Score Level by Each Reader in the February Through May 2010 Administrations

First Score	Second Score				
	0	1	2	3	4
0	1.01*	0.00	0.00	0.00	0.00
1	0.00	1.21*	0.77	0.01	0.00
2	0.00	0.75	36.52*	12.19	0.38
3	0.00	0.01	12.13	25.31*	3.43
4	0.00	0.00	0.39	3.35	2.53*
Average score from first reader					2.5
Average score from second reader					2.5
Percent Exact Agreement (sum of diagonal elements)					66.6
Percent with differences of exactly one point					32.6
Percent with differences greater than one point					0.8

Note: Numbers followed by an asterisk indicate perfect agreement between the two readers.

Table 2.6. Percentage of Grade Ten Essays Assigned Each Score Level by Each Reader in the February Through May 2011 Administrations

First Score	Second Score				
	0	1	2	3	4
0	0.84*	0.00	0.00	0.00	0.00
1	0.00	1.64*	1.05	0.02	0.00
2	0.00	1.03	41.09*	11.94	0.49
3	0.00	0.02	12.02	21.02*	3.06
4	0.00	0.01	0.50	3.20	2.07*
Average score from first reader					2.4
Average score from second reader					2.4
Percent Exact Agreement (sum of diagonal elements)					66.7
Percent with differences of exactly one point					32.3
Percent with differences greater than one point					1.0

Note. Numbers with an asterisk (*) indicate perfect agreement between the two readers.

Table 2.7. Percentage of Grade Ten Essays Assigned Each Score Level by Each Reader in the February Through May 2012 Administrations

First Score	Second Score				
	0	1	2	3	4
0	0.80*	0.00	0.00	0.00	0.00
1	0.00	1.17*	0.69	0.01	0.00
2	0.00	0.69	42.30*	11.65	0.35
3	0.00	0.01	11.52	22.52*	2.89
4	0.00	0.00	0.33	2.92	2.17*
Average score from first reader					2.4
Average score from second reader					2.4
Percent Exact Agreement (sum of diagonal elements)					69.0
Percent with differences of exactly one point					30.3
Percent with differences greater than one point					0.7

Note. Numbers with an asterisk (*) indicate perfect agreement between the two readers.

Table 2.8. Percentage of Grade Ten Essays Assigned Each Score Level by Each Reader in the February Through May 2013 Administrations

First Score	Second Score				
	0	1	2	3	4
0	0.77*	0.00	0.00	0.00	0.00
1	0.00	1.05*	0.59	0.01	0.00
2	0.00	0.57	42.41*	12.16	0.28
3	0.00	0.01	12.07	23.34*	2.38
4	0.00	0.00	0.29	2.45	1.64*
Average score from first reader					2.4
Average score from second reader					2.4
Percent Exact Agreement (sum of diagonal elements)					69.2
Percent with differences of exactly one point					30.2
Percent with differences greater than one point					0.6

Note. Numbers with an asterisk (*) indicate perfect agreement between the two readers.

Table 2.9. Percentage of Grade Ten Essays Assigned Each Score Level by Each Reader in the February Through May 2014 Administrations

First Score	Second Score				
	0	1	2	3	4
0	0.74*	0.00	0.00	0.00	0.00
1	0.00	1.42*	0.70	0.01	0.00
2	0.00	0.58	42.85*	11.56	0.24
3	0.00	0.01	11.86	23.32*	2.35
4	0.00	0.00	0.25	2.45	1.61*
Average score from first reader					2.4
Average score from second reader					2.4
Percent Exact Agreement (sum of diagonal elements)					69.9
Percent with differences of exactly one point					29.5
Percent with differences greater than one point					0.5

Note. Numbers with an asterisk (*) indicate perfect agreement between the two readers.

Table 2.10. Percentage of Grade Ten Essays Assigned Each Score Level by Each Reader in the February Through May 2015 Administrations

First Score	Second Score				
	0	1	2	3	4
0	0.96	0.00	0.00	0.00	0.00
1	0.02	1.31	0.66	0.01	0.00
2	0.01	0.66	42.01	11.11	0.22
3	0.00	0.00	10.99	23.98	2.85
4	0.00	0.00	0.23	2.82	2.23
Average score from first reader					2.45
Average score from second reader					2.45
Percent Exact Agreement (sum of diagonal elements)					70.49
Percent with differences of exactly one point					29.46
Percent with differences greater than one point					0.05

Note. Numbers with an asterisk (*) indicate perfect agreement between the two readers.

In summary, scoring consistency was improved compared to prior years and was generally acceptable. Exact agreement rates for the year as a whole were above 70 percent, while the percentage of disagreements greater than one score point was not more than half a percent.

A final point about the accuracy of the essay scores is that there is no way of directly estimating how much a student's score would vary across different essay prompts, since each student responds to only a single prompt. Prior analyses of similar tests (Wise, 2011) suggests that differences in student scores for different essay prompts could be significant. Currently, this facet is not addressed in assessing the accuracy of the overall ELA scores and the consistency in classifying students as meeting or not meeting the CAHSEE ELA requirement.

Assembling Comparable Forms

In prior years, HumRRO provided an independent verification of the procedures used by ETS for assembling test forms and equating scores across the different forms used each year. No issues were found. Since there were no significant changes to test assembly and form equating processes, there was no need to repeat this independent verification. As in prior years, however, we have continued to monitor the degree of consistency in the scoring tables used to map the number correct scores for each test form onto the constant reporting scale.

Tables 2.11 and 2.12 show the scoring tables for each ELA and mathematics test form used this year. Key decision points, including CAHSEE passing levels and proficiency levels that have been used for school accountability use, are footnoted and shaded. The test forms do vary slightly by difficulty, but the number of correct responses to reach each of the decision points generally varies by only one or two across all of the forms, indicating a high level of success in assembling test forms of approximately equal difficulty. There was slightly more variability in ELA form difficulty this year, with a raw score of 54 required for passing the most difficult forms and a score of 57 required on the easiest form.

One other point about the scoring tables is that the expected score for students who guess on every question is higher than the minimum score of 275, for the mathematics test. The mathematics test consists of 80 questions with four possible responses each. Students who guess randomly on each question will end up with an average of 20 correct answers and will earn a score ranging from 306 to 310. Guessing is less of a factor for ELA because it is not possible to guess on the essay, but guessing on each of the multiple choice questions will still yield a score slightly above the minimum score of 275. Thus, caution is needed in interpreting differences among very low scores, as chance factors may account for such differences. Guessing is much less of an issue around the minimum scores required for passing (350) or for being classified as proficient (380).

Across different test forms, the minimum percentage of total points needed to pass has varied slightly to compensate for the fact that the questions in one form turned out to be a little more or a little less difficult than the questions on the base form. Originally, passing levels were set to 60 percent of total points for ELA and 55 percent for mathematics. Table 2.13 shows the minimum and maximum of the percentage of total points needed for passing across different forms in each testing year and overall. Prior analyses (Becker, et. al, Nov. 2011) confirmed the accuracy of score equating from one form to the next and thus the importance of varying the minimum cut points for passing based on this equating. Overall, the variation in form difficulty is minor, indicating that form construction procedures were effective in assembling forms of generally comparable difficulty.

Table 2.11. Raw-to-Scale Score Conversions for the 2014–15 ELA Tests

Raw Score	Scale Score							Raw Score	Scale Score						
	Jul. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Feb. 2015	Mar. 2015	May 2015		Jul. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Feb. 2015	Mar. 2015	May 2015
0-15	275	275	275	275	275	275	275	51	343	337	341	343	344	339	339
16	275	275	275	275	275	275	275	52	345	339	343	345	346	342	341
17	275	275	275	275	276	275	275	53	347	341	345	347	348	344	343
18	277 ¹	275 ¹	278 ¹	275 ¹	279 ¹	275 ¹	277 ¹	54	349	344	347	349	350 ²	346	345
19	279	275	280	275	281	275	279	55	351 ²	346	351 ²	351 ²	352	348	347
20	282	277	282		283	276	281	56	353	348	351	353	354	350 ²	349
21	284	279	284	279	285	279	283	57	355	350 ²	353	355	356	352	351 ²
22	286	281	286	281	287	281	285	58	357	352	356	357	358	355	353
23	288	283	288	284	289	283	287	59	359	354	358	359	360	357	355
24	290	285	290	286	291	285	289	60	362	356	360	362	362	359	357
25	292	287	292	289	293	287	291	61	364	358	362	364	365	361	359
26	294	289	294	291	295	289	293	62	366	361	364	366	367	364	362
27	296	291	296	293	297	291	294	63	368	363	367	368	369	366	364
28	298	293	298	296	299	293	296	64	371	365	369	371	372	369	366
29	300	295	300	298	301	295	298	65	373	368	371	373	374	371	368
30	302	297	302	300	303	297	300	66	376	370	374	376	377	374	371
31	304	299	304	302	305	299	302	67	378	373	376	378	379	377	373
32	306	301	306	304	307	301	304	68	381 ³	375	379	381 ³	382 ³	379	375
33	308	303	307	307	309	303	306	69	383	378	382 ³	384	385	382 ³	378
34	310	305	309	309	311	305	308	70	386	381 ³	384	386	387	385	381 ³
35	312	306	311	311	313	307	310	71	389	384	387	389	390	388	383
36	314	308	313	313	314	309	311	72	392	387	390	392	393	391	386
37	316	310	315	315	316	311	313	73	395	390	393	395	396	394	389
38	318	312	317	317	318	313	315	74	398	393	396	399	399	398	392
39	320	314	319	319	320	315	317	75	401	396	400	403	403	401	395
40	321	316	320	321	322	317	319	76	405	399	403	406	406	405	399
41	323	318	322	323	324	319	321	77	407	403	407	410	410	409	402
42	325	320	324	325	326	321	323	78	412	407	411	414	414	413	406
43	327	322	326	327	328	323	324	79	416	411	415	418	418	418	410
44	329	324	328	329	330	325	326	80	420	415	420	423	423	423	414
45	331	326	330	331	332	327	328	81	425	420	425	429	428	428	419
46	333	328	332	333	334	329	330	82	429	425	430	435	433	433	424
47	335	330	334	335	336	331	332	83	436	430	436	443	439	439	429
48	337	332	336	337	338	333	334	84	442	436	442	450	445	446	435
49	339	333	337	339	340	335	336	85	446	443	449	450	450	450	442
50	341	335	339	341	342	337	337	86-90	450	450	450	450	450	450	450

¹ Expected scores from guessing alone (chance).

² Minimum scores required for passing the diploma requirement.

³ Proficiency cut scores that have been used for purposes of school accountability.

Table 2.12. Raw-to-Scale Score Conversions for the 2014–15 Mathematics Tests

Raw Score	Scale Score							Raw Score	Scale Score						
	Jul. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Feb. 2015	Mar. 2015	May 2015		Jul. 2014	Oct. 2014	Nov. 2014	Dec. 2014	Feb. 2015	Mar. 2015	May 2015
0-8	275	275	275	275	275	275	275	43	348	350 ²	350 ²	353	350 ²	351 ²	351 ²
9	275	275	275	275	275	275	275	44	350 ²	352	351	355	352	353	352
10	275	277	277	278	276	277	278	45	352	354	353	357	353	355	354
11	278	281	281	283	280	281	282	46	354	356	355	359	355	357	356
12	282	284	285	287	284	284	285	47	356	357	357	360	357	358	358
13	285	288	288	290	287	288	289	48	358	359	359	362	359	360	359
14	288	291	291	293	290	291	292	49	360	361	360	364	361	362	361
15	291	294	294	296	293	294	294	50	361	363	362	366	363	364	363
16	294	296	296	299	296	296	297	51	363	365	364	368	364	366	365
17	296	299	299	302	298	299	300	52	365	367	366	370	366	368	367
18	299	301	302	304	301	302	302	53	367	369	368	372	368	370	369
19	301	304	304	307	303	304	305	54	369	371	370	374	370	372	371
20	304 ¹	306 ¹	306 ¹	309 ¹	306 ¹	307 ¹	307 ¹	55	371	373	372	376	372	374	373
21	306	308	309	311	308	309	309	56	373	375	374	378	374	376	375
22	308	311	311	314	310	311	312	57	376	377	376	380 ³	377	378	377
23	311	313	313	316	312	313	314	58	378	379	378	382	379	380 ³	379
24	313	315	315	318	315	315	316	59	380 ³	381 ³	380 ³	384	381 ³	383	381 ³
25	315	317	317	320	317	318	318	60	382	384	383	386	383	385	383
26	317	319	319	322	319	320	320	61	385	386	385	389	386	387	386
27	319	321	321	324	321	322	322	62	387	389	387	391	388	390	388
28	321	323	323	326	323	324	324	63	390	391	390	394	391	392	391
29	323	325	325	328	325	326	326	64	392	394	393	396	393	395	393
30	325	327	327	330	326	327	328	65	395	396	395	399	396	398	396
31	327	329	328	332	328	329	329	66	398	399	398	402	399	401	399
32	328	330	330	333	330	331	331	67	401	402	401	405	402	404	402
33	330	332	332	335	332	333	333	68	405	406	404	408	405	407	405
34	332	334	334	337	334	335	335	69	408	409	408	411	409	410	408
35	334	336	336	339	336	337	337	70	412	413	412	415	412	414	412
36	336	338	337	341	337	339	338	71	416	417	416	419	416	418	416
37	338	340	339	343	339	340	340	72	420	421	420	424	421	423	420
38	339	341	341	344	341	342	342	73	425	426	425	428	426	428	425
39	341	343	343	346	343	344	344	74	431	432	431	434	431	433	431
40	343	345	344	348	345	346	345	75	438	439	437	440	438	440	437
41	345	347	346	350 ²	346	348	347	76	446	446	445	448	446	448	445
42	347	348	348	351	348	349	349	77-80	450	450	450	450	450	450	450

¹ Expected scores from guessing alone (chance).

² Minimum score (350 or more) required for passing the diploma requirement.

³ Proficiency cut scores that have been used for purposes of school accountability.

Table 2.13. Percentage of Points Needed to Pass Across Test Forms for Each Testing Year

Testing Year	ELA		Mathematics	
	Minimum Percentage	Maximum Percentage	Minimum Percentage	Maximum Percentage
2004	60.0	62.2	53.8	53.8
2004–05	58.9	62.2	52.5	55.0
2005–06	60.0	64.4	52.5	55.0
2006–07	61.1	65.6	52.5	55.0
2007–08	60.0	62.2	52.5	55.0
2008–09	60.0	63.3	51.3	53.8
2009–10	60.0	63.3	51.3	55.0
2010–11	61.1	62.2	52.5	55.0
2011–12	60.0	63.3	51.3	53.8
2012–13	61.1	63.3	52.5	55.0
2013–14	60.0	63.3	51.3	53.8
2014–15	60.0	63.3	52.5	55.0
All Years	58.9	65.6	51.3	55.0

Test Results Data

The primary source of data used to analyze CAHSEE test results was the detailed item-analysis files received after each CAHSEE administration from ETS, the testing contractor. These data were analyzed and documented in brief reports to the CDE with cumulative results through each separate administration. The data files contain test item and student questionnaire responses for each student who took the CAHSEE, but do not include final corrections by LEAs to demographic information, which come later in the year, and may exclude a small number of students whose test results were not processed in time to be included in these files.

Table 2.14 shows the number of answer document records in the files received from ETS for each of the 2014–15 CAHSEE administrations.⁶ For each CAHSEE test, Table 2.14 also shows the number of answer documents and the number of documents with passing scores by administration date and current grade. The July 2014 CAHSEE administration included students in grade twelve and in adult education. The October through December 2014 administrations also included students in grade eleven. Grade ten students are included in the February, March, and May administrations, along with students in grades eleven and twelve, and adult education students who are still trying to pass.

Cumulative passing rates are estimated in this report for current grade ten, eleven, and twelve students (classes of 2017, 2016, and 2015 respectively), as well as for students who were previously in the classes of 2012 through 2014. Passing rates for students in adult education programs are not analyzed further except for those students who were previously in the classes of 2012 through 2014.

Some students used more than one answer document in the same CAHSEE administration (usually one for the ELA test and one for the mathematics test), resulting in multiple test records on the ETS files for the same student. In addition, many grade eleven and grade twelve students participated in more than one administration during the year. We matched answer documents within and across the 2014–15 administrations to avoid counting the same student more than once. Table 2.15 shows the resulting estimates of the number of different students participating in one or more of the 2014–15 CAHSEE administrations and the numbers and percentages of these students passing each of the two tests. There are minor discrepancies between Table 2.14 and Table 2.15 in the numbers of students passing because grade codes were corrected for a small number of students who had more than one answer document and had inconsistent grade codes across the different answer documents.

⁶ Note that the data analyzed here are preliminary results prior to final review and correction of demographic information by schools and districts.

Table 2.14. Number of Answer Documents from Each 2014–15 CAHSEE Administration and Number with Passing Scores

Test Date	Grade ¹	Total Answer Sheets	Blank Answer Sheets	ELA		Mathematics	
				Number Taking ²	Number Passing	Number Taking ²	Number Passing
Jul. 2014	12	11,979	4,542	5,008	1,186	4,440	762
	Adult Education	1,587	182	918	307	774	186
	Total	13,566	4,724	5,926	1,493	5,214	948
Oct. 2014	11	17,879	2,226	11,960	4,558	11,094	3,779
	12	38,475	5,280	23,903	6,520	22,851	5,863
	Adult Education	2,488	23	1,706	704	1,506	570
Total	58,842	7,529	37,569	11,782	35,451	10,212	
Nov. 2014	11	80,117	0	62,259	26,985	56,782	21,341
	12	45,428	0	32,368	9,888	31,755	9,042
	Adult Education	4,483	0	3,059	1,345	2,801	1,101
Total	130,028	0 ³	97,686	38,218	91,338	31,484	
Dec. 2014	11	379	62	228	99	196	88
	12	2,662	942	1,175	220	938	233
	Adult Education	580	40	345	125	321	111
Total	3,621	1,044	1,748	444	1,455	432	
Feb. 2015	10	120,740	5,736	112,887	96,118	112,766	95,045
	11	25,356	4,129	15,605	4,491	14,910	4,109
	12	41,727	8,051	23,267	5,068	22,749	5,080
	Adult Education	3,901	328	2,357	998	2,237	894
Total	191,724	18,244	154,116	106,675	152,662	105,128	
Mar. 2015	10	359,428	14,803	338,780	286,831	338,671	285,993
	11	34,418	4,200	22,201	7,111	21,317	6,263
	12	30,090	5,998	16,464	3,772	16,332	3,735
	Adult Education	3,882	97	2,472	1,140	2,428	917
Unknown ³	131	3	128	112	127	109	
Total	427,949	25,101	380,045	298,966	378,875	297,017	
May 2015	10	16,280	4,247	8,511	5,189	8,459	5,039
	11	23,631	4,176	13,873	3,551	13,580	3,464
	12	27,289	6,555	14,081	1,794	13,610	2,160
	Adult Education	3,646	209	2,175	837	2,243	815
Total	70,846	15,187	38,640	11,371	37,892	11,478	
Total Grade 10		496,448	24,786	460,178	388,138	459,896	386,077
Total Grade 11		181,780	14,793	126,126	46,795	117,879	39,044
Total Grade 12		197,650	31,368	116,266	28,448	112,675	26,875
Total Adult Education		20,567	879	13,032	5,456	12,310	4,594
Unknown Grade		896,576	71,829	715,730	468,949	702,887	456,699
Total All Records		896,445	71,826	715,602	468,837	702,760	456,590

¹ Grade ten students are in the Class of 2017, grade eleven students are in the Class of 2016, and grade twelve students are in the Class of 2015.

² Students who took a test with a modification are included in the counts of the number of students taking each test but not counted as having passed. Note that in DataQuest these students are not counted as having taken the test.

³ We received an updated November 2014 administration data file that did not include blank answer documents.

Table 2.15. Counts of Unique Students and Passing Rates by Grade Level in the 2014–15 CAHSEE Administrations

Count ¹	Grade					Total
	Ten	Eleven	Twelve	Adult Educ.	Unknown ⁴	
Total Students ²	475,981	117,340	85,160	12,578	128	691,187
Blank Answer Documents ³	13,362	5,409	9,016	520	0	28,307
Number Taking ELA	456,299	84,796	52,556	8,524	128	602,303
Number Passing ELA	387,636	46,340	25,305	4,605	112	463,998
Percent Passing ELA	85.0%	54.6%	48.1%	54.0%	87.5%	77.0%
Number Taking Math	454,342	74,873	48,534	8,078	127	585,954
Number Passing Math	385,542	38,757	23,532	3,865	109	451,805
Percent Passing Math	84.9%	51.8%	48.5%	47.8%	85.8%	77.1%

¹ Counts of students passing by grade level may differ from those in Table 2.12 because of corrections to inconsistent grade codes across answer documents for the same student and because a number of students appear to have passed the same test more than once. Counts of students taking each test **include** students who took the test with a modification. Such students are not considered to have passed, since a waiver would be required.

² Includes unique students for whom answer documents were blank.

³ Both blank and non-blank answer documents were found for some students. These students were not counted as having blank answer documents in Table 2.13, resulting in lower counts of blank answer documents in comparison to Table 2.12.

⁴ Unless matched to prior-year records, students for whom answer documents had no grade codes are **excluded** from the remainder of the analyses.

We matched the 2014–15 CAHSEE test data to test results from the 2010–11 through 2013–14 CAHSEE administrations. Matching was done primarily on the basis of statewide student identifiers (SSID), with some checking for erroneous or missing SSIDs based on name, birthdate, school, and other demographic information. Matches were found for 88 percent of the current grade twelve students, 83 percent of the current grade eleven students, and 90 percent of the students currently enrolled in adult education programs. Most of the grade ten students were not matched to any prior records and were assumed to have been in grade nine last year.⁷

Table 2.16 shows the relationship of the high school class based on the grade reported last year during 2013–14 testing to the high school class and grade indicated in the 2014–15 test records for students with matching prior-year records. Approximately 77 percent of the 64,850 current grade twelve students tested as grade eleven students last year. A few of the grade twelve students (2,189) tested as grade ten students last year, having since then made up credits or otherwise advanced to grade twelve. A few more were shown as being in adult education programs last year. The rest of the grade twelve students were students repeating grade twelve from an earlier year. Of the students who were in grade twelve for the first time last school year, 83 percent (9,396 of 11,285) are shown as being in grade twelve again this year. A small number of last

⁷ Schools may vary in the rules they use to assign students to a grade level based on courses or units completed at any point in time. The grade entered for a student in the CAHSEE records may vary during the school year.

year's first time grade twelve students (462) are shown as dropping back to grade eleven or grade ten this year, with the remainder (1,427) having enrolled in adult education programs.

Table 2.16. Number of 2014–15 Examinees (Excluding Blank Answer Documents) Matched to Prior-Year Records by Current Grade and Prior High School Class

High School Class in Prior School Year (2013–14)	Grade in 2014–15 School Year				
	Grade Ten ¹	Grade Eleven	Grade Twelve ²	Adult Education	Total Matched
Class of 2017 ¹ (Grade 9)	459,244*		0	0	0
Class of 2016 (Grade 10)	2,394	89,878*	2,189	64	94,525
Class of 2015 (Grade 11)	404	2,415	49,851*	271	52,941
Class of 2014 (Grade 12)	115	347	9,396*	1,427*	11,285
Class of 2013 (Grade 12 in 2012–13) ³	33	102	2,110*	952*	3,197
Class of 2012 (Grade 12 in 2011–12) ³	16	62	829*	641*	1,548
Class of 2011 (Grade 12 in 2010–11) ³	7	42	413*	458*	920
Adult Education ⁴		28	62	7,094*	7,184
Total	462,213	92,874	64,850	10,907	630,844

¹ Current grade ten students not matched to 2013–14 CAHSEE records were assumed to have been in the Class of 2017 last year as well as this year.

² Current grade twelve students include students previously in the Classes of 2009 through 2013 as well as the Class of 2014.

³ Note that some students from prior high school classes are still shown as grade twelve students this year while others are shown as adult education students, based on codes in their CAHSEE answer documents.

⁴ Students in adult education programs and not matched to any prior grade twelve CAHSEE record.

Note: Shaded cells or numbers with an asterisk (*) indicate normal grade progression. Normal progression for grade twelve students who did not pass is either to remain in grade twelve or to enter adult education.

It is important to note that some students remained in the same grade or advanced more than one grade and thus moved to a different high school class between the 2013–14 and 2014–15 school years. If students who changed to a different class had previously passed only one of the CAHSEE tests, they had to be removed from the prior counts of students passing that test for their original class and added to the corresponding counts for their new class. For this reason, counts of students in a given class who had passed either the ELA or mathematics test in previous years were subject to change. Counts of students who passed both tests did not change, since these students did not participate in further CAHSEE testing. Some of the students previously meeting the CAHSEE requirement might have changed to a different high school class, but we would have no way of verifying such a change. We also deleted a few records for students who appeared to be taking a CAHSEE test even though they had already been counted as meeting the CAHSEE requirement.

For consistency and completeness in reporting, we corrected all of the CAHSEE records with missing or inconsistent gender or race/ethnicity codes from the 2014–15 CAHSEE administrations. For records with missing or inconsistent gender codes, we

assigned the gender most common to their first name. In a very few cases, their first name was not shared with 10 or more others, so we assigned a gender code randomly with equal probability. For records with missing or inconsistent race/ethnicity codes, we assigned the race/ethnicity code with the highest frequency for their first or last name, whichever one had a higher frequency among a single racial/ethnic group. We also corrected inconsistencies in first and last names by selecting the most frequent first or last name among different names found for a given student. Name corrections did not affect statistical analyses directly but did have some impact on efforts to match student records across administrations and years.

Computing Passing Rates

A key issue in computing and reporting passing rates for the CAHSEE is what to use as the denominator. As noted above, the composition of a given high school class changes dynamically as students advance a grade within a school year or remain in a grade for longer than a school year. In addition, a number of students leave the system without passing the CAHSEE (e.g., leave the state, transfer to private schools, or just drop out for reasons unrelated to the CAHSEE) and a continuing issue is how best to handle them in computing passing rates. Table 2.17 compares fall enrollment counts (reported by DataQuest), enrollment counts from the Standardized Testing and Reporting (STAR) Program tests that occurred closer in time to the CAHSEE census testing dates (spring), and record counts from the CAHSEE. We used total CAHSEE record counts in computing grade ten passing rates for this report. Note that the STAR enrollment counts are typically lower than the fall enrollment counts, although spring counts are not available this year because ELA and mathematics STAR testing was suspended in 2014. Essentially all grade ten students must be tested on the CAHSEE to meet the federal Elementary and Secondary Education Act (ESEA) participation requirements. The CAHSEE counts appear to be reasonably complete, and the 2014 CAHSEE counts appear comparable to prior year counts relative to fall enrollment numbers. Through 2013, STAR reports included the number of students tested in different demographic groups, but did not include separate enrollment counts for these groups.

Table 2.17. Grade Ten Enrollment Estimates from California Basic Educational Data System (CBEDS), STAR, and CAHSEE¹

Source	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Fall enrollment (CBEDS)	497,203	515,761	517,873	513,707	509,157	506,042	502,452	494,739	486,498	484,993	480,753
STAR reported enrollment	482,164	502,616	500,655	495,912	495,705	497,957	495,322	486,991	480,032	Not Avail ³	Not Avail ³
STAR students tested ² (Grade Ten ELA)	462,795	482,781	481,950	478,582	479,510	482,333	466,937	455,363	467,170	Not Avail ³	Not Avail ³
CAHSEE examinees ⁴	470,891	505,045	502,106	493,559	496,688	498,187	480,868	486,892	478,905	478,132	475,981
Percentage of fall enrollment	94.7%	97.9%	96.9%	96.0%	97.6%	98.4%	95.7%	98.4%	98.4%	98.6%	99.0%

¹ CBEDS and STAR data were retrieved online through CDE’s DataQuest facility at <http://dq.cde.ca.gov/dataquest>.

² STAR counts include students taking the California Standards Test (CST), the California Modified Assessment (CMA) or the California Alternate Performance Assessment (CAPA).

³ In 2014 STAR testing was suspended. It will be replaced in 2014–15 by the California Assessment of Student Performance and Progress (CAASPP). See <http://www.cde.ca.gov/ta/tg/ca/>. Counts from the CAASPP 2015 administration are not yet available.

⁴ CAHSEE student counts include blank answer documents, with duplicate records for the same student removed. These are the counts used as the base in computing passing rates.

The denominators used in computing passing rates for students in grades eleven and twelve were adjusted to reflect students who moved between high school classes, transferred out of state, or dropped out. The denominator used was the number of students in the class who had passed the CAHSEE in prior years plus the number still taking the CAHSEE during 2014–15. Some of the students who passed in prior years may also have changed classes or dropped out, but were not in our data files because they did not take the CAHSEE again. In the future, the California Longitudinal Pupil Achievement Data System (CALPADS) will provide better data on students who do not participate in further CAHSEE testing, including both those who have passed the CAHSEE and those who have not.

We recognize that excluding students who dropped out before grade twelve from the computation of passing rates may overstate student success in meeting the CAHSEE requirement. There is no way of knowing, however, how many of the students who dropped out might have passed the CAHSEE had they kept trying. The high rate of high school dropouts is a serious and costly problem (Alliance for Excellence, 2007) that is somewhat beyond the scope of the present evaluation. While there is no evidence that the CAHSEE has led to increased dropout rates prior to grade twelve, there is some evidence from our prior analyses that the CAHSEE requirement has prevented or delayed between 1 and 4 percent of seniors from graduating.

The denominators used in computing this year’s cumulative passing rates for the classes of 2011 through 2013 include as “not yet passed” those who did not continue testing after their senior year. For these classes, we report separately the number of students not continuing to take the CAHSEE, but retain them in the denominator.

Excluding Students with Disabilities

The way information on SWDs is collected on the CAHSEE answer documents limits our ability to make precise distinctions between SWDs and students who receive special education services. Question 12a asks: “if this student receives special education services under an IEP, mark the three-digit Primary Disability code.” If a code other than “000” is marked, we are counting the student under SWDs and also under special education students.

At the end of the answer document, under Accommodations and Modifications, Question 24a reads “The signature below indicates that the student has access to the accommodations and/or modifications as specified in the student’s IEP or 504 Plan” and provides separate options to indicate an IEP or Section 504 Plan. A significant number of students have a primary disability code from Question 12a, but do not have either the IEP or 504 Plan bubbles marked for Question 24a. These may be mostly students receiving special education services who do not require testing accommodations or modifications, and thus an incomplete count of all IEP or 504 Plan students. In a few cases, one of these bubbles is marked for students where no primary disability code is indicated, and we include these students in our counts of SWDs. We also include a small number of students who receive specific testing accommodations or modifications, according to responses to 24b, but have neither a primary disability code nor an indication of an IEP or 504 Plan. Thus, the working definition of SWDs based on information from the CAHSEE answer document is all students who: (a) have a primary disability code in response to Question 12a, (b) have either the IEP or 504 Plan bubble marked under Question 24a, **or** have a testing accommodation or modification indicated in response to Question 24b.

SWDs, including students in special education programs and also students with 504 Plans that may specify accommodations and modifications, have been exempt from the CAHSEE requirement at various times. To provide consistent trend information, SWDs have been excluded from many of the grade eleven and twelve passing rate computations for other demographic groups. In the following text, the remaining students are sometimes referred to as general education students, which they all are. It should be noted, however, that some of the SWDs, particularly 504 Plan students, are not currently subject to the CAHSEE requirement, although they are also in general education programs. In all cases, results for SWDs are reported separately. For the grade ten census administrations, SWDs have consistently been required to participate along with all other students, so SWDs have not been excluded from any of the analyses of grade ten results.

Test Results

Key Analysis Questions

This section presents cumulative CAHSEE results through the 2014–15 administrations. Analyses of test results are organized around four main issues:

1. **Grade twelve students:** How many first-time grade twelve students in the class of 2015 who had not passed the CAHSEE were able to pass in their senior year, and how many did not meet the CAHSEE requirement by June 2015? How did these numbers compare to the results for the classes of 2008 through 2014?
2. **Grade eleven students:** How did the performance of grade eleven students in the Class of 2016 who had not yet passed the CAHSEE change? What can we expect for those who have not yet passed by the end of grade eleven? Also, how did improved performance for grade eleven students in the Class of 2016 compare to improvements seen in our previous analyses for grade eleven students over the last several years?
3. **Grade ten students:** How did 2015 results for grade ten students in the Class of 2017 compare to results for the classes of 2008 through 2016 when those students took the CAHSEE for the first time as grade ten students in 2006 through 2014 respectively?
4. **Prior classes:** How many students from the classes of 2012 through 2014 who had not met the CAHSEE requirement continued to try to pass the CAHSEE in 2015? How many of them passed?

Our analyses answer each of these questions for students in specific demographic categories defined by gender, race/ethnicity, economic disadvantage, and English learner or disability status. Results for adult education students are reported briefly, but are not the primary policy focus of these analyses except for adult education students who were previously in the Classes of 2012 through 2014.

Readers should attend carefully to the table titles and footnotes to ensure appropriate interpretation of the data. To help differentiate between the results tables presented for each class of students, a brief explanation of the logic of table order follows:

- For the Class of 2015 and the Class of 2016, six similar tables of 2014–15 results are presented. The first two tables for each class show passing results for both tests (ELA and mathematics), starting with general education students only and then including SWDs. The next tables show passing rates on the individual tests, ELA (excluding, then including SWDs) and then mathematics (excluding, then including SWDs).

- For the Class of 2017, the three tables of 2014–15 results (both tests, ELA, then mathematics) all include SWDs. Since all grade ten students are required to take the CAHSEE, no students were excluded from the analyses.
- For each class, the 2014–15 administration results tables are followed by a table comparing passing rates for one grade (twelve, eleven, ten) over time.
- For high school classes prior to 2015 (2012 through 2014), tables showing results for general education students (both tests, ELA, then mathematics) are presented, since SWDs may have received a waiver or exemption. However, a separate line in each of these tables shows counts of SWDs who did pass the CAHSEE.

Class of 2015 — Once Again Many Seniors Continued to Work to Meet Graduation Deadline

Tables 2.16 through 2.21 show cumulative passing rates for students in the Class of 2015, this year's first-time seniors. To avoid duplication, students who had been seniors in 2006 through 2014 were excluded from the counts in Tables 2.16 through 2.21. In the primary tables, SWDs are excluded from all rows, due to the exemption currently reinstated for these students. We also provide an alternative to each table where SWDs are included in all rows, allowing for direct comparison to prior-year results in some cases.

In computing the estimates shown in these tables, adjustments were made to previous estimates of the numbers of students who had passed each part in prior years.

We removed students who appeared to shift from the class of 2015 to a different high school class, because they remained in grade eleven in both the 2013–14 and 2014–15 school years, or in a few cases, dropped back to grade ten.

We added in a few students who joined the target class because they advanced by more than one grade (from grade ten in the 2013–14 school year to grade twelve in the 2014–15 school year). Adding students moving into the class of 2015 may have increased the number of students in the class who had passed one but not both parts of the CAHSEE by May 2014. We did not, however, add students from the class of 2014 or earlier classes who remained in grade twelve. These students are included in the tables below for the classes of 2012 through 2014.

Finally, we removed class of 2015 students who had not passed both parts, but were not matched to any test record from the 2014–15 administrations. We also added a small number of grade twelve students who participated in the 2014–15 administrations but could not be matched to any prior records. These students were most likely new to the state, although some were students who could not be matched to their prior records because of coding errors in key student identifiers.

In the tables that follow, we believe that the most important values are the estimates of the numbers of students who have not yet passed either or both parts of the CAHSEE. The percentages shown are subject to some debate due to differences of opinion as to the appropriate denominator (the base for computing the percentages). For example, students who passed the CAHSEE but subsequently left the state or dropped out are included in the denominator since we have no basis for estimating the number of these students.

Table 2.18. Estimated Number and Percentage of Students in the Class of 2015¹ Passing Both CAHSEE Tests Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed ²	Not Passed	Not Tested	Passed	Not Yet Passed ³	Percent Pass
All Students	388,896	49,614	23,620	18,246	7,748	412,516	18,246	95.8%
Females	199,134	22,973	11,368	8,398	3,207	210,502	8,398	96.2%
Males	189,762	26,641	12,252	9,848	4,541	202,014	9,848	95.4%
American Indian or Alaska Native	2,439	313	144	93	76	2,583	93	96.5%
Asian	39,087	2,469	1,413	833	223	40,500	833	98.0%
Pacific Islander	2,233	361	188	117	56	2,421	117	95.4%
Filipino	12,951	671	419	194	58	13,370	194	98.6%
Hispanic or Latino	188,147	31,477	13,992	12,420	5,065	202,139	12,420	94.2%
Black or African American	21,405	5,162	2,223	2,061	878	23,628	2,061	92.0%
White, non-Hispanic	110,343	6,286	3,928	1,382	976	114,271	1,382	98.8%
Two or More Races	12,291	2,875	1,313	1,146	416	13,604	1,146	92.2%
Economically Disadvantaged	196,903	33,009	14,653	13,351	5,005	211,556	13,351	94.1%
English Learner	27,551	19,459	7,630	8,883	2,946	35,181	8,883	79.8%
Reclassified Fluent English	105,028	4,849	3,089	1,228	532	108,117	1,228	98.9%

¹ Current grade twelve students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade twelve students who tested as grade ten students last year have been moved into counts for the Class of 2015 and are included here along with students who tested as grade eleven students last year. SWDs are *excluded* from all rows.

² Counts of students passing this year include students who passed both parts this year and, and more frequently, students who passed one part this year and the other part in a prior year.

³ Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Explanation of table contents: Line 1 shows that through May of 2014, 388,896 students now in the Class of 2015, excluding SWDs, had passed the CAHSEE and 49,614 had not. This year, 23,620 of the students who had not passed by May 2014 completed the CAHSEE requirement. Another 18,246 of these students took the CAHSEE, but have not yet passed both parts. An estimated 7,748 Class of 2015 students who had not passed by May 2014 did not participate in a CAHSEE administration this year and have been dropped from counts of students still trying to pass. Overall, we estimate that 412,516 general education students in the Class of 2015 have now passed the CAHSEE, which is 95.8 percent of the general education students in the Class of 2015 still trying to pass the CAHSEE after adjusting for students moving into and out of this class. An estimated 18,246 students in the Class of 2015 are still trying to pass the CAHSEE but have not yet done so.

Table 2.19. Estimated Number and Percentage of Students in the Class of 2015¹ Passing Both CAHSEE Tests Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed ²	Not Passed	Not Tested	Passed	Not Yet Passed ³	Percent Pass
All Students	409,595	77,961	27,425	36,184	14,352	437,020	36,184	92.4%
Females	206,050	33,059	12,720	14,797	5,542	218,770	14,797	93.7%
Males	203,545	44,902	14,705	21,387	8,810	218,250	21,387	91.1%
American Indian or Alaska Native	2,615	536	159	237	140	2,774	237	92.1%
Asian	40,384	3,387	1,673	1,341	373	42,057	1,341	96.9%
Pacific Islander	2,307	488	211	193	84	2,518	193	92.9%
Filipino	13,271	926	465	340	121	13,736	340	97.6%
Hispanic or Latino	197,760	48,213	16,134	23,391	8,688	213,894	23,391	90.1%
Black or African American	22,553	8,498	2,539	4,272	1,687	25,092	4,272	85.5%
White, non-Hispanic	117,661	11,294	4,703	4,109	2,482	122,364	4,109	96.8%
Two or More Races	13,044	4,619	1,541	2,301	777	14,585	2,301	86.4%
Economically Disadvantaged	207,124	51,688	16,988	25,641	9,059	224,112	25,641	89.7%
English Learner	31,973	30,015	9,061	15,955	4,999	41,034	15,955	72.0%
Reclassified Fluent English	107,770	6,753	3,482	2,311	960	111,252	2,311	98.0%
Students with Disabilities	20,699	28,347	3,805	17,938	6,604	24,504	17,938	57.7%

¹ Current grade twelve students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade twelve students who tested as grade ten students last year have been moved into counts for the Class of 2015 and are included here along with students who tested as grade eleven students last year. SWDs are *included* in all rows.

² Counts of students passing this year include students who passed both parts this year and, more frequently, students who passed one part this year and the other part in a prior year.

³ Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

For the Class of 2015, nearly 42,000 general education students (Table 2.18) and more than 21,000 SWDs (Table 2.19) took the CAHSEE this school year. More than 56 percent (23,620) of the general education students and over 17 percent (3,805) of the SWDs who took the CAHSEE this year completed the CAHSEE requirement. This leaves just over 18,000 general education students and just under 18,000 SWDs in the Class of 2015 who continued to try to pass the CAHSEE this year, but have not yet done so.

Table 2.20. Estimated Number and Percentage of Students in the Class of 2015¹ Passing the CAHSEE ELA Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	399,780	36,553	18,906	12,076	5,571	418,686	12,076	97.2%
Females	205,552	15,395	8,421	4,927	2,047	213,973	4,927	97.7%
Males	194,228	21,158	10,485	7,149	3,524	204,713	7,149	96.6%
American Indian or Alaska Native	2,490	233	131	55	47	2,621	55	97.9%
Asian	39,233	2,294	1,347	753	194	40,580	753	98.2%
Pacific Islander	2,306	273	154	78	41	2,460	78	96.9%
Filipino	13,069	536	352	143	41	13,421	143	98.9%
Hispanic or Latino	195,585	22,714	10,697	8,277	3,740	206,282	8,277	96.1%
Black or African American	22,653	3,632	1,813	1,223	596	24,466	1,223	95.2%
White, non-Hispanic	111,542	4,741	3,291	820	630	114,833	820	99.3%
Two or More Races	12,902	2,130	1,121	727	282	14,023	727	95.1%
Economically Disadvantaged	204,441	24,121	11,463	9,003	3,655	215,904	9,003	96.0%
English Learner	30,133	16,446	6,800	7,131	2,515	36,933	7,131	83.8%
Reclassified Fluent English	107,238	2,372	1,683	424	265	108,921	424	99.6%

¹ Current grade twelve students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade twelve students who tested as grade ten students last year have been moved into counts for the Class of 2015 and are included here along with students who tested as grade eleven students last year. SWDs are *excluded* from all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.21. Estimated Number and Percentage of Students in the Class of 2015¹ Passing the CAHSEE ELA Test Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	424,083	59,532	23,024	26,097	10,411	447,107	26,097	94.5%
Females	214,068	23,081	9,887	9,612	3,582	223,955	9,612	95.9%
Males	210,015	36,451	13,137	16,485	6,829	223,152	16,485	93.1%
American Indian or Alaska Native	2,693	410	156	162	92	2,849	162	94.6%
Asian	40,579	3,135	1,613	1,206	316	42,192	1,206	97.2%
Pacific Islander	2,399	374	178	134	62	2,577	134	95.1%
Filipino	13,417	746	402	257	87	13,819	257	98.2%
Hispanic or Latino	207,163	36,669	12,990	17,132	6,547	220,153	17,132	92.8%
African American or Black	24,191	6,392	2,238	2,935	1,219	26,429	2,935	90.0%
White, non-Hispanic	119,721	8,298	4,065	2,687	1,546	123,786	2,687	97.9%
Two or More Races	13,920	3,508	1,382	1,584	542	15,302	1,584	90.6%
Economically Disadvantaged	216,757	39,778	14,064	18,932	6,782	230,821	18,932	92.4%
English Learner	35,237	26,043	8,414	13,338	4,291	43,651	13,338	76.6%
Reclassified Fluent English	110,511	3,562	2,004	1,048	510	112,515	1,048	99.1%
Students with Disabilities	24,303	22,979	4,118	14,021	4,840	28,421	14,021	67.0%

¹ Current grade twelve students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade twelve students who tested as grade ten students last year have been moved into counts for the Class of 2015 and are included here along with students who tested as grade eleven students last year. SWDs are *included* in all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.22. Estimated Number and Percentage of Students in the Class of 2015¹ Passing the CAHSEE Mathematics Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	399,860	36,885	18,472	12,430	5,983	418,332	12,430	97.1%
Females	203,350	18,187	9,360	6,190	2,637	212,710	6,190	97.2%
Males	196,510	18,698	9,112	6,240	3,346	205,622	6,240	97.1%
American Indian or Alaska Native	2,501	240	102	73	65	2,603	73	97.3%
Asian	40,069	1,372	996	268	108	41,065	268	99.4%
Pacific Islander	2,323	260	132	83	45	2,455	83	96.7%
Filipino	13,156	450	310	98	42	13,466	98	99.3%
Hispanic or Latino	195,391	23,105	10,621	8,547	3,937	206,012	8,547	96.0%
Black or African American	22,214	4,198	1,847	1,628	723	24,061	1,628	93.7%
White, non-Hispanic	111,325	5,064	3,376	952	736	114,701	952	99.2%
Two or More Races	12,881	2,196	1,088	781	327	13,969	781	94.7%
Economically Disadvantaged	205,048	23,714	10,814	9,045	3,855	215,862	9,045	96.0%
English Learner	33,714	12,465	5,295	5,055	2,115	39,009	5,055	88.5%
Reclassified Fluent English	106,059	3,700	2,286	1,000	414	108,345	1,000	99.1%

¹ Current grade twelve students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade twelve students who tested as grade ten students last year have been moved into counts for the Class of 2015 and are included here along with students who tested as grade eleven students last year. SWDs are *excluded* from all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.23. Estimated Number and Percentage of Students in the Class of 2015¹ Passing the CAHSEE Mathematics Test Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	424,684	59,948	21,988	26,532	11,428	446,672	26,532	94.4%
Females	211,485	26,726	10,646	11,436	4,644	222,131	11,436	95.1%
Males	213,199	33,222	11,342	15,096	6,784	224,541	15,096	93.7%
American Indian or Alaska Native	2,702	431	120	189	122	2,822	189	93.7%
Asian	41,688	1,904	1,170	540	194	42,858	540	98.8%
Pacific Islander	2,424	352	148	139	65	2,572	139	94.9%
Filipino	13,524	640	348	204	88	13,872	204	98.6%
Hispanic or Latino	207,552	36,624	12,677	17,056	6,891	220,229	17,056	92.8%
African American or Black	23,657	7,143	2,168	3,539	1,436	25,825	3,539	87.9%
White, non-Hispanic	119,272	9,211	4,059	3,142	2,010	123,331	3,142	97.5%
Two or More Races	13,865	3,643	1,298	1,723	622	15,163	1,723	89.8%
Economically Disadvantaged	218,064	38,884	13,019	18,670	7,195	231,083	18,670	92.5%
English Learner	40,105	20,607	6,682	10,202	3,723	46,787	10,202	82.1%
Reclassified Fluent English	109,134	5,167	2,581	1,848	738	111,715	1,848	98.4%
Students with Disabilities	24,824	23,063	3,516	14,102	5,445	28,340	14,102	66.8%

¹ Current grade twelve students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade twelve students who tested as grade ten students last year have been moved into counts for the Class of 2015 and are included here along with students who tested as grade eleven students last year. SWDs are *included* in all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.24 provides a comparison of CAHSEE passing rates for this year’s grade twelve students to passing rates for all grade twelve students in the classes of 2008 through 2014 as of the May CAHSEE administration of their senior year. Excluding SWDs, the overall passing rate of 95.8 percent is slightly higher than the comparable rate for the classes of 2013 and 2014 (95.5 each year), and it is also considerably higher than the rate for earlier years. From the class of 2008 through the class of 2015, the overall grade twelve passing rate through May, excluding SWDs, increased from 93.6 percent to 95.8 percent. Correspondingly, the percentage of grade twelve students still trying to pass the CAHSEE who have not yet done so, excluding SWDs, has dropped from 6.4 percent to 4.2 percent at this same point. Passing rates this year increased for every demographic group except Black or African American students, economically disadvantaged students, and ELs.

Table 2.24. Comparison of Estimated Percentage of Students in the Classes of 2008 Through 2015 Passing Both CAHSEE Tests, Through May of their Senior Year, Excluding SWDs¹

Group ¹	Passed Both Parts of the CAHSEE							
	Class of 2008	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015
All Students	93.6%	93.4%	94.4%	94.2%	95.0%	95.5%	95.5%	95.8%
Females	94.1%	93.9%	94.8%	94.7%	95.5%	96.0%	95.9%	96.2%
Males	93.2%	92.9%	93.9%	93.7%	94.6%	95.1%	95.1%	95.4%
American Indian or Alaska Native	93.6%	94.6%	95.4%	94.8%	97.2%	95.5%	95.6%	96.5%
Asian	96.5%	96.2%	97.4%	97.1%	97.8%	97.8%	97.7%	98.0%
Pacific Islander	-- ²	93.1%	95.3%	93.6%	95.2%	94.2%	95.2%	95.4%
Filipino	-- ²	97.2%	98.1%	97.9%	98.4%	98.5%	98.4%	98.6%
Hispanic or Latino	89.9%	89.9%	91.4%	91.7%	93.1%	93.8%	93.8%	94.2%
Black or African American	87.2%	87.5%	89.6%	89.6%	91.9%	91.8%	92.2%	92.0%
White, non-Hispanic	98.2%	97.9%	98.1%	98.2%	98.6%	98.5%	98.6%	98.8%
Two or More Races ³	-- ³	-- ³	-- ³	-- ³	-- ³	92.4%	90.9%	92.2%
Economically Disadvantaged	89.8%	89.5%	91.3%	91.4%	92.8%	93.5%	94.2%	94.1%
English Learner	78.6%	78.4%	81.0%	80.3%	81.7%	82.2%	80.6%	79.8%
Reclassified Fluent English	-- ²	98.1%	98.5%	98.6%	98.9%	98.9%	98.9%	98.9%
Students with Disabilities ⁴	54.5%	56.6%	53.3%	56.3%	55.5%	53.6%	57.2%	57.7%

¹ Grade twelve students who also tested as grade twelve students in a previous year are *excluded* from this table.

² Results for Pacific Islanders and Filipinos and for students reclassified as fluent English proficient were not analyzed separately prior to 2009.

³ The "Two or More Races" category was added in 2010–11. Students are shown in the "Two or More Races" category above only if they could be identified as such from current-year or prior-year test records. Passing rates could not be computed for some classes because two or more race students were not identified among those passing as grade ten students prior to 2010–11.

⁴ SWDs in the classes of 2008 and 2009 were required to pass the CAHSEE to receive a diploma. An exemption was available to SWDs in 2006, 2007, and now again in 2010 through 2015. SWDs are *excluded* from all rows of this table but the last one.

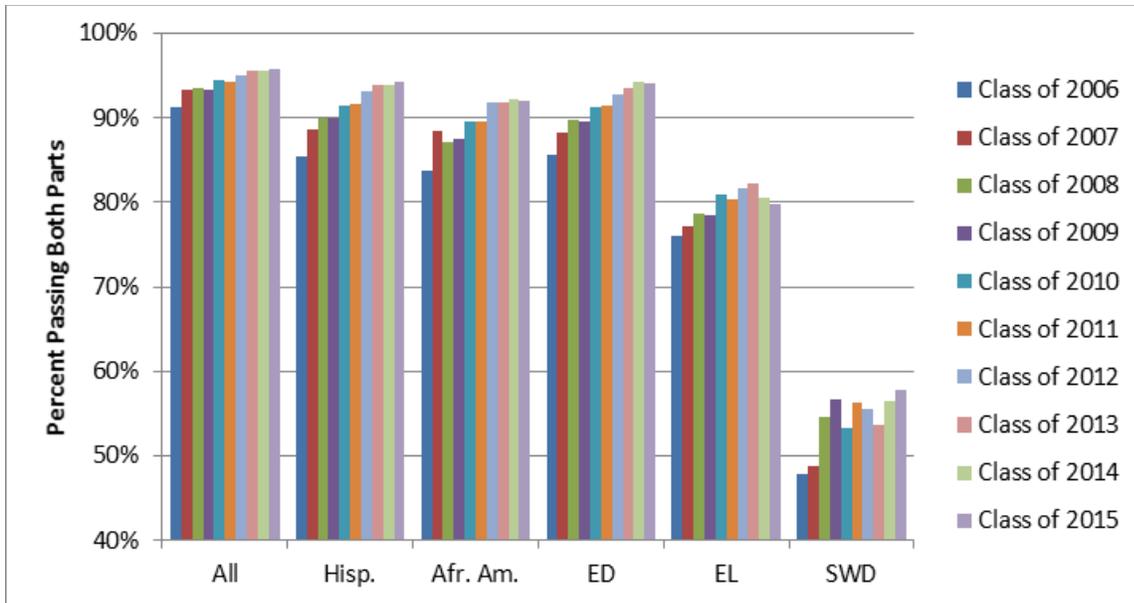


Figure 2.1. Trends in cumulative grade twelve passing rates for selected groups.

Figure 2.2 shows trends in differences in passing rates for selected demographic groups. Since 2006, there has been a modest reduction in passing rate gaps for Hispanic or Latino, Black or African American, and economically disadvantaged students. The gap for ELs has remained constant at about 15 percentage points and the gap for SWDs has fluctuated considerably around 40 percentage points, but has not shown significant improvement over time.

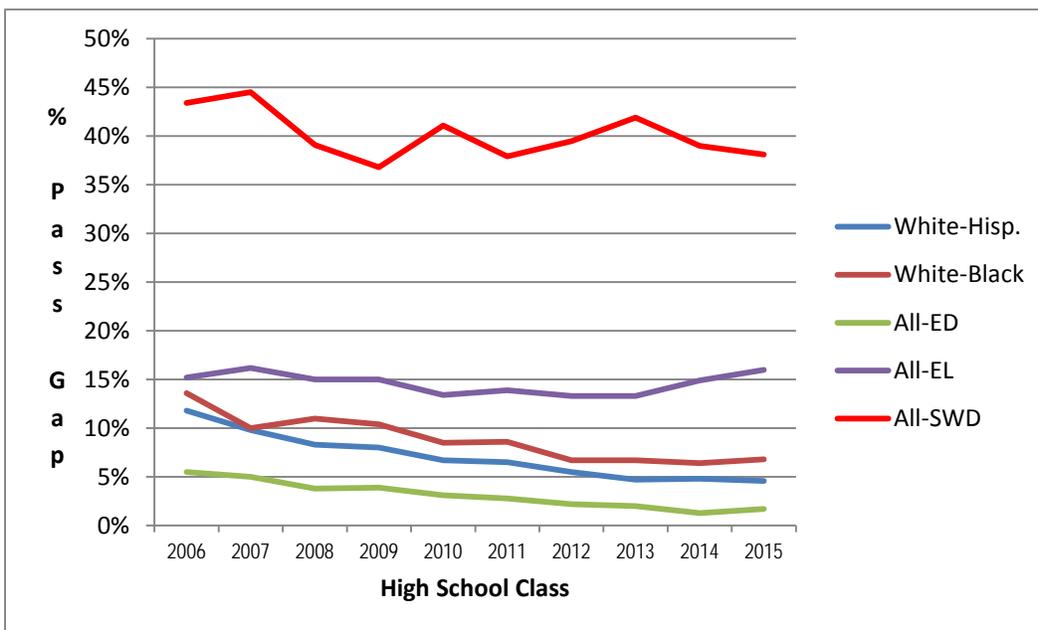


Figure 2.2. Trends in grade twelve passing rate gaps for selected groups.

Class of 2016 — Improvement for Students Who Retested in Grade Eleven

Tables 2.25 through 2.30 show cumulative passing rates for students in the class of 2016 (this year's grade eleven students). In the primary tables, SWDs are excluded from all rows. To avoid duplication, students who had been seniors prior to 2015 were excluded from the counts in Tables 2.25 through 2.30. We also provide an alternative to each table where SWDs are included in all rows, allowing for direct comparison to prior year results in some cases.

Table 2.25. Estimated Number and Percentage of Students in the Class of 2016¹ Passing Both CAHSEE Tests Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed ²	Not Passed	Not Tested	Passed	Not Yet Passed ³	Percent Pass
All Students	346,600	89,971	43,146	34,904	11,921	389,746	34,904	91.8%
Females	178,533	42,371	21,009	16,175	5,187	199,542	16,175	92.5%
Males	168,067	47,600	22,137	18,729	6,734	190,204	18,729	91.0%
American Indian or Alaska Native	2,045	673	300	244	129	2,345	244	90.6%
Asian	35,142	4,149	2,307	1,482	360	37,449	1,482	96.2%
Pacific Islander	1,951	602	274	243	85	2,225	243	90.2%
Filipino	12,003	1,382	840	443	99	12,843	443	96.7%
Hispanic or Latino	164,846	57,498	26,320	23,940	7,238	191,166	23,940	88.9%
Black or African American	17,874	8,666	3,582	3,685	1,399	21,456	3,685	85.3%
White, non-Hispanic	100,512	13,057	7,750	3,289	2,018	108,262	3,289	97.1%
Two or More Races	12,227	3,944	1,773	1,578	593	14,000	1,578	89.9%
Economically Disadvantaged	165,421	60,495	27,072	25,866	7,557	192,493	25,866	88.2%
English Learner	14,443	28,483	9,528	15,576	3,379	23,971	15,576	60.6%
Reclassified Fluent English	94,767	14,022	9,088	3,604	1,330	103,855	3,604	96.6%

¹ Current grade eleven students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade eleven students who tested as grade eleven students last year have been moved into counts for the Class of 2016 and are included here along with students who tested as grade ten students last year. SWDs are *excluded* from all rows.

² Counts of students passing this year include students who passed both parts this year and, more frequently, students who passed one part this year and the other part in a prior year.

³ Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

For the class of 2016, approximately 78,000 general education students (Table 2.25) and more than 32,500 SWDs (Table 2.26) took the CAHSEE so far this school year. More than 43,000 of the general education students (55 percent) and about 6,000 of the SWDs (19 percent) who took the CAHSEE this year completed the CAHSEE requirement. This leaves roughly 35,000 general education students and more than 26,000 SWDs in the class of 2016 who are still trying to pass the CAHSEE, but have not yet done so.

Table 2.26. Estimated Number and Percentage of Students in the Class of 2016¹ Passing Both CAHSEE Tests Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed ²	Not Passed	Not Tested	Passed	Not Yet Passed ³	Percent Pass
All Students	360,976	131,587	49,420	61,275	20,892	410,396	61,275	87.0%
Females	183,271	57,006	23,287	25,431	8,288	206,558	25,431	89.0%
Males	177,705	74,581	26,133	35,844	12,604	203,838	35,844	85.0%
American Indian or Alaska Native	2,162	1,044	349	471	224	2,511	471	84.2%
Asian	36,090	5,647	2,683	2,229	735	38,773	2,229	94.6%
Pacific Islander	2,002	801	315	361	125	2,317	361	86.5%
Filipino	12,247	1,891	943	687	261	13,190	687	95.0%
Hispanic or Latino	171,065	81,876	29,756	40,255	11,865	200,821	40,255	83.3%
Black or African American	18,654	13,217	4,005	6,660	2,552	22,659	6,660	77.3%
White, non-Hispanic	106,028	21,321	9,311	7,790	4,220	115,339	7,790	93.7%
Two or More Races	12,728	5,790	2,058	2,822	910	14,786	2,822	84.0%
Economically Disadvantaged	172,035	87,660	30,693	43,853	13,114	202,728	43,853	82.2%
English Learner	16,615	43,128	11,437	25,718	5,973	28,052	25,718	52.2%
Reclassified Fluent English	96,870	17,251	9,963	5,412	1,876	106,833	5,412	95.2%
Students with Disabilities	14,376	41,616	6,274	26,371	8,971	20,650	26,371	43.9%

¹ Current grade eleven students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade eleven students who tested as grade eleven students last year have been moved into counts for the Class of 2016 and are included here along with students who tested as grade ten students last year. SWDs are *included* in all rows.

² Counts of students passing this year include students who passed both parts this year and, more frequently, students who passed one part this year and the other part in a prior year.

³ Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.27. Estimated Number and Percentage of Students in the Class of 2016¹ Passing the CAHSEE ELA Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	362,761	71,467	38,250	23,639	9,578	401,011	23,639	94.4%
Females	188,102	31,537	18,015	9,600	3,922	206,117	9,600	95.5%
Males	174,659	39,930	20,235	14,039	5,656	194,894	14,039	93.3%
American Indian or Alaska Native	2,168	520	253	168	99	2,421	168	93.5%
Asian	35,411	3,836	2,181	1,339	316	37,592	1,339	96.6%
Pacific Islander	2,035	506	258	175	73	2,293	175	92.9%
Filipino	12,210	1,156	749	327	80	12,959	327	97.5%
Hispanic or Latino	175,640	45,310	23,173	16,293	5,844	198,813	16,293	92.4%
Black or African American	19,528	6,732	3,324	2,289	1,119	22,852	2,289	90.9%
White, non-Hispanic	102,869	10,262	6,673	2,009	1,580	109,542	2,009	98.2%
Two or More Races	12,900	3,145	1,639	1,039	467	14,539	1,039	93.3%
Economically Disadvantaged	176,182	48,276	24,279	17,898	6,099	200,461	17,898	91.8%
English Learner	16,859	25,741	9,981	12,707	3,053	26,840	12,707	67.9%
Reclassified Fluent English	98,877	9,510	6,953	1,629	928	105,830	1,629	98.5%

¹ Current grade eleven students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade eleven students who tested as grade eleven students last year have been moved into counts for the Class of 2016 and are included here along with students who tested as grade ten students last year. SWDs are *excluded* from all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.28. Estimated Number and Percentage of Students in the Class of 2016¹ Passing the CAHSEE ELA Test Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	381,138	108,120	45,778	44,755	17,587	426,916	44,755	90.5%
Females	194,648	43,972	20,816	16,525	6,631	215,464	16,525	92.9%
Males	186,490	64,148	24,962	28,230	10,956	211,452	28,230	88.2%
American Indian or Alaska Native	2,323	845	322	337	186	2,645	337	88.7%
Asian	36,416	5,256	2,578	2,008	670	38,994	2,008	95.1%
Pacific Islander	2,109	676	299	270	107	2,408	270	89.9%
Filipino	12,506	1,606	849	522	235	13,355	522	96.2%
Hispanic or Latino	183,927	67,190	27,446	29,703	10,041	211,373	29,703	87.7%
Black or African American	20,715	10,790	3,890	4,714	2,186	24,605	4,714	83.9%
White, non-Hispanic	109,523	17,023	8,385	5,221	3,417	117,908	5,221	95.8%
Two or More Races	13,619	4,734	2,009	1,980	745	15,628	1,980	88.8%
Economically Disadvantaged	184,990	72,773	28,744	32,847	11,182	213,734	32,847	86.7%
English Learner	19,609	39,721	12,351	21,810	5,560	31,960	21,810	59.4%
Reclassified Fluent English	101,565	12,041	7,872	2,808	1,361	109,437	2,808	97.5%
Students with Disabilities	18,377	36,653	7,528	21,116	8,009	25,905	21,116	55.1%

¹ Current grade eleven students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade eleven students who tested as grade eleven students last year have been moved into counts for the Class of 2016 and are included here along with students who tested as grade ten students last year. SWDs are *included* in all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.29. Estimated Number and Percentage of Students in the Class of 2016¹ Passing the CAHSEE Mathematics Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	367,977	66,329	32,690	23,983	9,656	400,667	23,983	94.4%
Females	187,060	33,057	16,536	12,121	4,400	203,596	12,121	94.4%
Males	180,917	33,272	16,154	11,862	5,256	197,071	11,862	94.3%
American Indian or Alaska Native	2,169	530	237	183	110	2,406	183	92.9%
Asian	36,819	2,334	1,671	441	222	38,490	441	98.9%
Pacific Islander	2,084	447	227	157	63	2,311	157	93.6%
Filipino	12,439	919	590	257	72	13,029	257	98.1%
Hispanic or Latino	179,169	41,800	19,207	16,730	5,863	198,376	16,730	92.2%
Black or African American	19,378	6,932	2,919	2,844	1,169	22,297	2,844	88.7%
White, non-Hispanic	102,963	10,240	6,349	2,239	1,652	109,312	2,239	98.0%
Two or More Races	12,956	3,127	1,490	1,132	505	14,446	1,132	92.7%
Economically Disadvantaged	181,069	43,317	19,645	17,645	6,027	200,714	17,645	91.9%
English Learner	22,838	19,326	7,205	9,504	2,617	30,043	9,504	76.0%
Reclassified Fluent English	99,149	9,327	5,696	2,614	1,017	104,845	2,614	97.6%

¹ Current grade eleven students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade eleven students who tested as grade eleven students last year have been moved into counts for the Class of 2016 and are included here along with students who tested as grade ten students last year. SWDs are *excluded* from all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.30. Estimated Number and Percentage of Students in the Class of 2016¹ Passing the CAHSEE Mathematics Test Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed ²	Percent Pass
All Students	387,999	101,725	38,650	45,022	18,053	426,649	45,022	90.5%
Females	193,446	45,868	18,709	19,834	7,325	212,155	19,834	91.5%
Males	194,553	55,857	19,941	25,188	10,728	214,494	25,188	89.5%
American Indian or Alaska Native	2,333	851	270	379	202	2,603	379	87.3%
Asian	38,228	3,338	1,978	796	564	40,206	796	98.1%
Pacific Islander	2,160	618	265	253	100	2,425	253	90.6%
Filipino	12,768	1,336	675	434	227	13,443	434	96.9%
Hispanic or Latino	188,800	62,447	22,572	29,704	10,171	211,372	29,704	87.7%
Black or African American	20,508	11,080	3,347	5,464	2,269	23,855	5,464	81.4%
White, non-Hispanic	109,513	17,341	7,778	5,838	3,725	117,291	5,838	95.3%
Two or More Races	13,689	4,714	1,765	2,154	795	15,454	2,154	87.8%
Economically Disadvantaged	191,362	66,454	23,221	31,998	11,235	214,583	31,998	87.0%
English Learner	27,392	31,388	9,256	17,122	5,010	36,648	17,122	68.2%
Reclassified Fluent English	101,970	11,786	6,310	3,965	1,511	108,280	3,965	96.5%
Students with Disabilities	20,022	35,396	5,960	21,039	8,397	25,982	21,039	55.3%

¹ Current grade eleven students who also tested as grade twelve students in a prior year are *excluded* from this table. Current grade eleven students who tested as grade eleven students last year have been moved into counts for the Class of 2016 and are included here along with students who tested as grade ten students last year. SWDs are *included* in all rows.

² Students who have not passed and have not yet continued to try to pass in 2014–15 are *excluded* from the cumulative totals.

Table 2.31 provides a comparison of subject-specific and overall passing rates for this year’s grade eleven students with passing rates for students in the classes of 2014 and 2015 at this same point in grade eleven. The overall passing rate including SWDs has increased from 85.9 percent for the Class of 2014 to 87.0 percent for the Class of 2016. The cumulative passing rate for the ELA test increased from 89.8 percent up to 90.5 percent over this same period, while the passing rate for the mathematics test increased from 89.7 to 90.5 percent. The overall passing rate for Black or African American students continues to be notably lower (77.3 percent) for the Class of 2016 compared to most other demographic groups. Overall passing rates for ELs and SWDs were only 52 and 44 percent, respectively, for the Class of 2016.

Table 2.31. Comparison of Estimated Passing Rates for the Classes of 2014 Through 2016, Through May of their Junior Year, Including SWDs¹

Group	Passed ELA			Passed Mathematics			Passed Both		
	Class of 2014	Class of 2015	Class of 2016	Class of 2014	Class of 2015	Class of 2016	Class of 2014	Class of 2015	Class of 2016
All Students	89.8%	90.2%	90.5%	89.7%	90.1%	90.5%	85.9%	86.4%	87.0%
Females	92.3%	92.6%	92.9%	90.7%	91.0%	91.5%	87.9%	88.4%	89.0%
Males	87.5%	87.9%	88.2%	88.8%	89.2%	89.5%	83.9%	84.4%	85.0%
American Indian or Alaska Native	89.3%	88.7%	88.7%	87.5%	88.1%	87.3%	84.0%	84.1%	84.2%
Asian	94.5%	94.7%	95.1%	97.8%	97.8%	98.1%	93.9%	94.1%	94.6%
Pacific Islander	88.8%	89.6%	89.9%	90.2%	90.9%	90.6%	85.0%	85.9%	86.5%
Filipino	95.9%	96.1%	96.2%	96.4%	96.8%	96.9%	94.5%	94.8%	95.0%
Hispanic or Latino	86.5%	87.2%	87.7%	86.7%	87.2%	87.7%	81.6%	82.5%	83.3%
African American	82.5%	83.1%	83.9%	79.2%	80.5%	81.4%	74.7%	76.0%	77.3%
White, non-Hispanic	95.4%	95.6%	95.8%	94.6%	94.8%	95.3%	92.9%	93.2%	93.7%
Two or More Races	89.7%	88.4%	88.8%	88.0%	87.3%	87.8%	84.7%	83.2%	84.0%
Economically Disadvantaged	85.9%	87.4%	86.7%	86.4%	87.6%	87.0%	81.0%	82.9%	82.2%
English Learner	62.9%	61.5%	59.4%	71.7%	69.9%	68.2%	55.8%	53.9%	52.2%
Reclassified Fluent English	97.8%	97.8%	97.5%	96.7%	96.7%	96.5%	95.5%	95.5%	95.2%
Students with Disabilities	54.3%	55.4%	55.1%	54.9%	55.5%	55.3%	42.8%	44.0%	43.9%

¹ Students who also tested as grade twelve in previous years are *excluded* from this table. SWDs are included in each demographic category as appropriate and in results for all students.

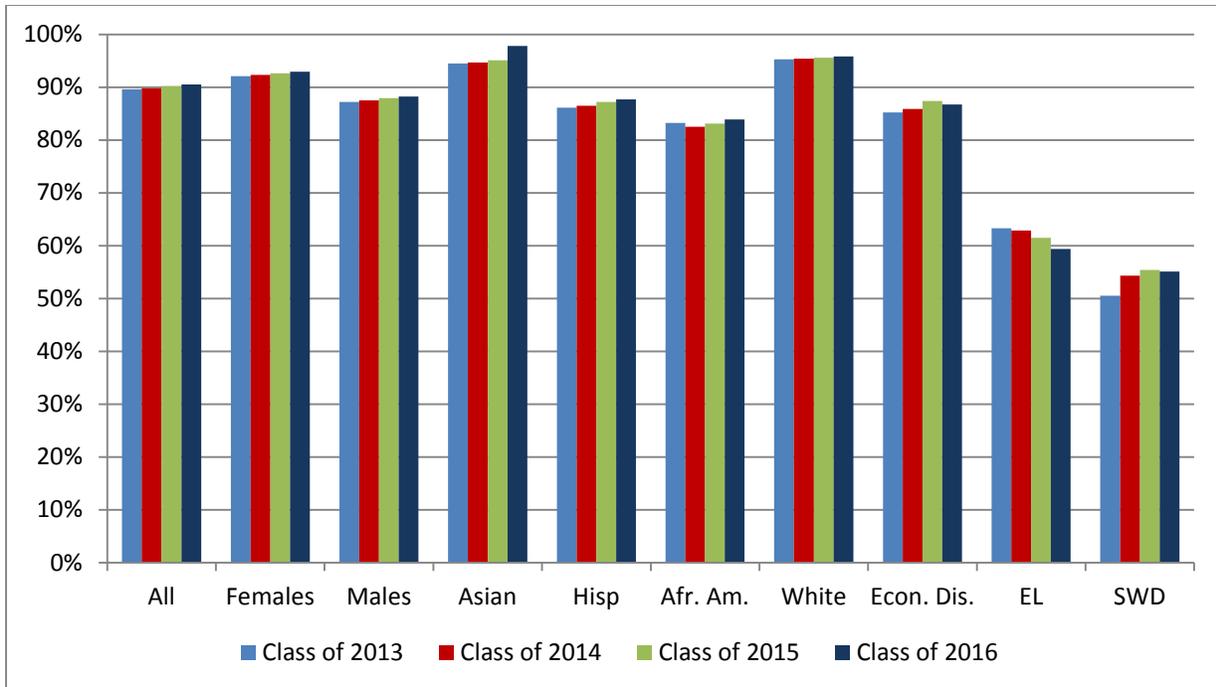


Figure 2.3. Trends in cumulative grade eleven ELA passing rates for selected groups; SWDs are included in all groups.

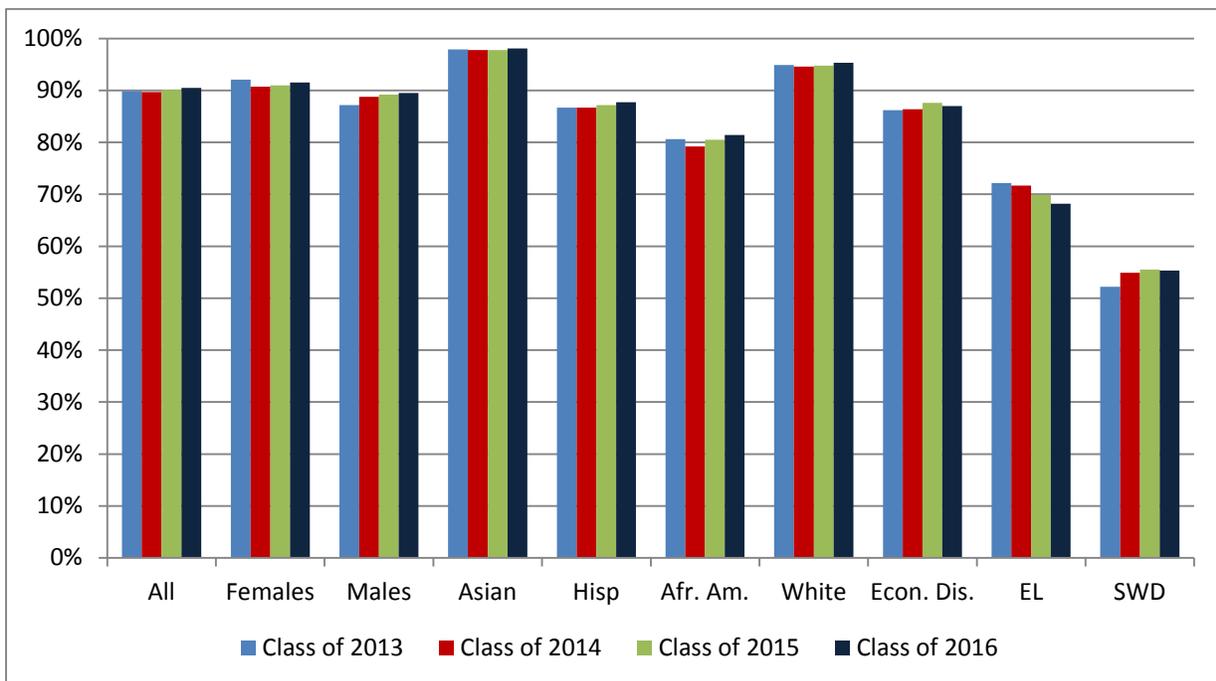


Figure 2.4. Trends in cumulative grade eleven mathematics passing rates for selected groups; SWDs are included in all groups.

Initial Results for the Class of 2017

Tables 2.32 through 2.34 show cumulative passing rates for students in the Class of 2017—this year’s grade ten students. Grade ten SWDs are required to take the CAHSEE and are included in all rows. A small number of students who tested as grade ten students this year also tested last year as grade ten students. Some of these students passed one part of the CAHSEE previously.

Table 2.32. Estimated Number and Percentage of Students in the Class of 2017¹ Passing Both CAHSEE Tests Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested ²	Passed	Not Yet Passed	Percent Pass
All Students	2,516	473,268	360,938	101,244	11,086	363,454	112,330	76.4%
Females	1,161	230,652	183,208	42,819	4,625	184,369	47,444	79.5%
Males	1,355	242,616	177,730	58,425	6,461	179,085	64,886	73.4%
American Indian or Alaska Native	13	3,032	2,094	814	124	2,107	938	69.2%
Asian	52	41,125	37,106	3,583	436	37,158	4,019	90.2%
Pacific Islander	6	2,542	1,861	628	53	1,867	681	73.3%
Filipino	10	13,494	12,097	1,227	170	12,107	1,397	89.7%
Hispanic or Latino	1,805	245,778	172,662	67,116	6,000	174,467	73,116	70.5%
Black or African American	172	29,603	17,989	10,455	1,159	18,161	11,614	61.0%
White, non-Hispanic	306	121,836	104,655	14,493	2,688	104,961	17,181	85.9%
Two or More Races	152	15,858	12,474	2,928	456	12,626	3,384	78.9%
Economically Disadvantaged	1,774	264,816	181,946	75,788	7,082	183,720	82,870	68.9%
English Learner	174	56,418	17,774	36,076	2,568	17,948	38,644	31.7%
Reclassified Fluent English	815	114,615	99,679	13,788	1,148	100,494	14,936	87.1%
Students with Disabilities	107	55,283	15,462	34,835	4,986	15,569	39,821	28.1%

1 Students who were in grade ten in 2014–15 may have passed one or both CAHSEE tests in prior years. Grade ten students who did not yet test this year are not included in counts of students who have not passed.

2 Students whose answer documents were blank are included in the “Not Tested” totals.

An estimated 363,454 (76.4 percent) of the grade ten students have passed both parts of the CAHSEE. More than 101,244 additional grade ten students took the CAHSEE this year but have not yet passed both parts. A small number of the grade ten students (11,086) were registered for but did not take the test.

Table 2.33. Estimated Number and Percentage of Students in the Class of 2017¹ Passing the CAHSEE ELA Test Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested ²	Passed	Not Yet Passed	Percent Pass
All Students	3,275	472,509	387,555	74,057	10,897	390,830	84,954	82.1%
Females	1,578	230,235	198,140	27,563	4,532	199,718	32,095	86.2%
Males	1,697	242,274	189,415	46,494	6,365	191,112	52,859	78.3%
American Indian or Alaska Native	17	3,028	2,311	594	123	2,328	717	76.5%
Asian	55	41,122	37,606	3,082	434	37,661	3,516	91.5%
Pacific Islander	7	2,541	2,010	479	52	2,017	531	79.2%
Filipino	14	13,490	12,408	914	168	12,422	1,082	92.0%
Hispanic or Latino	2,354	245,229	189,729	49,630	5,870	192,083	55,500	77.6%
Black or African American	266	29,509	20,863	7,513	1,133	21,129	8,646	71.0%
White, non-Hispanic	381	121,761	109,328	9,767	2,666	109,709	12,433	89.8%
Two or More Races	181	15,829	13,300	2,078	451	13,481	2,529	84.2%
Economically Disadvantaged	2,331	264,259	200,522	56,781	6,956	202,853	63,737	76.1%
English Learner	256	56,336	22,655	31,134	2,547	22,911	33,681	40.5%
Reclassified Fluent English	1,035	114,395	105,246	8,050	1,099	106,281	9,149	92.1%
Students with Disabilities	184	55,206	21,169	29,093	4,944	21,353	34,037	38.6%

1 Students who were in grade ten in 2014–15 may have passed one or both CAHSEE tests in prior years. Grade ten students who did not yet test this year are *not included* in counts of students who have not passed.

2 Students whose answer documents were blank are *included* in the “Not Tested” totals.

Table 2.34. Estimated Number and Percentage of Students in the Class of 2017¹ Passing the CAHSEE Mathematics Test Through May 2015, Including SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested ²	Passed	Not Yet Passed	Percent Pass
All Students	3,178	472,606	385,450	76,203	10,953	388,628	87,156	81.7%
Females	1,399	230,414	191,626	34,220	4,568	193,025	38,788	83.3%
Males	1,779	242,192	193,824	41,983	6,385	195,603	48,368	80.2%
American Indian or Alaska Native	14	3,031	2,266	642	123	2,280	765	74.9%
Asian	68	41,109	39,073	1,602	434	39,141	2,036	95.1%
Pacific Islander	13	2,535	2,024	459	52	2,037	511	79.9%
Filipino	17	13,487	12,500	819	168	12,517	987	92.7%
Hispanic or Latino	2,302	245,281	188,544	50,834	5,903	190,846	56,737	77.1%
Black or African American	235	29,540	19,710	8,691	1,139	19,945	9,830	67.0%
White non-Hispanic	349	121,793	108,218	10,895	2,680	108,567	13,575	88.9%
Two or More Races	180	15,830	13,115	2,261	454	13,295	2,715	83.0%
Economically Disadvantaged	2,299	264,291	200,220	57,092	6,979	202,519	64,071	76.0%
English Learner	374	56,218	27,483	26,205	2,530	27,857	28,735	49.2%
Reclassified Fluent English	978	114,452	103,714	9,620	1,118	104,692	10,738	90.7%
Students with Disabilities	179	55,211	21,162	29,089	4,960	21,341	34,049	38.5%

1 Students who were in grade ten in 2014–15 may have passed one or both CAHSEE tests in prior years. Grade ten students who did not yet test this year are *not included* in counts of students who have not passed.

2 Students whose answer documents were blank are *included* in the “Not Tested” totals.

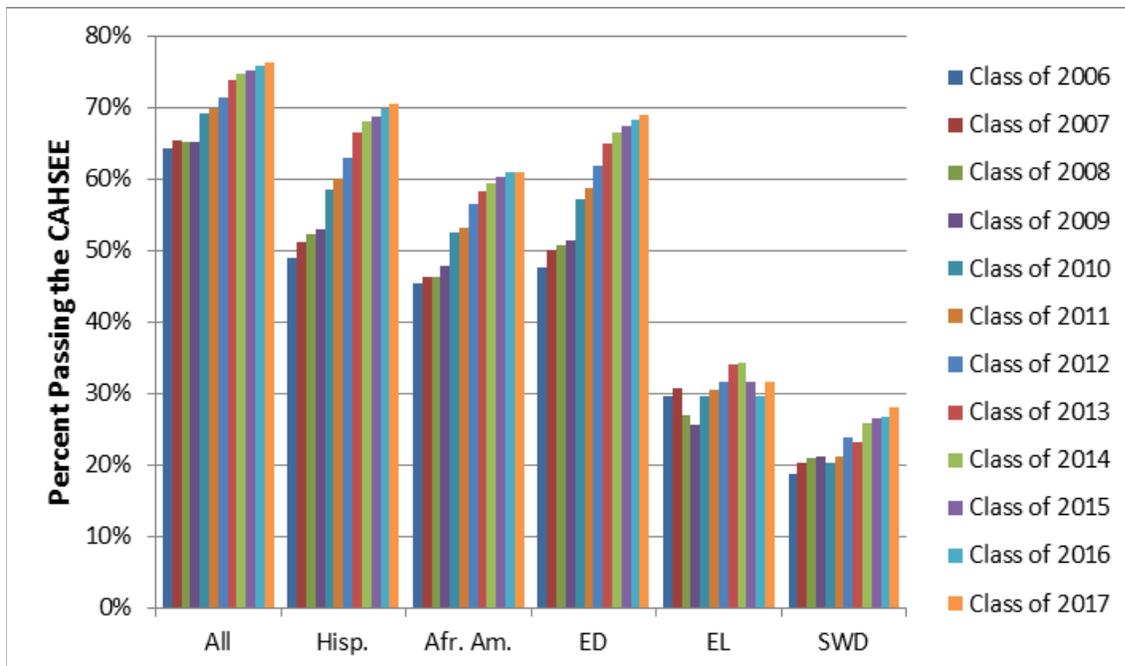
Table 2.35 and Figure 2.5 show a comparison of CAHSEE passing rates from the census testing of grade ten students for the high school classes of 2008 through 2016 through May of their sophomore year. Overall, grade ten passing rates including SWDs have increased consistently through the years, from 65.1 percent for the Class of 2008 up to 76.4 percent for the Class of 2017, this year’s grade ten students. Grade ten passing rates increased this year for all demographic groups except Pacific Islanders and students indicating two or more races. Passing rates continue to be noticeably lower for Black or African American students (61.0 percent compared to the overall rate of 76.4 percent) and also for ELs (31.7 percent) and SWDs (28.1 percent).

Table 2.35. Comparison of Estimated Percentage of Students Meeting the CAHSEE Requirement for the Classes of 2008 Through 2017, Through May of Their Grade Ten Year, Including SWDs¹

Group	Class of 2008	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
All Students	65.1%	65.2%	69.2%	69.9%	71.5%	73.8%	74.8%	75.3%	75.9%	76.4%
Females	67.9%	68.0%	71.8%	72.4%	74.2%	76.6%	77.9%	78.2%	78.9%	79.5%
Males	62.4%	62.5%	66.8%	67.4%	68.9%	71.2%	71.9%	72.5%	73.1%	73.4%
American Indian or Alaska Native	61.0%	61.6%	66.0%	64.8%	68.6%	67.4%	69.1%	68.6%	67.2%	69.2%
Asian	82.5%	83.2%	85.8%	86.1%	88.0%	88.5%	89.3%	89.0%	89.3%	90.2%
Pacific Islander	62.9%	63.3%	69.7%	68.9%	70.0%	73.2%	73.3%	73.0%	74.3%	73.3%
Filipino	81.3%	82.4%	84.5%	85.1%	86.7%	87.6%	88.4%	88.5%	88.7%	89.7%
Hispanic or Latino	52.4%	52.9%	58.5%	60.1%	62.9%	66.6%	68.1%	68.8%	69.8%	70.5%
Black or African American	46.3%	47.8%	52.5%	53.3%	56.6%	58.3%	59.5%	60.2%	60.9%	61.0%
White, non-Hispanic	80.5%	80.5%	83.4%	83.2%	83.5%	84.6%	84.9%	85.3%	85.8%	85.9%
Two or More Races ²	-- ²	-- ²	-- ²	-- ²	-- ²	73.8%	76.4%	77.9%	80.1%	78.9%
Economically Disadvantaged	50.8%	51.4%	57.2%	58.8%	61.8%	65.0%	66.6%	67.4%	68.4%	68.9%
English Learner	27.0%	25.6%	29.5%	30.6%	31.5%	34.0%	34.3%	31.7%	29.5%	31.7%
Reclassified Fluent English	78.1%	77.9%	83.3%	84.1%	85.5%	87.5%	88.2%	87.8%	86.9%	87.1%
Students with Disabilities	20.9%	21.1%	20.2%	21.1%	23.9%	23.1%	25.9%	26.5%	26.7%	28.1%

¹ End-of-year passing rates are shown for the classes of 2008 through 2011 because interim grade ten results through March were not previously computed. Passing rates for grade ten students through March (prior to May test results) are shown for the classes of 2012 through 2017.

² The "Two or More Races" category was added in 2010–11. Students are shown in the "Two or More Races" category above only if they could be identified as such from current-year test records.



Note: EL = English learner, ED = economically disadvantaged, SWD = students with disabilities

Figure 2.5. Trends in overall grade ten passing rates for selected groups; SWDs are included in all groups.

Analysis of Grade Ten Results by Mathematics Courses Taken

From the outset, the level of mathematics achievement required for high school graduation has been a key policy issue. When the CAHSEE requirement was established in 1999, students were not required to take Algebra I to earn a diploma in many districts, so including Algebra questions on the CAHSEE mathematics test reflected recognition of the importance of higher mathematics for success after high school. Shortly thereafter, a statewide requirement that students take Algebra was enacted in further recognition of the importance of mathematics skills.

As in prior years, we analyzed passing rates on the mathematics part of the CAHSEE for students who had completed varying levels of high school mathematics courses. Table 2.36 shows the distribution of the highest level of mathematics courses completed by the end of grade ten for students in the Class of 2017 compared to students in the classes of 2008 through 2016. Over the past nine years, the proportion of students taking higher levels of mathematics courses by grade ten has increased.

Table 2.36. Distribution of Grade Ten Students by Highest Mathematics Course Taken

	Class of 2008	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
General Math	1.9%	0.9%	0.0%	1.2%	1.1%	1.0%	0.9%	0.8%	0.8%	0.7%
Pre-Algebra	11.7%	3.1%	2.2%	8.7%	8.3%	8.2%	7.8%	7.3%	6.8%	5.3%
Algebra I	18.9%	28.3%	27.7%	18.3%	17.2%	16.8%	16.2%	16.2%	14.5%	15.6%
Geometry	34.3%	33.6%	36.9%	38.5%	38.6%	37.4%	36.6%	36.3%	36.7%	38.1%
Algebra II	20.4%	21.3%	23.4%	25.4%	26.3%	27.6%	29.2%	30.7%	31.0%	30.9%
Advanced Math	2.7%	2.8%	3.1%	3.4%	3.8%	4.1%	4.8%	4.9%	5.5%	5.8%
None/Missing	10.3%	10.0%	6.6%	4.6%	4.6%	4.6%	4.6%	4.8%	4.9%	4.4%
No. of Students	502,874	502,501	474,351	458,777	461,663	461,716	454,874	449,648	448,862	443,881

* Note: Column percentages may not add to 100 percent due to rounding.

Table 2.37 shows the percentage of grade ten students in key demographic groups who have taken courses beyond Algebra I (meets expectation at grade ten) when students with missing information are excluded. Figure 2.6 portrays trends in the percentage of students taking courses beyond Algebra I for key demographic groups. Students following the expected curriculum would be taking at least geometry by grade ten. Students who took Algebra I in grade eight could be taking Algebra II in grade ten. More than three-quarters of the grade ten students had taken or were taking mathematics courses beyond Algebra I. More than 90 percent of Asian students were taking courses beyond Algebra I. The percentage of SWDs taking courses beyond Algebra I has increased very significantly from 33 percent for the Class of 2008 to 49 percent for the Class of 2016; however, their rate is still low compared to students in other demographic groups.

For all groups, the percentage taking courses beyond Algebra I continued to increase last year as shown in Table 2.37. However, the percentage of economically disadvantaged, Hispanic or Latino, and Black or African American students taking courses beyond Algebra I continued to lag behind that of White, Asian, and Filipino students. For example, the percentage of grade ten Class of 2016 Black or African American students taking courses beyond Algebra I in 2013–14 (72%) was 9 points less than the percentage of White students and nearly 20 points lower than the percentage of Asian students taking courses beyond Algebra I this year.

Table 2.37. Trends in Mathematics Courses Taken by Demographic Group

Group ¹	Percentage of Grade Ten Students Taking Mathematics Courses Beyond Algebra I									
	Class of 2008	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
All Students	64.0%	64.2%	68.0%	70.4%	72.0%	72.6%	74.0%	75.5%	76.9%	77.3%
Females	67.1%	67.6%	71.1%	73.3%	74.8%	75.4%	76.9%	78.3%	79.7%	80.2%
Males	61.0%	60.9%	65.0%	67.6%	69.2%	69.9%	71.1%	72.8%	74.1%	74.4%
American Indian or Alaska Native	-- ²	50.1%	55.6%	57.0%	61.4%	60.9%	63.5%	65.1%	66.4%	66.9%
Asian	85.1%	85.0%	87.9%	88.9%	89.4%	89.7%	91.0%	91.0%	91.5%	91.8%
Pacific Islander	-- ²	62.0%	67.5%	70.7%	70.2%	72.8%	74.5%	76.1%	77.8%	77.8%
Filipino	-- ²	79.7%	82.1%	84.4%	85.1%	85.9%	87.2%	87.9%	89.5%	89.8%
Hispanic	56.3%	56.3%	60.8%	64.1%	66.4%	67.4%	68.7%	70.7%	72.3%	72.9%
Black or African American	58.4%	59.2%	63.4%	64.9%	66.6%	66.8%	68.3%	70.3%	71.8%	71.3%
White, non-Hispanic	68.8%	69.3%	72.5%	74.6%	76.0%	76.7%	77.9%	79.6%	80.8%	81.4%
Economically Disadvantaged	57.2%	57.3%	61.7%	64.6%	66.6%	67.1%	68.6%	70.6%	72.1%	72.4%
English Learner	46.1%	43.3%	48.3%	52.3%	53.5%	53.5%	54.7%	54.8%	55.1%	55.4%
Reclassified Fluent English	-- ²	76.7%	78.7%	80.5%	81.7%	81.6%	82.3%	82.6%	83.0%	83.0%
Students with Disabilities	33.3%	31.7%	33.9%	36.8%	41.7%	41.9%	44.2%	46.6%	49.0%	49.2%

¹ Students whose highest mathematics course was unknown were *excluded* from this table.

² Students in a few specific demographic groups were not analyzed separately prior to 2009.

Figure 2.2

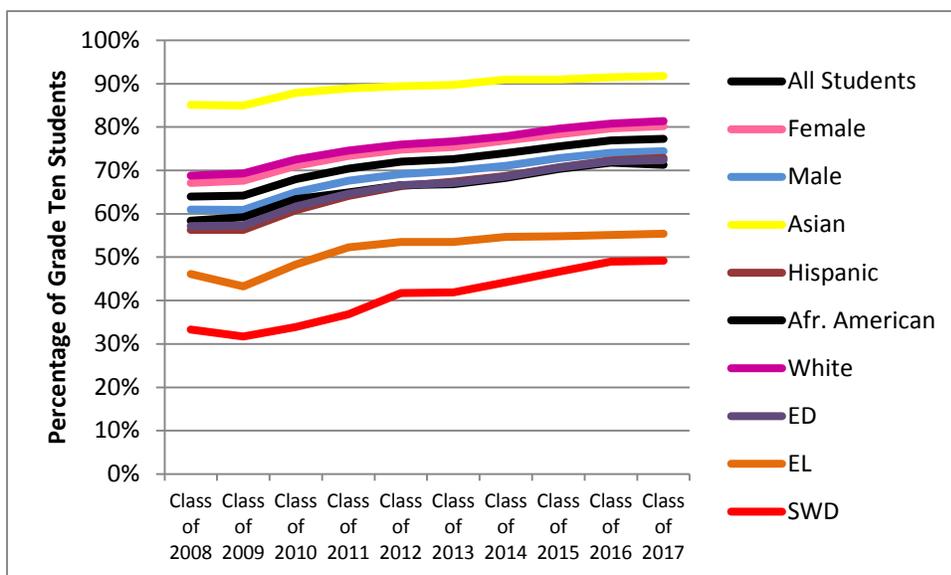


Figure 2.6. Percentage of grade ten students taking courses beyond Algebra I

Table 2.38 shows the CAHSEE mathematics passing rates for students at each course level. Passing rates increased for the Class of 2016 at all levels except Advanced Math, where in excess of 99 percent of students passed. Current rates are higher at all levels compared to the Class of 2008. Not only are more students taking higher level mathematics courses, but CAHSEE passing rates have increased for students at each level.

Table 2.38. Grade Ten CAHSEE Mathematics Passing Rates by Class and Highest Mathematics Course Taken

Highest Math Course Taken	Percentage Passing CAHSEE Mathematics in Grade Ten									
	Class of 2008	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
Algebra I	53.5%	59.0%	61.1%	58.3%	59.0%	61.1%	61.5%	61.7%	63.0%	62.7%
Geometry	81.3%	84.2%	85.3%	84.9%	85.0%	86.7%	87.1%	86.8%	87.3%	87.0%
Algebra II	91.9%	95.4%	96.0%	98.8%	96.0%	96.2%	96.3%	96.5%	96.6%	96.8%
Advanced Math	96.4%	98.9%	99.2%	99.7%	98.6%	99.1%	98.9%	99.2%	99.1%	99.2%
None/Missing	49.0%	35.4%	48.9%	64.6%	64.9%	67.4%	69.1%	70.4%	71.5%	73.9%
No. of Students	502,874	502,501	474,351	458,777	461,663	461,716	454,874	449,648	448,862	443,881

Results for Students from Prior High School Classes

In prior years, we tracked continued efforts by students from all prior high school classes subject to the CAHSEE requirement from 2006 through 2009. Beginning in 2011, we tracked students for the first three years after their initial graduation date. The reason for not tracking longer is that the number of students still trying to pass after more than three years is very low and the difficulty in matching student records across long periods of time is great, particularly for earlier high school classes where common student identifiers were not used consistently on CAHSEE answer documents. Consequently, the rate of error in estimates of the numbers of students still testing more than three years after their initial graduation date may be greater than the number itself.

Results for students who were first-time seniors in 2012 through 2014 are included in this report. A significant number of students from these high school classes continued to take the CAHSEE, either as repeat grade twelve students or through an adult education program.

Class of 2012

Tables 2.39 through 2.41 show the number of students originally in the Class of 2012 (first-time seniors in spring 2012) who continued to take the CAHSEE in 2014–15 and the number now estimated to have passed the CAHSEE through May 2015. To avoid duplication, we have excluded students who were counted previously as being in the Class of 2006 through 2011, even though some of those students were also in grade twelve in 2012. We are continuing to report SWDs separately but exclude them from the other student groups, including the counts for all students, since SWDs may have been

granted a waiver or an exemption. Note that it is possible that a few more students originally from the Class of 2012 tested again this year but could not be matched to earlier records because of differences in coding identifying information (primarily SSID, but also possibly demographic data).

This year, nearly 1,300 general education students and more than 100 SWDs from the Class of 2012 took the CAHSEE, with an estimated 353 of the general education students and 6 of the SWDs completing the CAHSEE requirement this year, three years after their originally scheduled graduation date. Table 2.39 shows 95.9 percent of the general education students and 56.9 percent of SWDs counted as being in the Class of 2012 have now passed the CAHSEE.

Table 2.39. Estimated Number and Percentage of Students in the Class of 2012¹ Passing Both CAHSEE Tests Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	428,391	18,888	353	939	17,596	428,744	18,535	95.9%
Females	217,747	8,459	200	527	7,732	217,947	8,259	96.3%
Males	210,644	10,429	153	412	9,864	210,797	10,276	95.4%
American Indian or Alaska Native	3,941	98	1	1	96	3,942	97	97.6%
Asian	43,635	776	13	38	725	43,648	763	98.3%
Pacific Islander	3,015	129	3	4	122	3,018	126	96.0%
Filipino	13,730	176	3	3	170	13,733	173	98.8%
Hispanic or Latino	200,262	12,584	240	628	11,716	200,502	12,344	94.2%
Black or African American	28,971	2,124	24	88	2,012	28,995	2,100	93.2%
White, non-Hispanic	131,156	1,600	23	38	1,539	131,179	1,577	98.8%
Two or More Races ²	3,681	1,401	46	139	1,216	3,727	1,355	---
Economically Disadvantaged	205,819	11,910	145	457	11,308	205,964	11,765	94.6%
English Learner	47,755	8,634	157	453	8,024	47,912	8,477	85.0%
Reclassified Fluent English	94,061	867	24	35	808	94,085	843	99.1%
Students with Disabilities	22,302	16,914	6	97	16,811	22,308	16,908	56.9%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The "Two or More Races" category was added in 2010–11. Students are shown in the "Two or More Races" category above only if they could be identified as such from current-year or prior-year test records. Passing rates for this category cannot be estimated since no students who passed prior to 2010–11 are *included*.

Table 2.40. Estimated Number and Percentage of Students in the Class of 2012¹ Passing the CAHSEE ELA Test through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	434,797	12,482	250	586	11,646	435,047	12,232	97.3%
Females	221,285	4,921	115	308	4,498	221,400	4,806	97.9%
Males	213,512	7,561	135	278	7,148	213,647	7,426	96.6%
American Indian or Alaska Native	3,978	61	1	1	59	3,979	60	98.5%
Asian	43,703	708	13	35	660	43,716	695	98.4%
Pacific Islander	3,055	89	2	2	85	3,057	87	97.2%
Filipino	13,772	134	3	2	129	13,775	131	99.1%
Hispanic or Latino	204,397	8,449	166	396	7,887	204,563	8,283	96.1%
Black or African American	29,811	1,284	19	46	1,219	29,830	1,265	95.9%
White, non-Hispanic	131,854	902	15	22	865	131,869	887	99.3%
Two or More Races ²	4,227	855	31	82	742	4,258	824	--- ²
Economically Disadvantaged	209,639	8,090	105	299	7,686	209,744	7,985	96.3%
English Learner	49,544	6,845	124	350	6,371	49,668	6,721	88.1%
Reclassified Fluent English	94,603	325	11	11	303	94,614	314	99.7%
Students with Disabilities	26,295	12,921	6	76	12,839	26,301	12,915	67.1%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records. Passing rates for this category cannot be estimated since no students who passed prior to 2010–11 are *included*.

Table 2.41. Estimated Number and Percentage of Students in the Class of 2012¹ Passing the CAHSEE Mathematics Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	434,408	12,871	230	570	12,071	434,638	12,641	97.2%
Females	220,065	6,141	141	332	5,668	220,206	6,000	97.3%
Males	214,343	6,730	89	238	6,403	214,432	6,641	97.0%
American Indian or Alaska Native	3,969	70	0	0	70	3,969	70	98.3%
Asian	44,196	215	2	8	205	44,198	213	99.5%
Pacific Islander	3,059	85	1	3	81	3,060	84	97.3%
Filipino	13,804	102	1	1	100	13,805	101	99.3%
Hispanic or Latino	204,272	8,574	165	387	8,022	204,437	8,409	96.0%
Black or African American	29,394	1,701	19	65	1,617	29,413	1,682	94.6%
White, non-Hispanic	131,606	1,150	17	23	1,110	131,623	1,133	99.1%
Two or More Races ²	4,108	974	25	83	866	4,133	949	--- ²
Economically Disadvantaged	209,597	8,132	108	282	7,742	209,705	8,024	96.3%
English Learner	51,584	4,805	79	201	4,525	51,663	4,726	91.6%
Reclassified Fluent English	94,230	698	18	30	650	94,248	680	99.3%
Students with Disabilities	26,275	12,941	6	69	12,866	26,281	12,935	67.0%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records. Passing rates for this category cannot be estimated since no students who passed prior to 2010–11 are *included*.

Class of 2013

Tables 2.42 through 2.44 show estimated cumulative passing rates for the Class of 2013 after including results from the May 2015 CAHSEE administration. To avoid duplication, we have excluded students who were counted previously as being in the Class of 2006 through 2012, even though some of those students were also in grade twelve in 2013. Thus, the definition of the Class of 2013 used here is students who were in grade twelve for the first time in spring 2013. As with the Class of 2012, we have excluded SWDs from the counts, except for the last row in each table, since many of these students were exempted from the CAHSEE requirement.

Table 2.42. Estimated Number and Percentage of Students in the Class of 2013¹ Passing Both CAHSEE Tests Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	428,385	17,831	756	1,761	15,314	429,141	17,075	96.2%
Females	218,325	8,051	391	992	6,668	218,716	7,660	96.6%
Males	210,060	9,780	365	769	8,646	210,425	9,415	95.7%
American Indian or Alaska Native	3,097	115	2	4	109	3,099	113	96.5%
Asian	42,160	793	36	64	693	42,196	757	98.2%
Pacific Islander	2,772	145	5	11	129	2,777	140	95.2%
Filipino	13,773	167	6	18	143	13,779	161	98.8%
Hispanic or Latino	202,532	11,763	494	1,147	10,122	203,026	11,269	94.7%
Black or African American	26,528	1,975	51	170	1,754	26,579	1,924	93.2%
White, non-Hispanic	127,031	1,695	50	95	1,550	127,081	1,645	98.7%
Two or More Races ²	10,492	1,178	112	252	814	10,604	1,066	90.9%
Economically Disadvantaged	210,640	11,276	393	906	9,977	211,033	10,883	95.1%
English Learner	44,434	8,240	348	887	7,005	44,782	7,892	85.0%
Reclassified Fluent English	96,858	943	66	99	778	96,924	877	99.1%
Students with Disabilities	21,212	17,661	39	403	17,219	21,251	17,622	54.7%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records.

This year, more than 2,500 general education students and more than 400 SWDs in the class of 2013 who had not passed the CAHSEE by May of 2014 continued to try to meet the CAHSEE requirement, two years after their scheduled graduation. An estimated 756 general education students and 39 SWDs passed the CAHSEE this year. Table 2.42 shows 96.2 percent of the general education students and 54.7 percent of SWDs counted as being in the class of 2013 have now passed the CAHSEE.

Table 2.43. Estimated Number and Percentage of Students in the Class of 2013¹ Passing the CAHSEE ELA Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	434,236	11,980	550	1,112	10,318	434,786	11,430	97.4%
Females	221,573	4,803	272	572	3,959	221,845	4,531	98.0%
Males	212,663	7,177	278	540	6,359	212,941	6,899	96.9%
American Indian or Alaska Native	3,147	65	2	2	61	3,149	63	98.0%
Asian	42,222	731	32	58	641	42,254	699	98.4%
Pacific Islander	2,818	99	1	9	89	2,819	98	96.6%
Filipino	13,816	124	6	15	103	13,822	118	99.2%
Hispanic or Latino	206,290	8,005	353	725	6,927	206,643	7,652	96.4%
Black or African American	27,320	1,183	38	95	1,050	27,358	1,145	96.0%
White, non-Hispanic	127,706	1,020	35	56	929	127,741	985	99.2%
Two or More Races ²	10,917	753	83	152	518	11,000	670	94.3%
Economically Disadvantaged	214,139	7,777	303	578	6,896	214,442	7,474	96.6%
English Learner	46,048	6,626	283	688	5,655	46,331	6,343	88.0%
Reclassified Fluent English	97,417	384	29	30	325	97,446	355	99.6%
Students with Disabilities	25,125	13,748	51	326	13,371	25,176	13,697	64.8%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were **excluded** from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records.

Table 2.44. Estimated Number and Percentage of Students in the Class of 2013¹ Passing the CAHSEE Mathematics Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	434,323	11,893	428	1,079	10,386	434,751	11,465	97.4%
Females	220,606	5,770	247	658	4,865	220,853	5,523	97.6%
Males	213,717	6,123	181	421	5,521	213,898	5,942	97.3%
American Indian or Alaska Native	3,124	88	0	4	84	3,124	88	97.3%
Asian	42,763	190	5	9	176	42,768	185	99.6%
Pacific Islander	2,828	89	4	8	77	2,832	85	97.1%
Filipino	13,852	88	1	6	81	13,853	87	99.4%
Hispanic or Latino	206,384	7,911	279	716	6,916	206,663	7,632	96.4%
Black or African American	26,949	1,554	36	124	1,394	26,985	1,518	94.7%
White, non-Hispanic	127,539	1,187	32	62	1,093	127,571	1,155	99.1%
Two or More Races ²	10,884	786	71	150	565	10,955	715	93.9%
Economically Disadvantaged	214,368	7,548	212	570	6,766	214,580	7,336	96.7%
English Learner	48,194	4,480	145	410	3,925	48,339	4,335	91.8%
Reclassified Fluent English	97,084	717	48	83	586	97,132	669	99.3%
Students with Disabilities	25,512	13,361	42	301	13,018	25,554	13,319	65.7%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records.

Class of 2014

Tables 2.45 through 2.47 show estimated cumulative passing rates for the Class of 2014 after including results from the 2014–15 CAHSEE administrations through May 2015. To avoid duplication, we have excluded students who were counted above as being in prior high school classes, even though many of those students were also in grade twelve again in 2014. As with the class of 2012 and the class of 2013, the definition of the class of 2014 used here is students who were in grade twelve for the first time in spring 2014. For consistency with other classes, we continue to report results separately for SWDs and exclude these students from counts for other categories.

Table 2.45. Estimated Number and Percentage of Students in the Class of 2014¹ Passing Both CAHSEE Tests Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	417,754	19,472	2,706	5,420	11,346	420,460	16,766	96.2%
Females	213,376	9,070	1,321	2,802	4,947	214,697	7,749	96.5%
Males	204,378	10,402	1,385	2,618	6,399	205,763	9,017	95.8%
American Indian or Alaska Native	2,823	118	13	24	81	2,836	105	96.4%
Asian	41,163	913	154	257	502	41,317	759	98.2%
Pacific Islander	2,475	105	15	29	61	2,490	90	96.5%
Filipino	13,455	197	36	57	104	13,491	161	98.8%
Hispanic or Latino	200,784	12,966	1,752	3,702	7,512	202,536	11,214	94.8%
Black or African American	24,699	1,961	230	484	1,247	24,929	1,731	93.5%
White, non-Hispanic	120,526	1,622	235	303	1,084	120,761	1,387	98.9%
Two or More Races ²	11,829	1,590	271	564	755	12,100	1,319	90.2%
Economically Disadvantaged	209,561	12,621	1,767	3,632	7,222	211,328	10,854	95.1%
English Learner	39,636	9,464	1,231	3,022	5,211	40,867	8,233	83.2%
Reclassified Fluent English	105,958	1,252	280	334	638	106,238	972	99.1%
Students with Disabilities	24,357	17,617	249	2,097	15,271	24,606	17,368	58.6%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records.

More than 8,000 general education students and more than 2,300 SWDs in the Class of 2014 who had not passed the CAHSEE by May 2014 continued to try to pass the CAHSEE this year. This year, 2,706 of these general education students and 249 of the SWDs have now passed, bringing the total passing rates to 96.2 percent for general education students and 58.6 percent for SWDs.

Table 2.46. Estimated Number and Percentage of Students in the Class of 2014¹ Passing the CAHSEE ELA Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	424,000	13,226	1,938	3,454	7,834	425,938	11,288	97.4%
Females	216,947	5,499	876	1,633	2,990	217,823	4,623	97.9%
Males	207,053	7,727	1,062	1,821	4,844	208,115	6,665	96.9%
American Indian or Alaska Native	2,874	67	8	12	47	2,882	59	98.0%
Asian	41,227	849	146	238	465	41,373	703	98.3%
Pacific Islander	2,504	76	14	18	44	2,518	62	97.6%
Filipino	13,505	147	24	42	81	13,529	123	99.1%
Hispanic or Latino	204,869	8,881	1,254	2,357	5,270	206,123	7,627	96.4%
Black or African American	25,453	1,207	142	282	783	25,595	1,065	96.0%
White, non-Hispanic	121,153	995	148	178	669	121,301	847	99.3%
Two or More Races ²	12,415	1,004	202	327	475	12,617	802	94.0%
Economically Disadvantaged	213,485	8,697	1,291	2,334	5,072	214,776	7,406	96.7%
English Learner	41,416	7,684	1,081	2,350	4,253	42,497	6,603	86.6%
Reclassified Fluent English	106,741	469	115	100	254	106,856	354	99.7%
Students with Disabilities	28,222	13,752	275	1,652	11,825	28,497	13,477	67.9%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were *excluded* from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records.

Table 2.47. Estimated Number and Percentage of Students in the Class of 2014¹ Passing the CAHSEE Mathematics Test Through May 2015, Excluding SWDs

Group	By May 2014		July 2014–May 2015			Cumulative Total		
	Passed	Not Yet Passed	Passed	Not Passed	Not Tested	Passed	Not Yet Passed	Percent Pass
All Students	424,166	13,060	1,673	3,371	8,016	425,839	11,387	97.4%
Females	215,921	6,525	892	1,856	3,777	216,813	5,633	97.5%
Males	208,245	6,535	781	1,515	4,239	209,026	5,754	97.3%
American Indian or Alaska Native	2,846	95	11	19	65	2,857	84	97.1%
Asian	41,846	230	25	47	158	41,871	205	99.5%
Pacific Islander	2,513	67	4	19	44	2,517	63	97.6%
Filipino	13,546	106	20	26	60	13,566	86	99.4%
Hispanic or Latino	205,002	8,748	1,108	2,335	5,305	206,110	7,640	96.4%
Black or African American	25,133	1,527	169	356	1,002	25,302	1,358	94.9%
White, non-Hispanic	120,991	1,157	163	191	803	121,154	994	99.2%
Two or More Races ²	12,289	1,130	173	378	579	12,462	957	92.9%
Economically Disadvantaged	213,719	8,463	1,114	2,288	5,061	214,833	7,349	96.7%
English Learner	43,864	5,236	580	1,485	3,171	44,444	4,656	90.5%
Reclassified Fluent English	106,230	980	208	277	495	106,438	772	99.3%
Students with Disabilities	28,287	13,687	199	1,675	11,813	28,486	13,488	67.9%

¹ Many SWDs who had not passed the CAHSEE by the end of grade twelve were allowed a waiver if they took the CAHSEE with a modification and achieved a passing score. In addition, SWDs were exempted in some years, but not others. For comparison across years with different exemption policies, SWDs were **excluded** from all rows of the table except for the last row.

² The “Two or More Races” category was added in 2010–11. Students are shown in the “Two or More Races” category above only if they could be identified as such from current-year or prior-year test records.

Fifth Year Students, Classes of 2008 Through 2013

Table 2.48 shows a comparison of the numbers of students continuing to take the CAHSEE in their fifth year of high school for the classes of 2007 through 2013. SWDs are excluded from these counts because these students were exempted in some years and many were granted a waiver in other years. The estimated percentage of students passing in four years has increased from 93.3 percent for the class of 2007 to 95.4 percent for the class of 2013. Roughly 40 to 45 percent of those not passing in four years continued to try to pass during their fifth year. As a result, the cumulative percentage of students completing the CAHSEE requirement by their fifth year of high school has increased from 94.3 for the class of 2007 to 96.0 percent for the class of 2013.

Table 2.48. Estimated Number and Percentage of Students in the Classes of 2007 Through 2013 Completing the CAHSEE Requirement by Their Fifth Year of High School, Excluding SWDs

Class	Through Year 4			During Year 5			Total After 5 Years ¹		
	Passed	Not Yet Passed	Percent Pass	Passed ¹	Not Passed ¹	Not Tested	Passed	Not Yet Passed	Percent Pass
2007	401,486	28,981	93.3%	4,444	8,365	16,172	405,930	24,537	94.3%
2008	409,420	29,992	93.2%	4,480	9,076	16,436	413,900	25,512	94.2%
2009	417,296	30,104	93.3%	4,516	9,359	16,229	421,812	25,588	94.3%
2010	419,796	25,572	94.3%	2,603	6,778	16,191	422,399	22,969	94.8%
2011	423,361	25,783	94.3%	3,557	6,946	15,280	426,918	22,226	95.1%
2012	424,480	22,144	94.9%	3,340	7,034	12,465	427,593	19,499	95.6%
2013	425,725	20,513	95.4%	2,861	6,103	11,549	428,586	17,652	96.0%
2014	417,754	19,472	95.5%	2,706	5,420	11,346	420,460	16,766	96.2%

¹ Includes some students who had previously been dropped from counts because they had not tested in their junior or senior year but returned to take the CAHSEE in a fifth year of high school.

Analyses of Exit and Completion Information

Prior analyses of test results have relied almost exclusively on information from CAHSEE administrations. A limitation of this approach is that once students have passed the CAHSEE, there is no further information on what happened to them. Did they graduate and receive a diploma? Did they transfer out of state or to a private school or drop out altogether? Did they complete high school, but fail to meet other requirements for graduation?

Similarly, a number of students who do not pass the CAHSEE in tenth or eleventh grade do not test the following year. There is no information in CAHSEE results to tell us what became of these students. It has been assumed that the majority transferred or dropped out, some may have persisted but failed to receive a diploma because of the CAHSEE requirement or because they also did not meet other requirements for graduation.

To address these questions, we analyzed completion and exit data from the CALPADS. In recent years, schools have been asked to account for each student who leaves their system, indicating whether they received a diploma, completed high school but failed to meet one or more graduation requirement(s), or transferred or dropped out prior to completing high school. We were able to merge CAHSEE results for students in the high school classes of 2010 through 2014, who were first tested as grade ten students in 2008 through 2012⁸. Individual student exit information was less reliable prior to 2008 and graduation information for the Class of 2015 is not yet available.

We analyzed results separately for SWDs in special education programs and for other students in general education programs. SWDs have been exempted from the CAHSEE requirement for much of this period and, even when they were subject to the requirement, were often granted waivers. General education students have all been subject to the CAHSEE requirement, beginning with the Class of 2006.

Students Who Passed the CAHSEE

Separate analyses of exit and completion information were conducted for students who did and students who did not pass the CAHSEE. Tables 2.49 shows counts of general education and special education students⁹ in each high school class who did or did not satisfy the CAHSEE requirement, according to data records from each CAHSEE administration. In this table, we are including all students who ever took the CAHSEE, whether they went on to complete high school or not. The vast majority of these students participated in grade ten census testing, but a few were either absent or transferred in later and took the CAHSEE for the first time at a later point.

⁸ There were CAHSEE records for a total of 2,475,188 students in the high school classes of 2010 through 2014. Matching exit data records were found for 95 percent of these students, with match rates rising from 93.0 percent for the Class of 2010 to 97.1 percent for the Class of 2014, reflecting improvement in the coverage and accuracy of both CALPADS and CAHSEE data records over time.

⁹ We are using the terms “general” and “special” education somewhat imprecisely, given limitations of information on the CAHSEE answer documents. (See discussion earlier in this chapter). Special education refers to all students receiving special education services as indicated by a primary disability code or information on testing accommodations and modifications. Many or all of these students are exempt from the CAHSEE requirement. General education students refer to all other students.

Table 2.49. Counts of General and Special Education Students Taking and Passing the CAHSEE for the High School Classes of 2010 through 2014

Class	General Ed Students				Special Ed Students			
	Number of Students	Passed	Did not Pass	Percent Pass	Number of Students	Passed	Did not Pass	Percent Pass
2010	443,140	404,367	38,773	91.3%	42,988	17,671	25,317	41.1%
2011	449,000	412,792	36,208	91.9%	44,874	18,733	26,141	41.7%
2012	449,027	416,024	33,003	92.7%	49,903	21,605	28,298	43.3%
2013	450,008	420,083	29,925	93.4%	49,620	20,739	28,881	41.8%
2014	442,399	412,965	29,434	93.3%	54,229	24,133	30,096	44.5%
Total	2,233,574	2,066,231	167,343	92.5%	54,804	23,768	31,036	43.4%

Tables 2.50 and 2.51 show exit and completion information for general and special education students who passed the CAHSEE.

Table 2.50. Results for General Education Students who Passed the CAHSEE, by High School Class

Class	Students Passing	Completed High School				Left Before Completion	
		Received Diploma	Other Cert	Failed CAHSEE	Did not Meet Other	Transfer Out	Drop Out
2010	404,367	88.3%	0.8%	0.3%	1.6%	2.4%	6.8%
2011	412,792	89.2%	0.7%	0.3%	1.5%	2.3%	6.1%
2012	416,024	89.7%	0.7%	0.3%	1.4%	2.3%	5.7%
2013	420,083	90.0%	0.6%	0.2%	1.3%	2.2%	5.6%
2014	412,965	89.7%	0.6%	0.2%	1.4%	2.1%	6.1%
Total	2,066,231	89.4%	0.7%	0.3%	1.4%	2.2%	6.0%

Table 2.51. Results for Special Education Students who Passed the CAHSEE, by High School Class

Class	Students Passing	Completed High School				Left Before Completion	
		Received Diploma	Other Cert	Failed CAHSEE	Did not Meet Other	Transfer Out	Drop Out
2010	17,671	85.1%	2.8%	0.2%	1.9%	2.1%	7.9%
2011	18,733	84.9%	3.8%	0.2%	1.6%	2.3%	7.2%
2012	21,065	87.1%	4.5%	0.2%	1.7%	2.5%	4.1%
2013	20,739	84.3%	4.4%	0.2%	1.8%	2.3%	7.1%
2014	24,133	84.2%	3.7%	0.1%	1.8%	2.3%	7.8%
Total	102,341	85.1%	3.9%	0.2%	1.8%	2.3%	6.8%

Students Who Did Not Pass the CAHSEE

Tables 2.52 and 2.53 show exit and completion outcomes for general and special education students for who did not pass the CAHSEE, insofar as we could tell from available CAHSEE data records.

Table 2.52. Results for General Education Students Who Did Not Pass the CAHSEE, by High School Class

Class	Students Not Passing	Completed High School				Left Before Completion	
		Received Diploma	Other Cert	Did not pass CAHSEE	Did not Meet Other	Transfer Out	Drop Out
2010	38,773	6.2%	3.8%	8.6%	7.1%	17.2%	57.2%
2011	36,208	6.2%	4.3%	9.8%	7.6%	16.3%	55.8%
2012	33,003	4.5%	4.8%	11.2%	7.0%	16.0%	56.5%
2013	29,925	4.6%	4.3%	11.2%	7.5%	16.1%	56.3%
2014	29,434	3.6%	3.9%	12.6%	7.9%	13.8%	58.2%
Total	167,343	5.1%	4.2%	10.6%	7.4%	16.0%	56.8%

Table 2.53. Results for Special Education Students Who Did Not Pass the CAHSEE, by High School Class

Class	Students Not Passing	Completed High School				Left Before Completion	
		Received Diploma	Other Cert	Did not pass CAHSEE	Did not Meet Other	Transfer Out	Drop Out
2010	25,317	53.7%	10.1%	1.8%	3.4%	5.3%	25.6%
2011	26,141	56.0%	9.1%	1.2%	2.8%	5.4%	25.5%
2012	28,298	56.4%	7.9%	1.4%	3.1%	5.4%	25.7%
2013	28,881	56.3%	7.1%	1.2%	3.7%	5.0%	26.7%
2014	30,096	54.8%	7.8%	1.2%	3.4%	4.8%	28.0%
Total	138,733	55.5%	8.3%	1.4%	3.3%	5.2%	26.4%

Discussion of Exit and Completion Outcomes

As shown in Table 2.49, about 93 percent of general education students, but only 43 percent of special education students pass the CAHSEE at some point before leaving high school. Passing rates have generally increased, albeit by a small amount, for general education students and been up and down for special education students.

Nearly 89.4 percent of the general education students who passed the CAHSEE went on to receive a high school diploma¹⁰ (Table 2.50). A small number, about 0.7 percent, received some other certification. Only about 1.4 percent of students who pass the CAHSEE complete high school but fail to meet other requirements. Overall, about 2.2 percent of students who pass the CAHSEE are shown as transferring out of state, to private schools, or to home schooling. Another 6 percent are designated with a variety of codes indicating that they dropped out before completing high school, ranging from truancy to failure to reappear from one year to the next without documentation as to where they went. Results for special education students who pass the CAHSEE are quite similar, except that only 85.1 percent receive a regular diploma (compared to 89.4 percent for general education students). Another 3.9 percent receive a certificate (in most cases a special education certificate) compared to only 0.7 percent of general education students who pass the CAHSEE.

Results for general and special education students who did not pass the CAHSEE are quite different (Tables 2.52 and 2.53). An estimated 5.1 percent of the general education students who do not appear to have passed the CAHSEE are coded as receiving a regular high school diploma anyway. This is 5.1 percent of the 7.5 percent of general education students who did not pass the CAHSEE, or about 0.4 percent of all general education students, a relatively low error rate if there is not a more substantial explanation as to how they earned the diploma without passing the CAHSEE.

Only 10.6 percent of the general education students who do not pass the CAHSEE are coded as failing to receive a diploma because of the CAHSEE requirement alone. An estimated 7.4 percent fail to meet some other requirement, 16 percent transfer out of the California public school system, and 56.8 percent leave school before completing high school and also before completing the CAHSEE requirement. Again, this is just over half of the 7.5 percent who do not pass the CAHSEE, or less than 4 percent of the entire class, a rate consistent with other indicators of dropout rates.

Well over half (55.5 percent) of the special education students who do not pass the CAHSEE go on to receive a high school diploma anyway, due to exemptions or waivers. Another 8.3 percent receive some type of certificate of completion. About 1.4 percent are coded as meeting all of the requirements except the CAHSEE, even though, in most cases, they were exempt from the CAHSEE requirement, while 3.3 percent fail to meet other requirements. Transfer and dropout rates for special education students who do not pass the CAHSEE are considerably lower than for general education students, with 5.2 percent transferring out of California public schools and 26.4 percent failing to complete high school for some other reason.

¹⁰ For a very small number, about 0.3 percent, exit code records indicated that the student had met all graduation requirements except passing the CAHSEE, while CAHSEE records indicated that they had passed the CAHSEE. This was judged to be a tolerably low error rate in matching records from two different data systems and in the coding of information in each of these systems.

Overall, CALPADs data show results that are consistent with those based on CAHSEE data records alone and provide us with a general picture of what happens to students who do and students who do not meet the CAHSEE requirements.

Additional Analyses of Results for SWDs

One of the most persistent problems for the CAHSEE has been the low passing rate for SWDs. Our prior evaluation reports have highlighted particular difficulties in meeting the CAHSEE requirement faced by these students. We have several times recommended consideration of alternatives for these students. In 2004, the California Legislature passed Senate Bill (SB) 964, calling for a panel to identify options or alternatives for SWDs and requiring a contractor to support the work of this panel and report on options that are identified.

Pursuant to requirements of SB 964, a report was submitted to the California Legislature in spring 2005 recommending alternative graduation assessments and requirements for SWDs (Rabinowitz, Crane, Ananda, Vasudeva, Youtsey, Schimozato, & Schwager, April 2005). The SB 964 report identified three types of options for SWDs:

1. Options for *alternate forms of testing* to be sure SWDs have adequate opportunities to demonstrate what they know and can do.
2. Options for *modifying the CAHSEE requirement*. The main recommendation in this area, to defer the requirement for SWDs, was based on the premise that instructional content was not yet adequate to provide sufficient opportunity for SWDs to learn the required material. The deferral was also recommended to allow time to develop alternative requirements, such as coursework, that SWDs might pass to receive a diploma.
3. Options concerning *alternative types of diplomas* for students who are not able to demonstrate competency in the CAHSEE standards.

Our 2005 and 2006 CAHSEE evaluation reports described analyses of characteristics of students in this population and the types of services they received in relation to success in passing the CAHSEE (Wise, et al., 2005b, Chapter 7; Wise, et al. 2006b). Key results from that investigation included:

1. Nearly half of the SWDs receive relatively non-intensive services (e.g., in-class accommodations, resource specialists) and participate in the regular curriculum 80 percent of the time or more. About half of these students pass the CAHSEE on the first try and, perhaps with additional time and resources, the others would be capable of passing and should be held to the CAHSEE requirement.
2. About one-quarter of the SWDs require more intensive assistance (e.g., special day programs) and spend less than 50 percent of their time in

regular instruction. A limited number of these students pass the CAHSEE; therefore, other goals may be more appropriate for these students. It is worth noting, however, that 10 percent of the students in this category do pass the CAHSEE, so expectations for meeting the CAHSEE requirement should not be abandoned lightly.

Under current law, the CAHSEE requirement has been deferred for SWDs until such time as alternative means to the CAHSEE can be implemented or deemed infeasible.¹¹

Table 2.54 shows trends in the number and percentage of grade ten SWDs in each primary disability category and the ELA and mathematics passing rates for students in each of these categories. The clear majority of SWDs in the matched sample had a *specific learning disability* as their primary disability code. These students passed the CAHSEE at relatively low rates, slightly below the average for all SWDs in 2011 through 2015. The distribution of students across primary disability categories was similar in 2011 through 2015. Over the four years, more students were classified as having autism and other health impairments and slightly fewer were classed as having emotional disturbance or specific learning disabilities. Passing rates were predictably somewhat variable across years due to the relatively small numbers of students in most categories. Passing rates for students with specific learning disabilities, the category accounting for over half of the SWDs, have remained flat for ELA and have increased for mathematics. Overall, SWDs passing rates have been reasonably unchanged over the four years for ELA and have shown a slight increase for mathematics.

¹¹ SB 172 was signed by the Governor subsequent to the drafting of this report and suspends the CAHSEE requirement for all students in the classes of 2016, 2017, and 2018.

Table 2.54. Counts and Passing Rates by Primary Disability Codes for Grade Ten SWDs

Primary Disability Category	Percent of SWDs in Category					Percent in Category Passing CAHSEE ELA ¹					Percent in Category Passing CAHSEE Math ¹				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
010 = Mental Retardation	4.8%	4.8%	4.6%	4.4%	4.1%	3.9%	2.6%	2.1%	3.0%	2.8%	3.6%	2.8%	3.6%	3.4%	2.6%
020 = Hard of Hearing	1.1%	1.1%	1.3%	1.2%	1.2%	53.2%	52.8%	50.3%	50.6%	54.4%	57.5%	54.4%	54.3%	59.1%	59.4%
030 = Deaf	0.7%	0.6%	0.5%	0.5%	0.4%	20.6%	22.3%	19.1%	21.5%	23.0%	29.3%	38.0%	33.8%	34.1%	34.7%
040 = Speech/Lang. Impairment	5.5%	6.2%	6.0%	5.6%	5.2%	49.5%	53.5%	53.2%	53.5%	57.1%	52.9%	58.6%	59.7%	59.7%	59.0%
050 = Visual Impairment	0.5%	0.6%	0.5%	0.5%	0.5%	65.3%	58.5%	62.3%	61.7%	62.5%	59.4%	63.4%	65.5%	58.7%	66.0%
060 = Emotional Disturbance	7.9%	7.1%	6.8%	6.6%	6.4%	44.9%	43.5%	45.3%	44.6%	48.8%	34.5%	36.9%	39.2%	36.9%	39.9%
070 = Orthopedic Impairment	1.7%	1.6%	1.5%	1.4%	1.3%	48.2%	49.8%	50.8%	53.7%	49.2%	40.3%	45.5%	46.1%	45.3%	47.3%
080 = Other Health Impairment	10.2%	10.9%	11.9%	12.6%	13.2%	52.6%	51.3%	51.0%	49.4%	51.7%	44.1%	44.7%	46.1%	45.2%	46.4%
090 = Specific Learning Disability	61.3%	60.1%	58.9%	58.8%	58.7%	32.1%	32.1%	31.9%	31.8%	34.4%	32.1%	32.5%	33.4%	34.1%	33.3%
100 = Deaf-Blindness	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	n/a	n/a	n/a		n/a	n/a	n/a		
110 = Multiple Disabilities	0.5%	0.5%	0.6%	0.5%	0.5%	20.8%	8.8%	13.0%	11.9%	23.5%	20.0%	13.6%	18.5%	19.6%	31.4%
120 = Autism	5.5%	6.1%	7.1%	7.4%	8.1%	59.1%	57.1%	56.0%	54.4%	55.9%	55.4%	56.8%	57.7%	55.5%	56.8%
130 = Traumatic Brain Injury	0.3%	0.3%	0.3%	0.4%	0.3%	24.8%	37.0%	34.4%	41.3%	39.8%	33.6%	34.8%	39.8%	45.5%	48.3%
Number of Students with Disabilities	49,742	49,913	49,600	49,462	50,162	37.5%	37.8%	38.1%	37.8%	40.5%	36.0%	37.4%	38.8%	38.8%	38.9%

¹ The percentage passing was not computed if there were fewer than 20 students in a particular disability category.

The CAHSEE allows a number of testing accommodations for students who need them. In addition, some students take the CAHSEE with test modifications¹² specified in their IEPs, even though these modifications invalidate their scores. Students who test with modifications and score at or above the passing level are allowed to petition for a local waiver from the CAHSEE requirement. Tables 2.55 and 2.56 categorize the various accommodations and modifications recorded for the CAHSEE ELA and mathematics tests. Each table shows the percentage of grade ten and twelve SWDs who received each type of accommodation or modification. Note that the counts refer to the number of administrations. Grade ten students only take the CAHSEE once, while grade twelve students can take the CAHSEE multiple times. This accounts for the larger number of administrations to grade twelve students even though fewer students are still trying to pass the CAHSEE in grade twelve than was the case for grade ten.

There is little difference in accommodations used by SWDs in grade ten versus grade twelve students. However, there is a notable increase in the percentage of SWDs receiving two particular modifications in grade twelve as compared to grade ten: (a) oral presentation for ELA and (b) calculator for mathematics. For the Class of 2015, 2.0 percent of grade ten SWDs received oral presentation for ELA versus 11.2 percent in grade twelve, and 7.0 percent of grade ten SWDs used calculators versus 20.9 percent in grade twelve. This increase may be due, in part, to the fact that a higher proportion of students not requiring these modifications passed the CAHSEE prior to grade twelve and are thus not included in the grade twelve samples.

¹² Test modifications are changes to test administration procedures that are thought to change the construct being measured, such as allowing calculators on test questions measuring computational skill. When test modifications are used, scores are not considered valid for meeting the CAHSEE requirement due to the impact on what is being measured.

Table 2.55. Percentage of SWDs Receiving Specific ELA Accommodations and Modifications in 2012 Through 2015 by Grade

Description of Accommodation or Modification	Grade Ten				Grade Twelve			
	2012	2013	2014	2015	2012	2013	2014	2015
Number of Administrations to SWDs	58,000	49,600	49,434	50,162	72,844	66,300	66174	64,073
Accommodations								
Transfer of Responses to Answer Document	0.4%	0.5%	0.5%	0.5%	0.2%	0.3%	0.2%	0.2%
Oral Responses Dictated to a Scribe	0.2%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%	0.1%
Spell Checker or Grammar Checker Off	0.5%	0.4%	0.3%	0.5%	0.3%	0.2%	0.3%	0.3%
Essay Responses/Dictated	0.1%	0.1%	0.2%	0.2%	0.1%	0.1%	0.0%	0.1%
Assistive Device/Independent	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Braille Version	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Large Print Version	0.2%	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
Test Over Multiple Days	2.8%	3.6%	3.3%	3.4%	2.0%	2.7%	2.6%	2.6%
Supervised Breaks	8.6%	10.2%	9.5%	10.5%	8.5%	9.7%	9.1%	10.1%
Beneficial Time	1.6%	1.3%	1.1%	1.8%	1.4%	1.7%	1.5%	1.8%
Tested Home or Hospital	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Modifications								
Dictionary	1.0%	1.0%	1.2%	1.2%	5.0%	5.0%	4.8%	4.7%
Sign Language	0.1%	0.1%	0.0%	0.0%	0.3%	0.3%	0.2%	0.3%
Oral Presentation	2.0%	2.0%	2.0%	2.0%	12.3%	12.5%	11.8%	11.2%
Spell Checker or Grammar Checker	0.1%	0.1%	0.1%	0.1%	1.2%	1.0%	0.9%	0.8%
Essay Responses/Dictated with Grammar and Spell Check Support	0.1%	0.1%	0.1%	0.1%	0.4%	0.2%	0.3%	0.2%
Assistive Device/with Support	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
Unlisted Modification	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%

Table 2.56. Percentage of SWDs Receiving Specific Mathematics Accommodations and Modifications in 2012 Through 2015 by Grade

Description of Accommodation or Modification	Grade Ten				Grade Twelve			
	2012	2013	2014	2015	2012	2013	2014	2015
Number of Administrations to SWDs	49,913	49,600	49,434	50,162	50,732	66,300	66,174	64,073
Accommodations								
Transfer of Responses to Answer Document	0.4%	0.4%	0.5%	0.4%	0.2%	0.2%	0.5%	0.2%
Oral Responses Dictated to a Scribe	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Braille Version	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
Large Print Version	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.2%	0.1%
Test Over More Than 1 Day	2.1%	2.6%	2.3%	2.3%	1.2%	1.8%	2.3%	1.6%
Supervised Breaks	7.8%	9.2%	8.5%	9.5%	7.3%	8.1%	8.5%	7.8%
Beneficial Time	1.5%	1.2%	1.1%	1.6%	1.2%	1.5%	1.1%	1.5%
Tested At Home or Hospital	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Dictionary	0.1%	0.1%	0.1%	0.1%	1.0%	0.9%	0.1%	0.7%
Sign Language	0.2%	0.1%	0.1%	0.1%	0.3%	0.3%	0.1%	0.2%
Oral Presentation	2.3%	2.3%	2.3%	2.5%	6.7%	6.8%	6.3%	6.2%
Modifications								
Calculator	7.0%	6.8%	6.7%	7.0%	22.0%	21.5%	20.7%	20.9%
Arithmetic Table	0.2%	0.2%	0.2%	0.2%	2.2%	2.3%	1.9%	1.8%
Math Manipulatives	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.3%	0.1%
Assistive Device	0.0%	0.0%	0.0%	0.0%	6.7%	6.7%	0.0%	0.0%
Unlisted Modification	0.1%	0.0%	0.1%	0.1%	0.2%	0.2%	0.2%	0.1%

Additional Analyses of Results for English Learners

The CAHSEE requirement has been a significant barrier for students classified as ELs. We conducted additional analyses of EL results using the CAHSEE data to examine trends in the number of grade ten students with different levels of language fluency. We also looked at trends in CAHSEE passing rates for students at each language fluency level.

As shown in Table 2.57 and illustrated in Figure 2.7, the number of grade ten ELs taking the CAHSEE has decreased steadily from about 76,000 in 2007 to under 57,000 in 2015. At the same time the number of grade ten students who had been ELs but were reclassified as fluent English proficient (RFEP) has risen from just over 77,000 in 2007 to more than 115,000 in 2015.

As shown in Figures 2.8 and 2.9, this is a very positive result because, while CAHSEE passing rates for ELs are quite low, the passing rates for RFEP students are nearly identical to those judged to have been initially fluent and are higher than passing rates for students classified as English only. Tables 2.58 and 2.59 show ELA and mathematics passing rates respectively for each English language proficiency

classification. There has been a decline in passing rates for ELs and also somewhat of a decline for RFEP students in recent years, which may be related to the change in numbers of students in these groups. Students who now remain in the EL category may have more serious language challenges than was the case in the past.

Table 2.57. Number of Grade Ten Students Taking the CAHSEE in 2007 Through 2015 by English Language Fluency

Fluency	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. English Only	276,249	267,229	265,666	265,271	263,735	258,435	251,646	265,878	265,328
2. Initially Fluent	40,530	39,476	39,871	39,183	39,383	32,836	33,394	38,097	34,792
3. English Learner	75,988	73,765	74,186	71,029	66,460	63,373	57,360	56,717	56,614
4. Reclassified Fluent	77,333	83,857	87,869	94,782	97,139	106,449	109,244	112,240	115,395
5. Unknown	626	2,706	2,706	2,136	4,298	2,645	6,051	5,200	3,852
Total Students	470,726	467,033	470,298	472,401	471,015	463,738	457,695	478,132	475,981

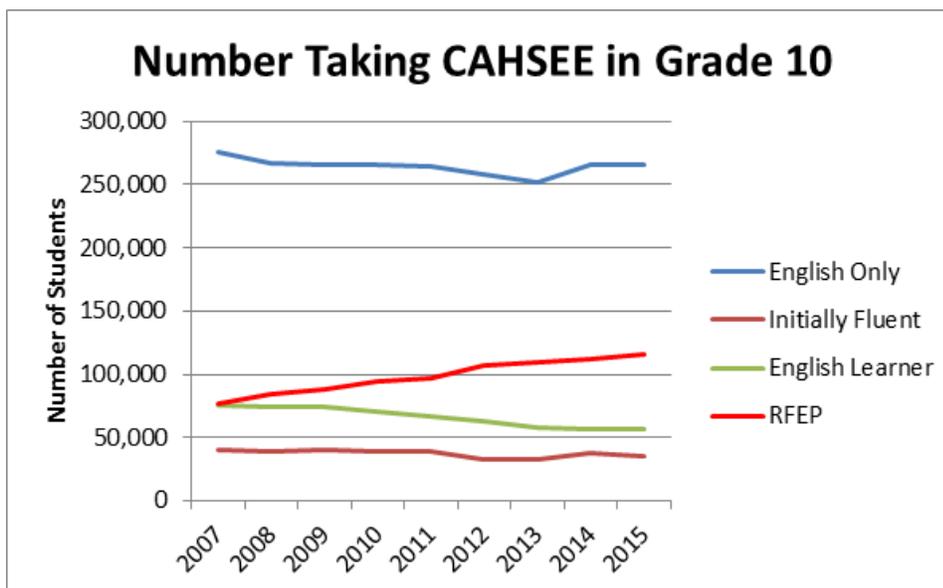


Figure 2.7 Trends in the number of students taking CAHSEE in grade ten by English language fluency.

Table 2.58. Percentage of Grade Ten Students Passing CAHSEE ELA Test in 2007 Through 2015 by English Language Fluency

Fluency	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. English Only	80.6%	82.0%	82.5%	82.9%	84.0%	84.4%	84.6%	84.4%	84.9%
2. Initially Fluent	86.6%	88.7%	89.2%	90.1%	91.7%	92.3%	92.4%	92.6%	92.5%
3. English Learner	34.9%	38.8%	39.3%	40.2%	42.6%	42.7%	39.8%	36.3%	39.9%
4. Reclassified Fluent	88.0%	90.3%	90.4%	91.5%	92.8%	92.9%	92.6%	91.0%	91.3%

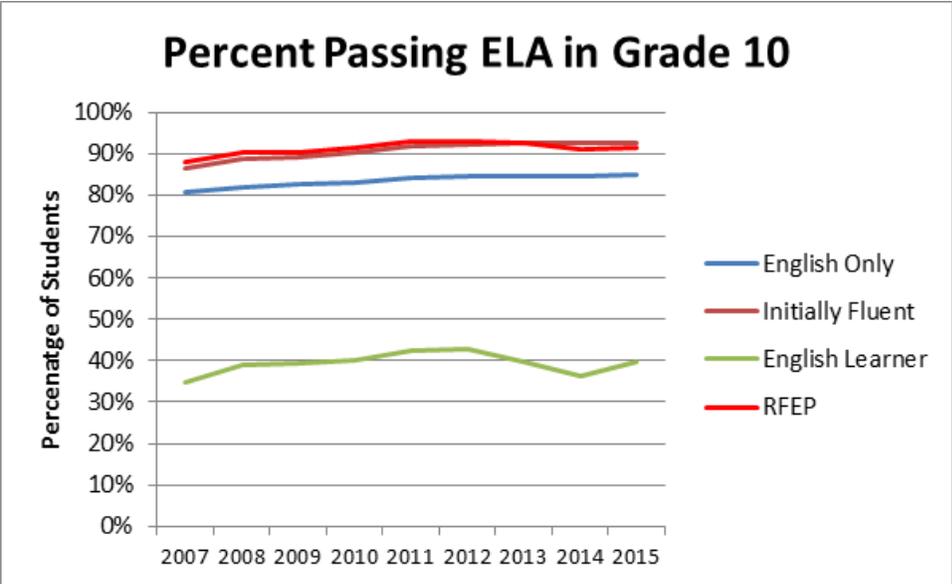


Figure 2.8. Trends in CAHSEE ELA passing rates in grade ten by English language fluency.

Table 2.59. Percentage of Grade Ten Students Passing CAHSEE Mathematics Test in 2007 Through 2015 by English Language Fluency

	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. English Only	77.2%	79.2%	80.1%	80.7%	81.9%	82.6%	83.4%	83.7%	83.0%
2. Initially Fluent	84.1%	86.4%	87.6%	88.5%	90.3%	91.3%	91.7%	92.3%	91.1%
3. English Learner	44.9%	48.2%	50.5%	49.9%	53.2%	53.2%	51.5%	50.9%	48.5%
4. Reclassified Fluent	85.0%	87.9%	89.3%	89.9%	91.4%	91.9%	91.7%	91.3%	89.9%

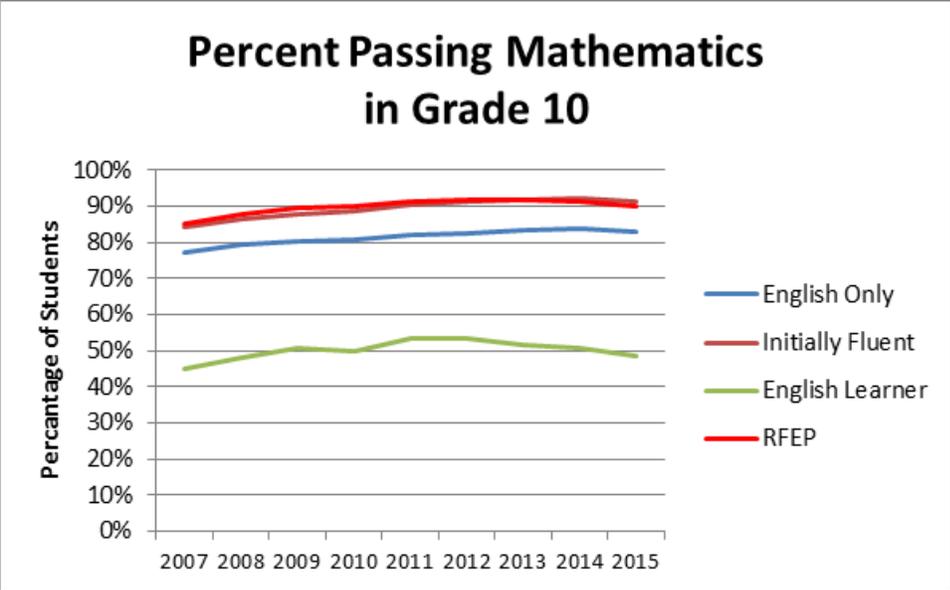


Figure 2.9. Trends in CAHSEE mathematics passing rates in grade ten by English language fluency.

Summary of Test Results

This year we examined two main aspects of CAHSEE test quality: (a) school site adherence to established standardized test administration policies and procedures, and (b) consistency in essay scoring and test form scoring decision points. We did not identify any significant concerns about the validity of the resulting scores.

With regard to test administration observations, the two sites we observed complied with most standard procedures. HumRRO evaluation efforts found no significant problems with the processes used to score the CAHSEE essay items. The reuse in 2014–15 of five test forms that had originally been administered during corresponding months in 2011–12 did not result in significant differences in mean essay scores, signaling the appropriate use of the original raw-to-scale score conversion tables. Scoring consistency did increase slightly, and ETS continues to assemble test forms of comparable difficulty.

CAHSEE test results show significant increases in students' competency in targeted skills since the implementation of the CAHSEE requirement. As shown in Table 2.24, overall grade twelve passing rates for seniors have increased steadily from 93.6 percent for the Class of 2008 to 95.8 percent for this year's Class of 2015. Similarly, as shown in Table 2.35, overall passing rates for grade ten students taking the CAHSEE have increased steadily from 65.1 percent for the Class of 2008 (tested in 2006) to 76.4 percent for the Class of 2017 tested in 2015. As shown in Table 2.35 and illustrated in Figure 2.5, initial (grade ten) passing rates have increased significantly for all demographic groups. That said, it should also be noted that passing rates for SWDs are still unacceptably low and that passing rates for ELs are also low and have not increased consistently since the CAHSEE requirement went into effect. Passing rates for economically disadvantaged, Hispanic or Latino, and Black or African American students also continue to be significantly lower than passing rates for White and Asian students at all grade levels.

A second encouraging finding is the large number of students who continue to try to pass the CAHSEE after their originally scheduled graduation date. Of the approximately 20,000 general education students in the Class of 2014 who did not complete the CAHSEE requirement by the end of grade twelve, more than 9,000 took the CAHSEE one or more times in 2014–15. More than 2,700 completed the CAHSEE requirement, as shown in Table 2.45. Also more than 2,500 general education students in the Class of 2013 who had not yet passed the CAHSEE continued to try to pass it last year and more than 750 did pass (Table 2.42) two years after their original graduation date. Finally, more than 1,200 general education students from the Class of 2012 took the CAHSEE last year, more than two years after their original graduation date, and more than 350 of them completed the CAHSEE requirement (Table 2.39). Perseverance and success in a fifth year of high school is summarized in Table 2.48.

A third significant trend since the implementation of the CAHSEE requirement has been the proportion of students taking more advanced mathematics courses in high school.

As shown in Table 2.37, the percentage of students taking mathematics courses beyond Algebra I by grade ten has increased from 64.0 percent for the Class of 2008 to 77.3 percent for this year's grade ten students in the Class of 2017. All demographic groups showed significant increases in the percentage of students taking more advanced courses over this period, including very significant gains—from 33.3 percent to 49.2 percent—for SWDs. Here too, however, significant gaps exist. Analyses show that fewer SWDs (49%), ELs (55%), economically disadvantaged students (72%), Native American (67%), Black or African American (71%), and Hispanic or Latino (73%) students are taking advanced mathematics courses by grade ten than White (81%) and Asian (92%) grade ten students.

A fourth finding was that the effectiveness of English language development programs appears to be improving. More students have been reclassified as fluent and fewer are still classified as ELs in grade ten when they take the CAHSEE.

Finally, the CAHSEE gains for SWDs have been mixed. Passing rates for grade ten SWDs have increased from the Class of 2006 to the Class of 2016 as shown in Figure 2.5. However, as shown in Figure 2.1, cumulative grade twelve passing rates for SWDs increased very significantly, from 49 percent to 55 percent when the exemption for SWDs was lifted for the Class of 2008, but decreased somewhat in 2010 when the CAHSEE exemption was reinstated for these students. This year, the cumulative grade twelve passing rate for SWDs is back up to 58 percent. While SWDs do not have to pass the CAHSEE to obtain a high school diploma, their results were previously counted in school accountability indicators. Thus their success on the CAHSEE as a high school accountability measure was of keen interest to teachers and administrators.

Chapter 3: Student Questionnaire Responses

Rebecca L. Norman Dvorak

The Human Resources Research Organization (HumRRO) designed a 14-item student questionnaire designed to investigate multiple topics including how students: (a) prepared for the California High School Exit Examination (CAHSEE), (b) made graduation and post-high school plans, (c) felt about course content and instruction coverage, and (d) put effort into the CAHSEE. This questionnaire was administered to all students at the end of the CAHSEE English language arts (ELA) and mathematics tests. The questionnaires were almost identical after both tests, with the exception of content-specific items geared towards the respective subject area. Students who took both tests had the opportunity to provide responses to both questionnaires. The questionnaire has been administered since 2001¹³; we made significant changes in 2005 and minor changes in more recent years, including a new question added in 2014. This chapter provides results from both the mathematics and ELA questionnaires and is based on student response data from 2005 through 2015. First we examine grade ten student responses this year and over time, as well as broken down by demographic and test passing category, then follow up with a selection of responses for 2015 grade twelve students who had failed to pass the CAHSEE in grade ten and took the CAHSEE during this past school year.

Grade Ten Student Questionnaire Respondents

Table 3.1 displays demographic characteristics of the grade ten students who completed the CAHSEE ELA and mathematics tests in 2015. Hispanic or Latino students accounted for just over half of all grade ten students, with White students being the second largest racial/ethnic group at 26 percent. More than 9 percent of students were classified as English learners (EL) who were not identified as students with disabilities (SWDs), and more than 6 percent were only SWDs, not EL. Just over 2 percent of students were identified as both ELs and SWDs. Almost 53 percent of the grade ten students were identified as economically disadvantaged (ED) based on the criterion of inclusion in the national school lunch program (NSLP) or if their parents' educational attainment was less than a high school graduate.

¹³ 2001 refers to the 2000–2001 school year. Similarly, the current results, 2015, are from the 2014–2015 school year.

Table 3.1. Demographic Characteristics by Percentage of 2015 Grade Ten Student Questionnaire Respondents

Variable	ELA (n=459,026)	Math (n=458,775)	
<i>Gender</i>	Female	48.9	49.0
	Male	51.1	51.0
<i>Ethnicity</i>	American Indian or Alaska Native	0.6	0.6
	Asian	8.1	8.1
	Pacific Islander	0.5	0.5
	Filipino	2.9	2.9
	Hispanic or Latino	52.3	52.3
	Black or African American	6.2	6.2
	White	26.0	26.0
	Two or More Races	3.4	3.4
<i>Disability and EL Status</i>	SWD, not EL	6.6	6.6
	EL, not SWD	9.3	9.3
	EL and SWD	2.3	2.3
	Neither EL or SWD	81.8	81.8
<i>Economically Disadvantaged (ED)</i>	No	45.9	45.9
	Yes	52.8	52.8

Table 3.2 presents the number of students who passed both the ELA and mathematics tests in 2015, only one of the two, and neither test. Just over 76 percent of all grade ten students were successful on both tests in 2015, while almost 13 percent of tenth graders did not pass either test.

Table 3.2. 2015 Grade Ten Students by Tests Passed

Tests Passed	Frequency	Percent
Both	363,827	76.3
Only ELA	27,513	5.8
Only Math	25,294	5.3
Neither	60,040	12.6

Comparisons on Student Perspective

We analyzed the trends and changes in students' perceptions after they took the CAHSEE mathematics and ELA tests, but before students knew their test results, by comparing:

- Grade ten student responses from 2005 to 2015;
- Grade ten student responses in 2015 by passing categories (whether they passed both tests, only ELA, only mathematics, or neither test);
- 2015 grade ten responses by key demographic characteristics (gender, ethnicity, disability status, EL status, economically disadvantaged status); and
- 2015 grade twelve responses compared to their 2013 responses as grade ten students, by those who passed in 2015 and those who did not.

The first part of this chapter presents the results of the first two sets of analyses—comparing student responses across years and by passing category. The results are organized by topic and question, and the response data are displayed using both tables and graphs; trend data is displayed using scatter plots and passing category data using bar graphs. Modifications to test questions and response options have been applied as recently as the current administration. We note these changes and advise readers to consider them when observing trend data.

The second part of this chapter presents the results comparing student responses by key demographic characteristics. We also present a summary of findings by topic.

Lastly, we present and discuss a selection of responses of 2015 grade twelve students who are still attempting to pass the CAHSEE.

Findings from 2015 Grade Ten Student Responses

Test Preparation

Question 1: How did you prepare for this test?

Table 3.3 shows how grade ten students report they prepared for the CAHSEE between 2007 and 2015. There has been an increase in grade ten students reporting they did not do anything in addition to course work to prepare for the CAHSEE ELA test between 2007 and 2015 for ELA and mathematics. Additionally, over time there has been an increase in the number of students reporting a teacher helped them to prepare. Note that one option (marked A.*) was not included on the 2011–15 questionnaires and the wording for options C and D was modified to read “an additional class” rather than “a special class” for the 2014 and 2015 questionnaires.

**Table 3.3. Question 1: How Did You Prepare for This Test? (Mark All That Apply)
(Grade Ten Students' Responses 2007–2015)**

After ELA	Percentage									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
A.* A teacher or counselor told me about the purpose and importance of the test.	34.4	35.6	37.0	36.6	n/a	n/a	n/a	n/a	n/a	
A. I practiced on questions similar to those on the test.	33.8	33.6	32.0	35.3	33.5	33.7	33.3	33.6	33.9	
B. A teacher spent time in class helping me to get ready to take the test.	36.4	37.1	37.9	38.5	42.8	43.9	42.9	43.1	42.1	
C.* I took an additional class during the regular school day that covered the topics on the CAHSEE.	5.1	5.7	6.4	6.6	7.5	7.5	7.0	5.7	5.3	
D.* I took an additional class after school or during the summer that covered the topics on the CAHSEE.	3.1	3.0	3.3	3.3	3.7	4.1	3.5	3.3	3.0	
E. I did not do anything in addition to regular course work to prepare for this test.	20.6	29.9	29.5	27.7	34.1	33.4	33.6	34.3	35.1	

After Mathematics	Percentage									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
A.* A teacher or counselor told me about the purpose and importance of the test.	31.6	32.3	34.5	34.4	n/a	n/a	n/a	n/a	n/a	
A. I practiced on questions similar to those on the test.	33.3	33.2	33.2	36.2	38.4	39.2	38.7	39.4	39.6	
B. A teacher spent time in class helping me to get ready to take the test.	24.3	24.6	25.3	26.2	27.0	27.6	25.7	26.2	25.2	
C.* I took an additional class during the regular school day that covered the topics on the CAHSEE.	4.5	4.9	5.7	5.7	6.8	6.8	6.3	5.2	4.7	
D.* I took an additional class after school or during the summer that covered the topics on the CAHSEE.	2.8	2.7	3.0	3.1	3.4	3.7	3.3	3.0	2.8	
E. I did not do anything in addition to regular course work to prepare for this test.	37.3	36.9	35.7	34.1	41.9	41.3	42.3	42.8	43.6	

* The first response option A was not included on the 2011–2014 student questionnaires.

** The wording for response options for C and D was modified from “a special class” to “an additional class” for the 2014 student questionnaire.

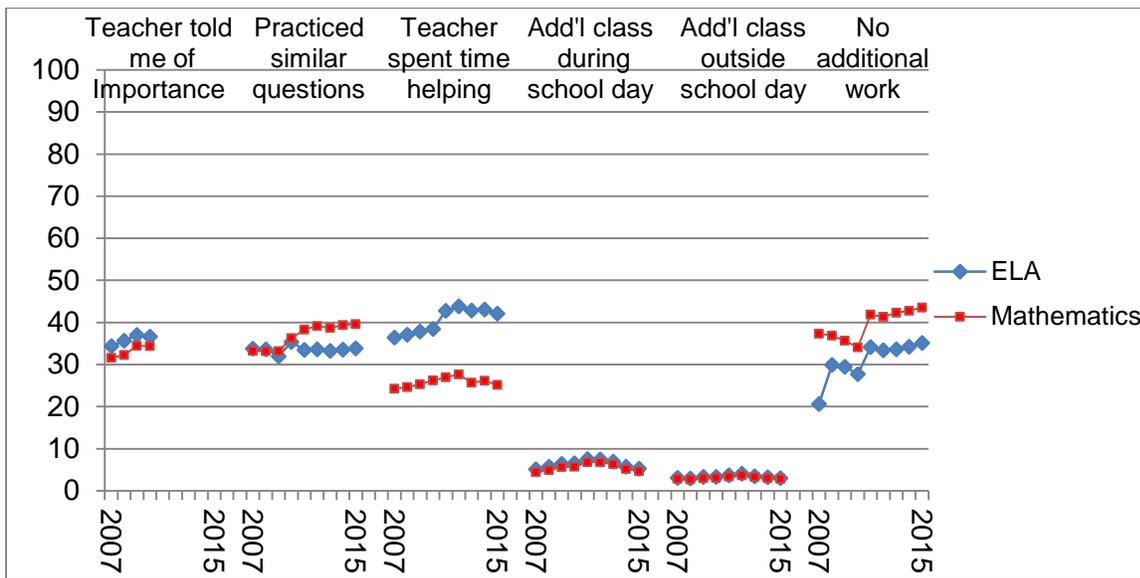


Figure 3.1. Test preparation by grade ten students 2007–2016 as reported after CAHSEE ELA and mathematics tests, in percentages.

Table 3.4 shows that students who passed both tests were less likely than students who passed only one test to have taken additional measures to prepare for the CAHSEE. Regardless of number of tests passed, a higher percentage of students reported practicing on similar questions for the mathematics exam than for the ELA exam; however, a higher percentage of students reported that a teacher spent time helping them get ready for the ELA exam compared to the mathematics exam.

Table 3.4. Question 1: How Did You Prepare for This Test? (Mark All That Apply) (Percentages of 2015 Grade Ten Student Responses by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I practiced on questions similar to those on the test.	33.6	35.3	35.2	34.9	38.9	41.2	46.6	41.6
B. A teacher spent time in class helping me to get ready to take the test.	43.4	39.4	40.6	34.0	24.5	26.2	31.8	27.4
C. I took an additional class during the regular school day that covered the topics on the CAHSEE	4.2	8.0	10.1	10.7	3.8	6.6	8.6	9.2
D. I took an additional class after school or during the summer that covered the topics on the CAHSEE	2.7	3.4	4.9	4.6	2.6	3.2	4.1	4.1
E. I did not do anything in addition to regular course work to prepare for this test.	37.4	27.5	24.9	24.0	47.2	34.7	25.8	26.1

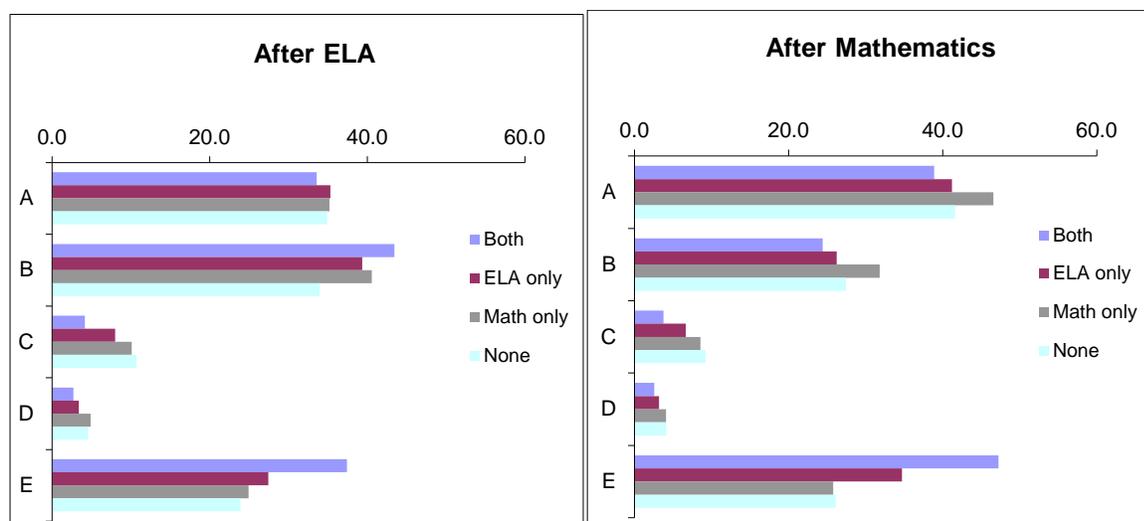


Figure 3.2. Test preparation of students as reported after taking CAHSEE ELA and mathematics tests, by tests passed in 2015, in percentages.

Question 2: What materials did you use to prepare for this test?

Question 2 was added to the student questionnaire in 2009. Response options were modified in 2011 to provide a new choice which may affect the comparability of student responses over time. Almost twice as many students in 2015 reported having used the

CAHSEE Online Prep than in 2009 to prepare for the CAHSEE exams. The percentage of grade ten students using textbooks to prepare has decreased greatly over time for both tests.

Table 3.5. Question 2: What Materials Did You Use to Prepare for This Test? (Mark All That Apply) (Grade Ten Student Responses, 2009–2015)

After ELA	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. Textbooks	20.0	18.7	13.0	12.6	10.9	9.5	8.3
B. ELA Student Guide	19.2	29.4	11.2	10.7	13.6	13.6	13.4
C.* Mathematics Student Guide	8.1	13.3	n/a	n/a	n/a	n/a	n/a
C. CAHSEE Online Prep**	8.5	7.5	12.2	12.9	13.6	13.8	16.4
D. Released (sample) test questions	39.8	37.7	39.9	41.6	40.1	38.8	36.2
E. Other Resources	37.7	32.9	20.2	20.4	19.0	19.8	19.3
F. I did not use any materials to prepare.	n/a	n/a	27.9	27.3	27.4	29.0	30.4

After Mathematics	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. Textbooks	28.9	27.2	17.5	16.5	14.0	13.3	11.3
B.* ELA Student Guide	9.6	12.8	n/a	n/a	n/a	n/a	n/a
B. Mathematics Student Guide	12.6	21.9	14.0	13.8	19.6	19.8	19.6
C. CAHSEE Online Prep**	7.5	6.8	10.0	10.6	10.9	11.2	13.3
D. Released (sample) test questions	29.8	28.6	28.8	30.6	28.2	27.1	24.9
E. Other resources	38.7	34.0	16.3	16.5	14.2	14.9	14.7
F. I did not use any materials to prepare.	n/a	n/a	35.6	35.3	35.9	37.2	38.2

* Response option not included in 2011–15.

** Wording slightly modified in 2011–15.

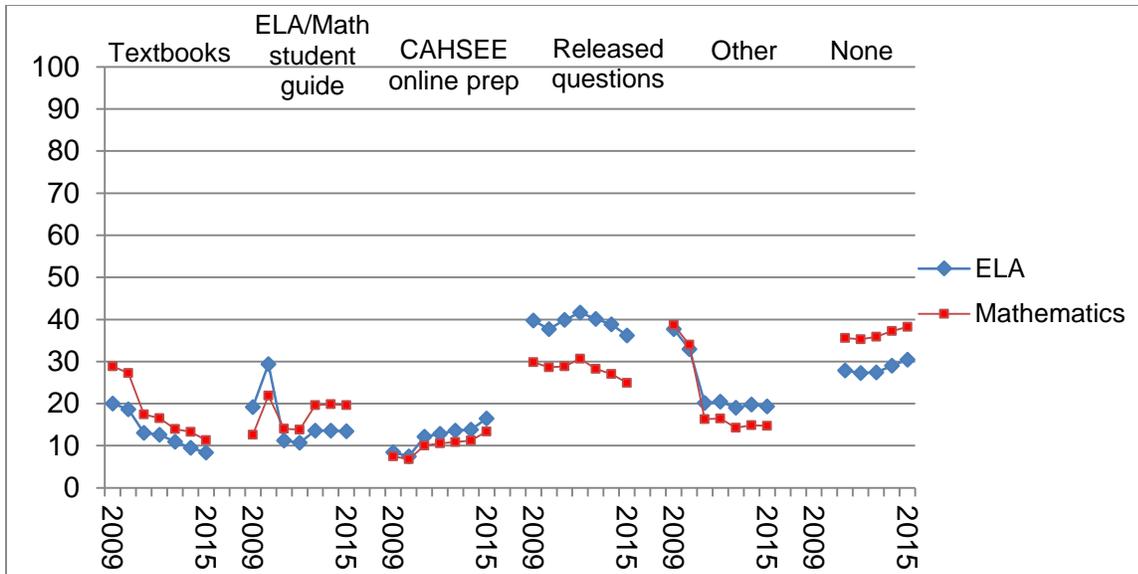


Figure 3.3. Students' report of materials used to prepare for CAHSEE ELA and mathematics tests, 2009–2015, in percentages.

Table 3.6 shows that students who passed both tests were the least likely of all grade ten students to use textbooks, the ELA or mathematics student guides, or the CAHSEE online prep to prepare; however, these students were the most likely to use released (sample) items in preparation for the tests.

Table 3.6. Question 2: What Materials Did You Use to Prepare for This Test? (Mark All That Apply) (Percentages of Grade Ten Student Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. Textbooks	7.0	11.2	13.3	15.2	10.1	14.5	17.1	17.1
B. ELA/Math Student Guide	12.5	15.3	18.5	17.8	17.9	23.5	30.1	27.0
C. CAHSEE On-line Prep	15.7	18.5	21.0	19.1	12.7	14.7	17.5	15.6
D. Released (sample) test questions	39.5	29.8	25.0	17.5	26.8	20.8	19.7	13.9
E. Other resources	18.6	23.1	23.6	21.3	13.7	19.1	19.5	18.2
F. I did not use any materials to prepare	32.5	22.3	20.6	21.5	42.0	26.6	21.1	21.8

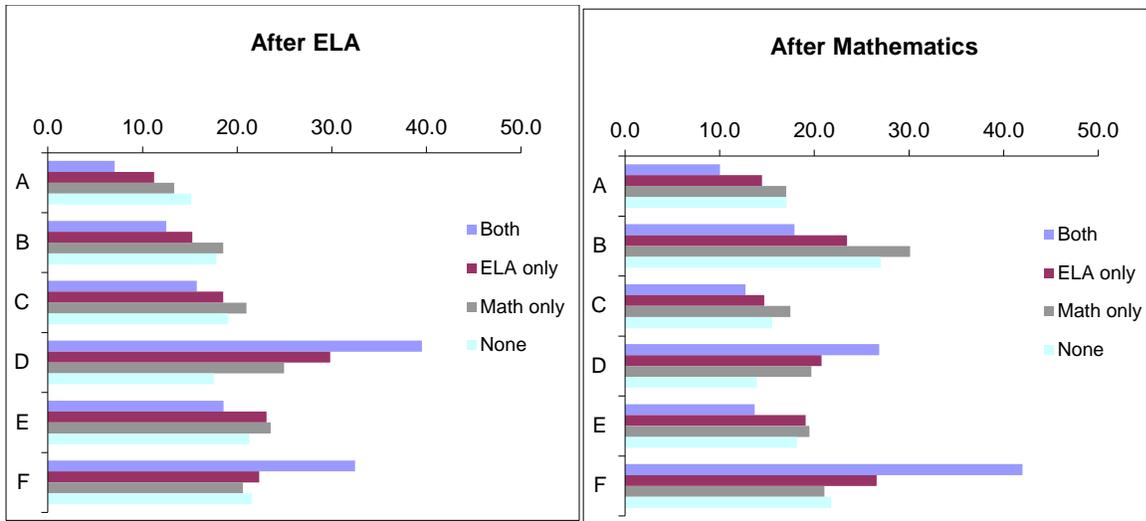


Figure 3.4. Materials used by grade ten students, by percentage, as reported after taking ELA and mathematics tests in 2015.

Question 14: Thinking back to your middle school years, what helped you do well on this test? (Mark all that apply.)

Question 14 was new for the 2014 assessment. It appears out of order in this section because it fits best with preparation questions. This seeks to examine activities in middle school that helped prepare students for the CAHSEE. The results in 2014 and 2015 were very similar; more than half of the students, after both ELA and mathematics, indicated their middle school teachers helped them learn test taking and study skills, and more than one-third of students reported after taking the mathematics examination that their middle school mathematics teachers covered CAHSEE topics. Approximately 18 percent of students were unable to recall any activity in middle school that prepared them for the assessment (see Table 3.7).

Table 3.7. Question 14: Thinking back to your middle school years, what helped you do well on this test? (Mark all that apply.) (Grade Ten Students' Responses, 2014–2015)

After ELA	Percentage	
	2014	2015
A. Teachers helped me learn study skills and test taking skills.	57.1	56.2
B. ELA teachers covered topics that were on the CAHSEE.	26.8	27.5
C. I kept up with my school assignments in ELA.	25.2	25.6
D. Teachers helped me learn the English language.	16.5	16.2
E. I was in a support program (AVID ¹ , GEAR UP, other).	6.2	6.2
F. I do not recall any activity that helped me do well on this test.	6.2	6.2
After Mathematics	Percentage	
	2014	2015
A. Teachers helped me learn study skills and test taking skills.	52.8	52.1
B. Math teachers covered topics that were on the CAHSEE.	36.9	36.8
C. I kept up with my school assignments in Math.	31.1	31.1
D. Teachers helped me learn the English language.	6.7	6.8
E. I was in a support program (AVID*, GEAR UP, other).	5.6	5.7
F. I do not recall any activity that helped me do well on this test.	18.2	18.0

*AVID is Advancement Via Individual Determination. The acronym was not defined on the questionnaire.

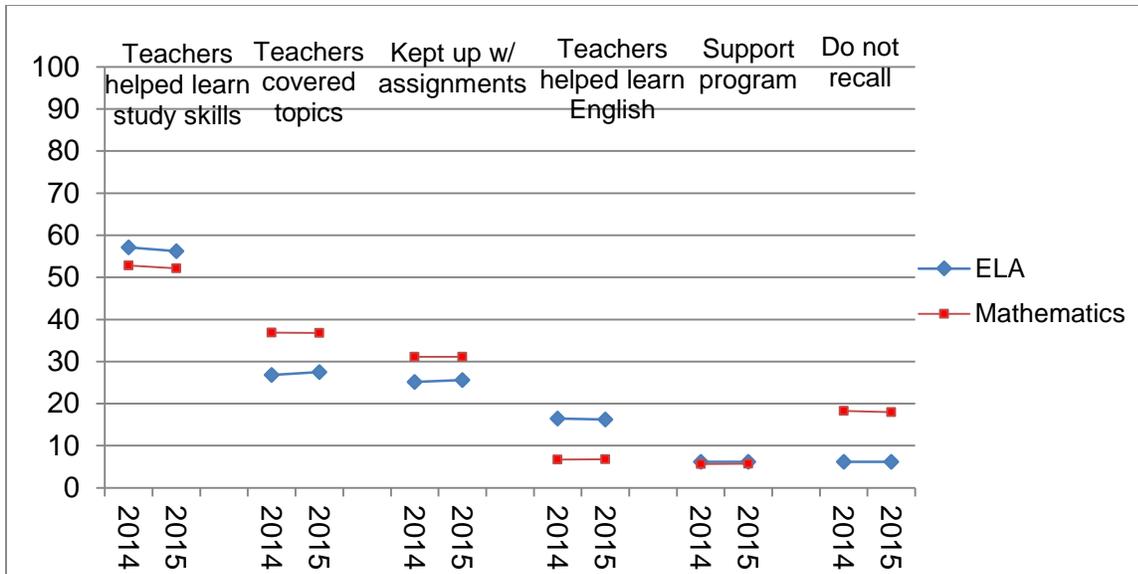


Figure 3.5. Recollections of middle school activities that helped students prepare for the CAHSEE, 2009–2015, in percentages.

Compared to other groups, those who passed both tests were most likely to recall a middle school teacher helping them learn study and test taking skills, and more likely to report having learned topics that were on the CAHSEE in middle school, particularly in mathematics. (See Table 3.8).

Table 3.8. Question 14: Thinking back to your middle school years, what helped you do well on this test? (Mark all that apply.) (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. Teachers helped me learn study skills and test taking skills.	58.1	52.0	50.4	46.0	53.7	45.7	50.2	44.1
B. ELA/Math teachers covered topics that were on the CAHSEE.	29.5	20.5	20.5	18.0	40.0	24.3	28.0	21.5
C. I kept up with my school assignments in ELA/Math.	28.5	14.2	15.4	12.7	34.6	16.0	20.6	16.1
D. Teachers helped me learn the English language.	16.2	13.1	18.8	16.5	6.5	5.0	9.0	9.0
E. I was in a support program (AVID, GEAR UP, other).	6.4	5.5	5.9	5.5	5.9	5.2	5.6	5.3
F. I do not recall any activity that helped me do well on this test.	17.2	19.9	17.1	16.5	17.4	26.2	16.8	18.6

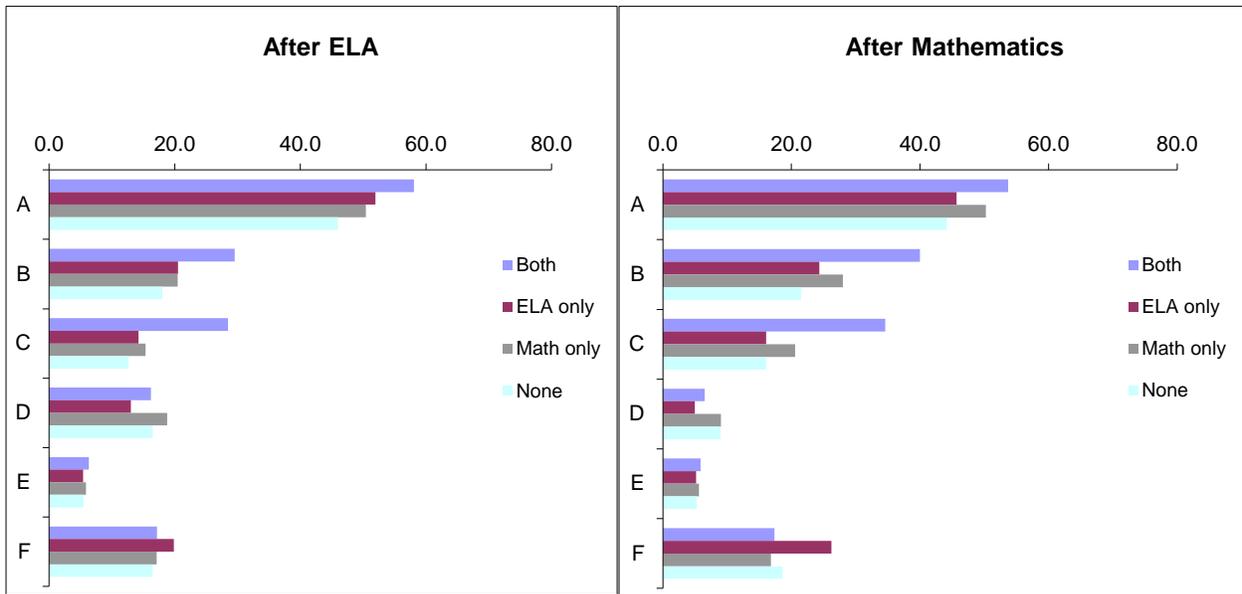


Figure 3.6. Recollections of middle school activities that helped students prepare for the CAHSEE, by tests passed in 2015, in percentages.

Graduation Expectations and Post-High School Plans

Question 3: Do you think you will receive a high school diploma?

Question 3 was revised for the 2009 CAHSEE administration, providing seven years of comparison data. Option F was modified in 2011. Responses have remained relatively stable over time, with most students expressing the expectation that they will graduate on time (see Table 3.9).

Table 3.9. Question 3: Do You Think You Will Receive a High School Diploma? (Grade Ten Student Responses, 2009–2015)

After ELA	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. Yes, with the rest of my class (or earlier).	84.4	84.3	83.8	85.0	85.7	85.8	85.8
B. Yes, but I will likely have to take classes after my original graduation date.	9.9	10.2	10.4	9.8	9.2	9.2	9.1
C. Yes, but I will pursue a diploma in Adult Education.	2.5	2.4	2.5	2.3	2.2	2.2	2.3
D. No, I probably will not receive a high school diploma.	2.1	2.0	2.0	1.7	1.7	1.7	1.8
E. No, I plan to take the GED ¹ .	0.7	0.7	0.7	0.6	0.5	0.5	0.5
F. No, but I plan to go to community college.	n/a	n/a	0.7	0.7	0.6	0.6	0.6
F.* No, I plan to take the CHSPE ² .	0.4	0.4	n/a	n/a	n/a	n/a	n/a

After Mathematics	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. Yes, with the rest of my class (or earlier).	84.0	83.9	82.9	84.3	84.7	84.9	84.8
B. Yes, but I will likely have to take classes after my original graduation date.	10.1	10.3	10.7	10.0	9.5	9.4	9.4
C. Yes, but I will pursue a diploma in Adult Education.	2.3	2.3	2.4	2.2	2.3	2.2	2.3
D. No, I probably will not receive a high school diploma.	2.4	2.4	2.4	2.1	2.1	2.1	2.3
E. No, I plan to take the GED.	0.8	0.8	0.8	0.7	0.7	0.6	0.6
F. No, but I plan to go to community college.	n/a	n/a	0.9	0.8	0.8	0.8	0.8
F.* No, I plan to take the CHSPE.	0.5	0.5	n/a	n/a	n/a	n/a	n/a

*Option F was revised in 2011.

1 GED® is General Educational Development. Before it became a registered trademark, the acronym “GED” was commonly used to refer to the GED test. The student questionnaire did not include the registration symbol, nor was the acronym defined on the questionnaire.

2 CHSPE is California High School Proficiency Examination. The acronym was not defined on the questionnaire.

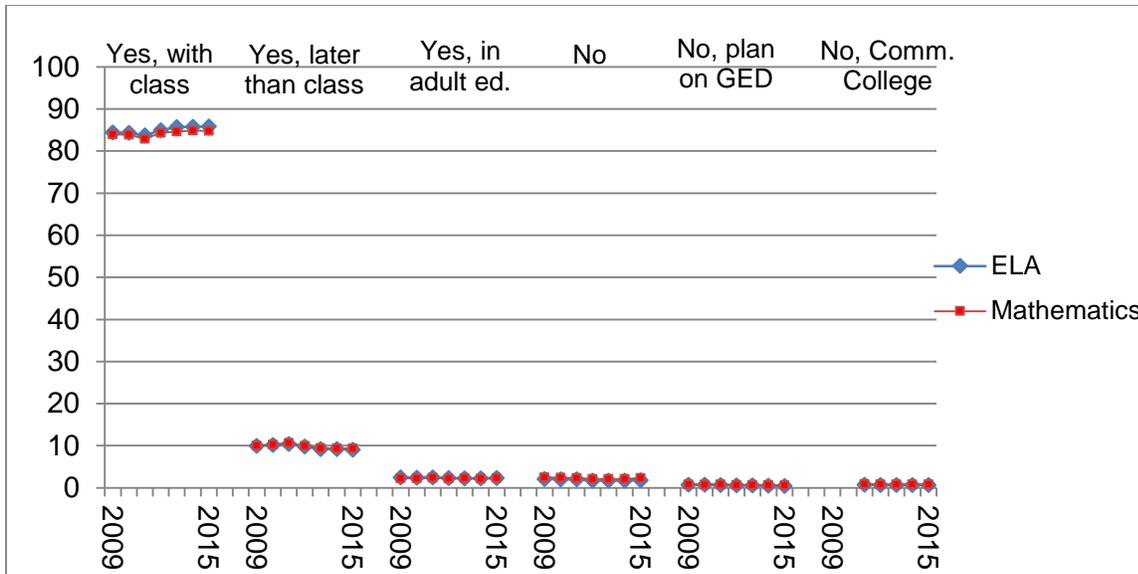


Figure 3.7. Comparison of grade ten students' expectations of receiving a high school diploma, by percentage, after taking ELA and mathematics tests, 2009–2015.

As shown in Table 3.10, the majority of students in each group (passed both tests, passed ELA only, passed mathematics only, or passed none) responded that they were most likely to receive a high school diploma with the rest of their class or earlier. However, only slightly more than half of those who did not pass either test selected this option, while over 90 percent of those who passed both tests did. Among grade ten students who passed neither test, 8.2 percent (after ELA) and 9.2 percent (after mathematics) do not expect to receive a high school diploma.

Table 3.10. Question 3: Do You Think You Will Receive a High School Diploma? (Percentages of Grade Ten Students' Responses in 2015 by Pass or Not Pass)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. Yes, with the rest of my class (or earlier).	91.8	72.7	65.7	53.1	90.9	68.9	67.4	52.1
B. Yes, but I will likely have to take classes after my original graduation date.	5.6	19.2	21.7	25.6	5.9	20.7	20.6	25.4
C. Yes, but I will pursue a diploma in Adult Education.	1.4	3.1	5.5	8.1	1.4	3.3	4.7	8.1
D. No, I probably will not receive a high school diploma.	0.7	3.3	4.6	8.2	1.0	4.6	4.9	9.2
E. No, I plan to take the GED.	0.2	0.7	0.7	2.0	0.4	1.1	0.8	2.2
F. No, but I plan to go to community college.	0.3	1.0	1.8	3.0	0.4	1.4	1.7	3.1

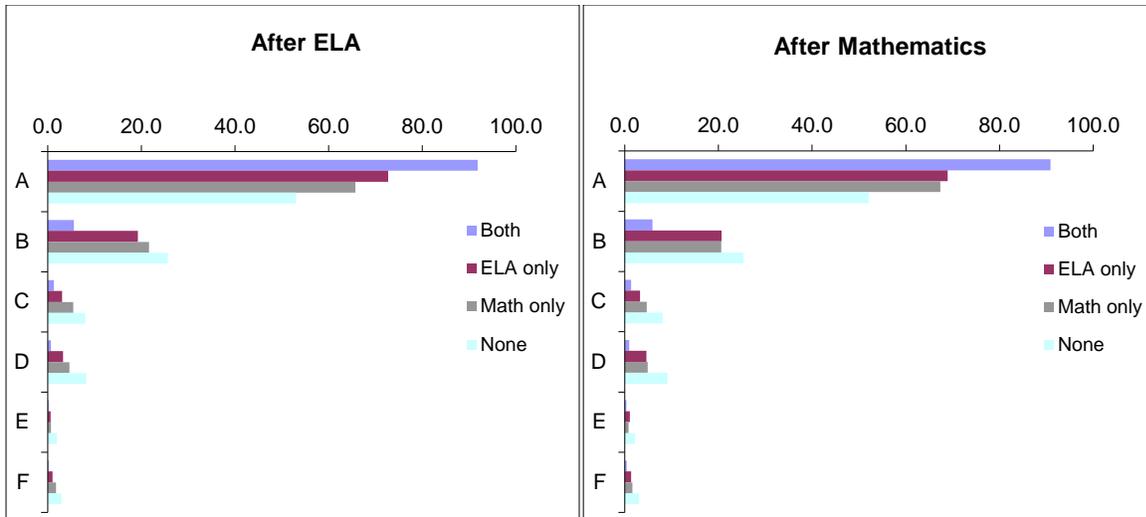


Figure 3.8. Comparison of grade ten students' expectations of receiving a diploma, by tests passed in 2015, in percentages.

Question 4: What might prevent you from obtaining a high school diploma?

Table 3.11 reveals that between 2007 and 2015 grade ten students have been fairly consistent in their concerns about what might prevent them from receiving a high school diploma; however, in 2007 the percentage concerned with the CAHSEE was slightly higher than the percentage concerned with inability to pass a required course. In more recent years inability to pass a required course has been the most frequent concern. Each year, the majority of students have expressed confidence they would receive a high school diploma.

Table 3.11. Question 4: What Might Prevent You From Receiving a High School Diploma? (Mark All That Apply) (Grade Ten Responses, 2007–2015)*

After ELA	Percentage								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. I may not pass all the required courses.	19.7	18.8	21.8	21.7	19.6	19.4	18.9	19.4	19.7
B. I may not pass the CAHSEE exam.	20.6	18.9	20.6	18.7	15.9	16.0	16.4	16.2	16.3
C. I may drop out before the end of 12th grade.	2.5	2.3	2.6	2.5	2.3	2.0	1.9	1.9	2.0
D. I may not meet some other graduation requirement.	13.4	12.6	12.2	12.2	11.8	11.7	11.2	12.0	12.0
E. I am confident I will receive a high school diploma.	63.3	65.6	63.1	63.9	65.5	66.6	66.4	66.4	65.9

After Mathematics	Percentage								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. I may not pass all the required courses.	21.4	20.3	23.8	23.6	21.0	20.9	20.1	20.7	20.9
B. I may not pass the CAHSEE exam.	23.3	21.4	22.8	21.1	19.0	18.8	19.3	19.1	19.7
C. I may drop out before the end of 12th grade.	2.8	2.6	2.9	2.8	2.5	2.2	2.1	2.2	2.3
D. I may not meet some other graduation requirement.	12.6	11.8	10.3	10.2	9.8	9.7	9.3	9.8	9.8
E. I am confident I will receive a high school diploma.	59.8	62.2	59.4	60.3	62.0	63.3	62.9	62.9	62.0

*In 2009 the wording of question 4 was changed from 'what might prevent you from graduating high school' to 'what might prevent you from receiving a high school diploma.'

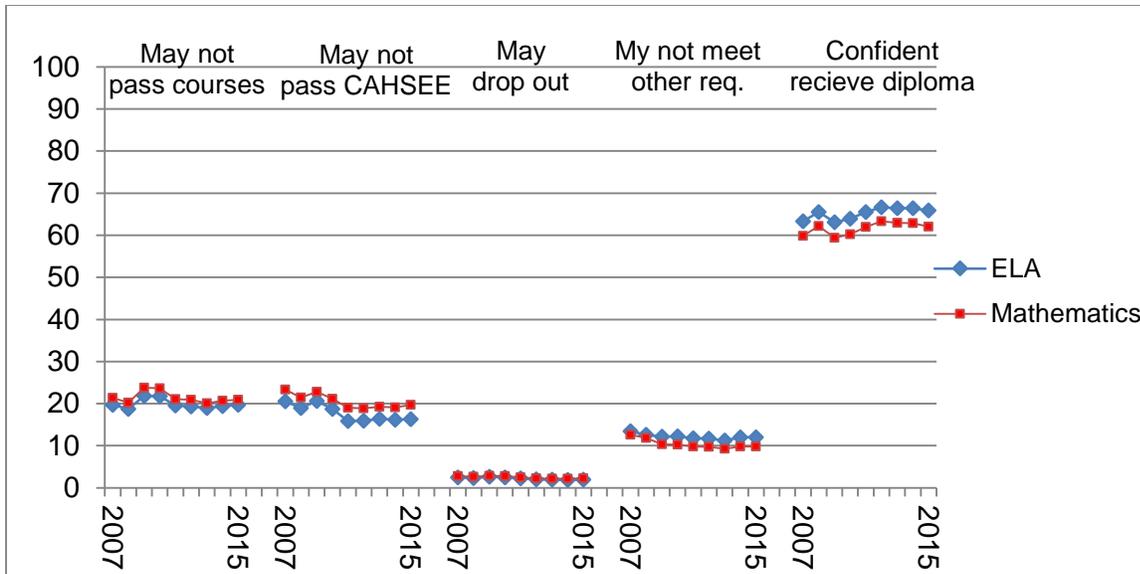


Figure 3.9. Grade ten respondents' reasons why they might not graduate with their class, as reported from 2007 through 2015, in percentages.

Table 3.12 shows that for those not confident they would receive a high school diploma, those who passed both tests were most likely to believe an inability to pass all the required courses would prevent them from doing so. For those who did not pass either test, passing the CAHSEE was their biggest concern. Less than a third of those who did not pass either test in grade ten felt confident they would receive a diploma.

Table 3.12. Question 4: What Might Prevent You From Receiving a High School Diploma? (Mark All That Apply) (Percentages of Grade Ten Students' Responses by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I may not pass all the required courses.	17.5	32.5	28.7	26.2	18.7	33.5	31.0	26.8
B. I may not pass the CAHSEE exam.	11.7	30.9	35.0	37.9	14.9	40.9	35.3	41.3
C. I may drop out before the end of 12th grade	1.3	2.3	4.3	6.1	1.6	2.8	4.4	6.3
D. I may not meet some other graduation requirement.	10.9	18.8	16.1	14.1	9.0	14.2	13.3	12.0
E. I am confident I will receive a high school diploma.	73.4	40.4	38.6	31.3	69.6	32.6	36.0	28.3

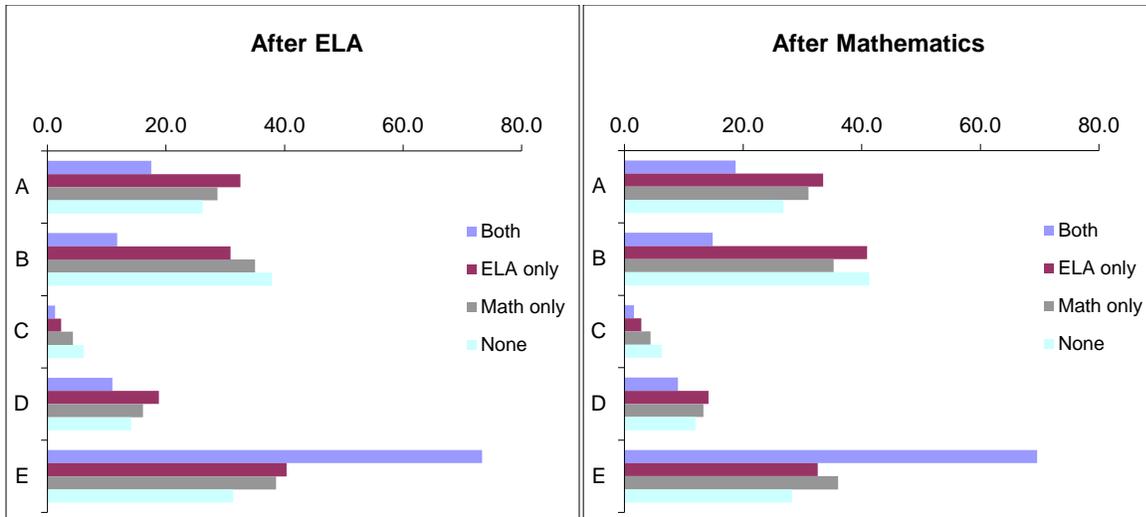


Figure 3.10. Reasons reported by grade ten students for possibly not receiving a diploma on time, by tests passed in 2015, in percentages.

In addition to examining the responses to Question 4 by trend and by tests passed, we also examined responses based on students’ responses to option “B” of the question, comparing students who believed that not passing the CAHSEE might prevent them from receiving a high school diploma with those who did not feel this way. Table 3.13 presents these results. Disaggregating data in this way reveals that approximately 30 percent of those who were concerned with passing the CAHSEE also felt that failure to pass the required course work might prevent them from a diploma compared to less than 20 percent of those who did not think failure to pass the CAHSEE would prevent them from graduating. Approximately 75 percent of students who did not think the CAHSEE would prevent them from earning a high school diploma were confident that they would graduate.

Table 3.13. Question 4: What Might Prevent You From Receiving a High School Diploma? (Mark All That Apply) (Percentages of Grade Ten Students’ Responses in 2015 by Response to Option B: ‘I may not pass the CAHSEE exam’)

Response	After ELA Questionnaire		After Math Questionnaire	
	Selected Option 'B'	Did not Select Option 'B'	Selected Option 'B'	Did not Select Option 'B'
A. I may not pass all the required courses.	30.8	17.6	28.9	19.0
B. I may not pass the CAHSEE exam.	100.0	0.0	100.0	0.0
C. I may drop out before the end of 12th grade.	3.1	1.7	2.6	2.2
D. I may not meet some other graduation requirement.	20.4	10.3	14.7	8.6
E. I am confident I will receive a high school diploma.	12.9	76.2	9.6	74.9

Question 5: What do you think you will do after high school?

Response option “F” for Question 5 was modified in 2009 and we include only the comparable data in Table 3.14. The data reveal a slight upward trend in the percentage of students expecting to attend a four-year college between 2009 and 2015. The percentage of students expecting to work full time or attend a vocational, technical, or trade school has remained relatively stable over time.

Table 3.14. Question 5: What Do You Think You Will Do After High School? (Responses from Grade Ten Students, 2009–2015)

After ELA	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. I will join the military.	5.0	5.8	6.1	6.1	6.6	6.4	6.1
B. I will go to a community college.	22.8	22.1	19.8	18.7	17.0	16.9	17.3
C. I will go to a 4-year college or university.	60.0	60.1	62.0	63.5	64.7	64.7	64.7
D. I will go to a vocational, technical, or trade school.	4.0	3.9	4.0	3.9	3.9	3.7	3.6
E. I will work full-time.	4.3	4.1	4.1	3.9	3.9	4.0	4.0
F. Do something else (besides school, work, or the military).	3.9	4.0	3.9	3.8	4.0	4.3	4.3

After Mathematics	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. I will join the military.	5.6	6.3	6.5	6.5	7.0	6.8	6.6
B. I will go to a community college.	22.5	21.9	19.5	18.4	16.9	16.7	17.1
C. I will go to a 4-year college or university.	59.6	59.7	61.8	63.3	64.2	64.4	64.4
D. I will go to a vocational, technical, or trade school.	3.8	3.7	3.8	3.7	3.6	3.5	3.3
E. I will work full-time.	4.4	4.2	4.4	4.2	4.1	4.3	4.3
F. Do something else (besides school, work, or the military).	4.1	4.2	4.2	4.0	4.2	4.4	4.5

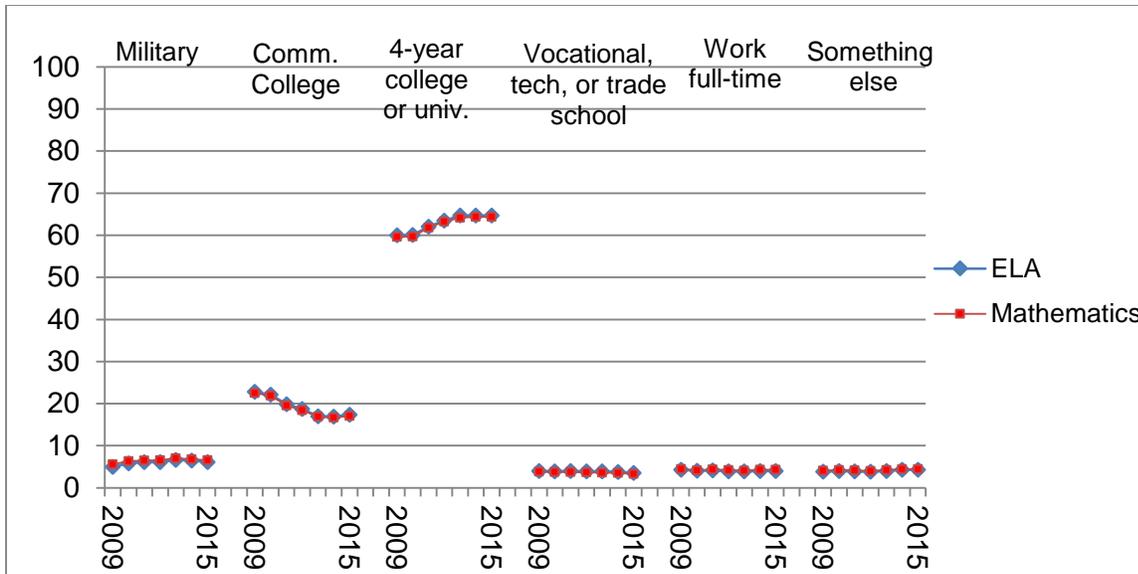


Figure 3.11. Grade ten students' estimate of what they will do after high school, by percentage, 2009–15, after taking ELA and mathematics tests.

The most popular response for all groups, regardless of tests passed, was to attend a four-year college or university; however, approximately twice the percentage of those passing both tests endorsed this option compared to those who did not pass either test (see Table 3.15). Those who did not pass either test were the most likely to express plans to join the military or work full time after high school.

Table 3.15. Question 5: What Do You Think You Will Do After High School? (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. Join the military	4.9	9.3	10.4	12.6	5.3	10.0	10.9	13.1
B. Go to a community college	15.4	27.9	23.8	24.2	15.1	27.4	23.2	24.2
C. Go to a 4-year college or university	70.9	43.3	45.1	34.9	70.6	42.8	45.9	34.9
D. Go to a vocational, technical, or trade school	3.2	4.5	5.0	5.6	2.9	4.3	4.6	5.4
E. Work full time	2.4	7.4	8.8	12.6	2.7	7.6	8.7	12.8
F. Do something else (besides school, work, or the military)	3.2	7.6	7.0	10.0	3.5	7.8	6.8	9.7

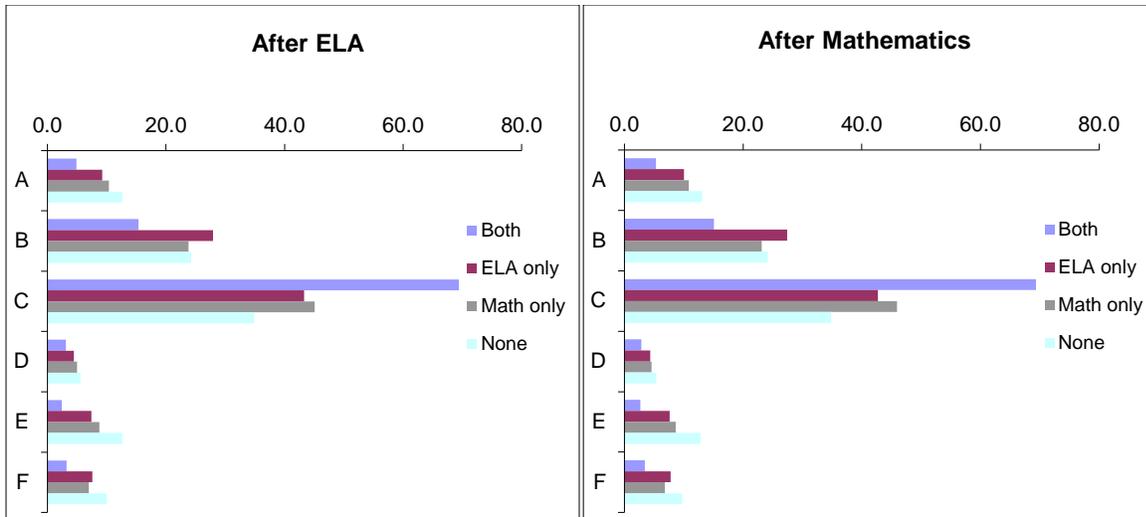


Figure 3.12. Grade ten students' estimate of what they will do after high school by tests passed in 2015, in percentages.

Test Performance and Influencing Factors

Question 6: How well did you do on this test?

In 2011 Question 6 was modified from "The main reasons I did not do as well as I could have on this test" to "How well did you do on this test." This change should be considered when examining the response data. The majority of students each year responded that they did as well as they could have on the tests—the percentage responding this way is fairly consistent between 2009 and the present; however, there is a slight dip in endorsement of this response after ELA between the years 2011 and 2013. Students consistently reported nervousness as the most common factor affecting their performance across time (see Table 3.16).

Table 3.16. Question 6: How Well Did You Do on This Test? (Mark All That Apply) (Grade Ten Students’ Responses, 2009–2015)

After ELA	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. I did as well as I could.	86.7	87.3	79.8	79.6	79.0	88.0	87.7
B. I was too nervous to do as well as I could.	9.0	8.6	6.8	7.4	7.8	8.5	8.6
C. I was not motivated to do well.	4.2	4.1	3.5	3.4	3.4	3.8	3.7
D. I did not have time to do as well as I could.	1.5	1.3	1.2	1.2	1.3	1.2	1.2
E. Conditions in the testing room made it difficult to concentrate.	4.7	4.3	3.7	3.7	3.5	3.7	3.7
F. There were other reasons why I did not do as well as I could.	4.6	4.1	3.4	3.6	3.5	3.6	3.6

After Mathematics	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. I did as well as I could.	86.4	86.3	84.8	85.9	85.7	86.2	85.3
B. I was too nervous to do as well as I could.	9.3	9.3	9.0	9.2	9.3	9.5	10.0
C. I was not motivated to do well.	3.9	3.9	4.3	4.0	3.9	4.0	4.0
D. I did not have time to do as well as I could.	1.3	1.2	1.2	1.1	1.2	1.1	1.2
E. Conditions in the testing room made it difficult to concentrate.	3.6	3.4	3.4	3.2	2.9	2.9	2.8
F. There were other reasons why I did not do as well as I could.	5.3	5.0	5.8	5.6	5.2	4.9	5.1

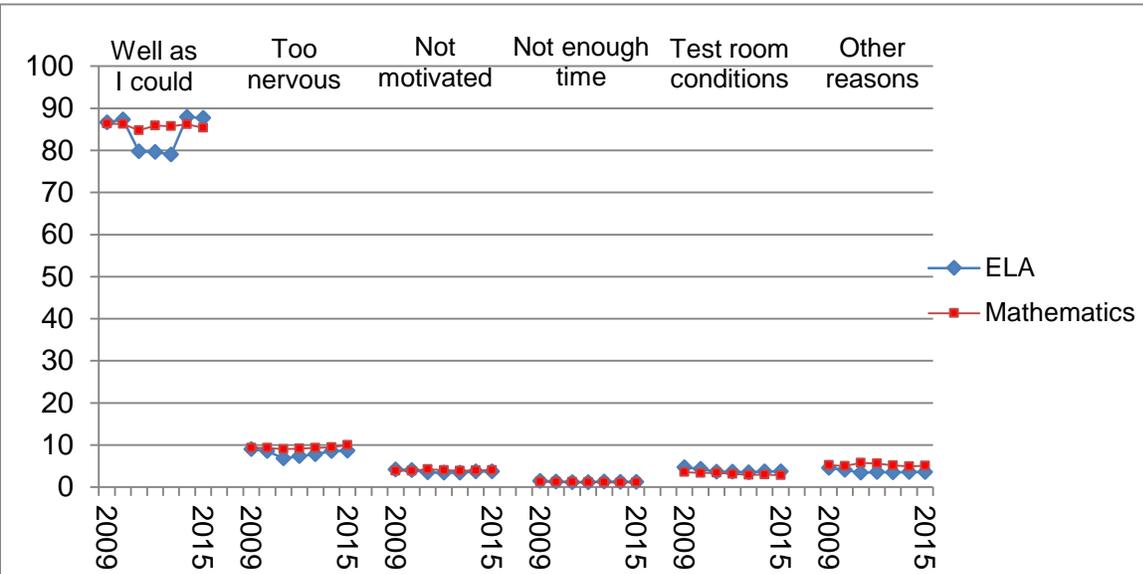


Figure 3.13. Reasons given by grade ten students for why they did or did not do as well as they could on ELA and mathematics tests in 2009–2015, in percentages.

Table 3.17 reveals that those who passed both tests were more likely than all other students to report that they did as well as they could on the CAHSEE; those who passed neither test were the least likely to do so. Among students who did not pass either test, approximately 20 percent of students said that nervousness affected how well they did on the CAHSEE. Very few students felt that time or testing conditions prevented them from doing as well as they could.

Table 3.17. Question 6: How Well Did You Do on This Test? (Mark All That Apply) (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I did as well as I could.	91.1	87.3	72.8	66.5	89.1	71.6	78.4	64.8
B. I was too nervous to do as well as I could.	6.5	10.1	20.4	19.8	7.8	18.4	17.0	20.3
C. I was not motivated to do well.	3.1	3.6	6.7	7.9	3.2	7.3	5.5	8.5
D. I did not have time to do as well as I could.	0.9	1.2	2.7	3.6	0.8	1.7	2.1	3.6
E. Conditions in the testing room made it difficult to concentrate.	3.6	3.1	4.0	4.5	2.7	3.1	2.8	4.0
F. There were other reasons why I did not do as well as I could.	3.2	3.0	5.7	5.8	4.5	10.7	4.7	7.4

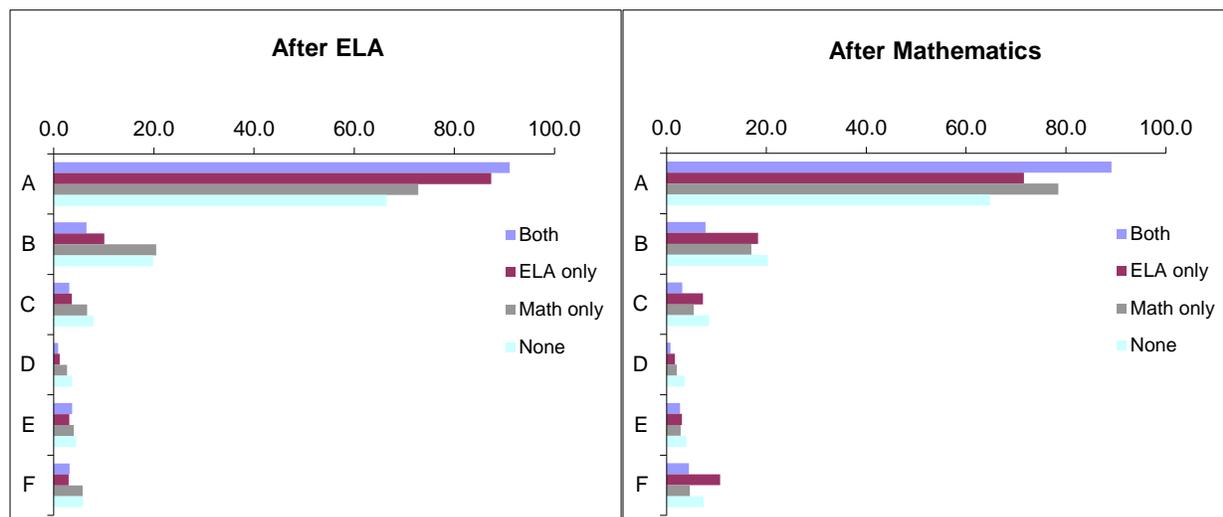


Figure 3.14. Reasons given by grade ten students for not doing as well as they could on the CAHSEE, by tests passed in 2015, in percentages.

Content and Instruction Coverage

Question 7: Were the topics on the test covered in courses you have taken?

Between 2005 and 2015 there has been a slight increase in the percentage of grade ten students who said that all or most of the topics covered on the CAHSEE were covered in courses. Table 3.18 presents responses to this question. Note that options “A” and “B” are combined to account for the intent that all or most of the content have been covered by grade ten. The vast majority of students reported familiarity with at least most of the ELA and mathematics topics (See Table 3.18).

Table 3.18. Question 7: Were the Topics on the Test Covered in Courses You Have Taken? (Grade Ten Students' Responses, 2005–2015)

After ELA	Percentage											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
A. Yes, all of them.												
B. Most, but not all of them (two-thirds or more were covered).	92.2	93.3	93.7	93.9	94.2	95.1	94.7	95.2	95.2	95.1	95.1	
C. Many topics on the test were not covered in my courses (less than two-thirds were covered).	7.7	6.7	6.25	6.1	5.8	4.9	5.4	4.8	4.8	4.9	4.9	

After Mathematics	Percentage											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
A. Yes, all of them.												
B. Most, but not all of them (two-thirds or more were covered).	88.9	90.6	91.5	92.3	92.4	92.7	91.3	92.0	92.3	92.5	92.1	
C. Many topics on the test were not covered in my courses (less than two-thirds were covered).	11.1	9.4	8.4	7.7	7.6	7.4	8.8	8.0	7.7	7.5	7.9	

*Options "A" and "B" were combined.

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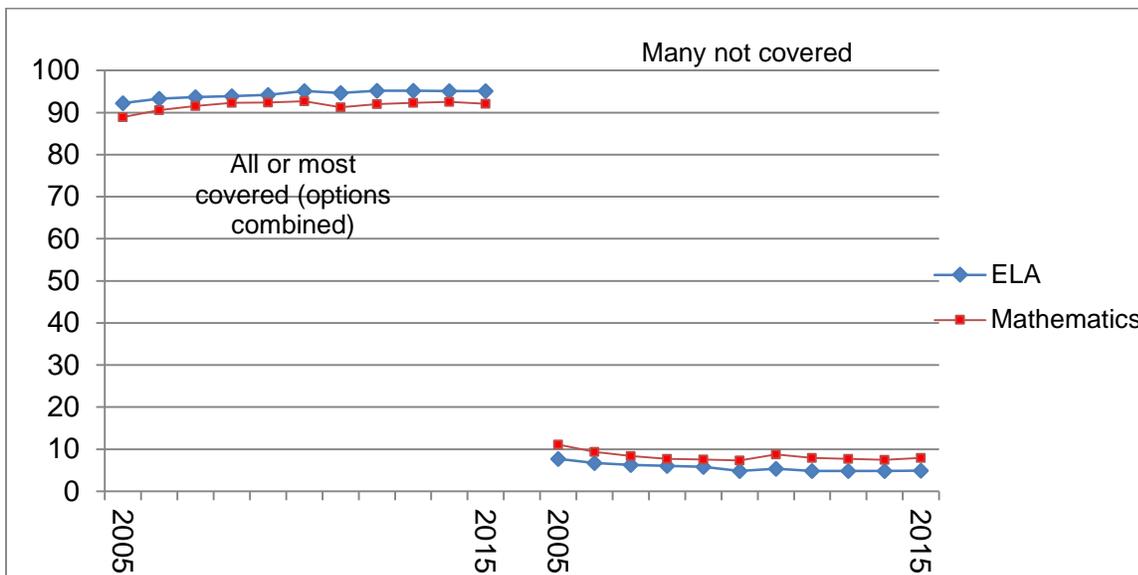


Figure 3.15. Opinions reported by grade ten students, 2005–2015, of whether all materials tested were covered in the courses they took, in percentages.

Table 3.19 reveals that students who did not pass either test were the most likely to report that topics on the CAHSEE were not covered in their courses. Also, students who passed only one test were more likely to report that topics were not covered than those who passed both. However, the majority of all categories of passing students said that at least most of the topics were covered in courses they had taken—including more than 80 percent of those who did not pass either test.

Table 3.19. Question 7: Were the Topics on the Test Covered in Courses You Have Taken? (Percentages of Grade Ten Students’ Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	<u>ELA</u> Only	<u>Math</u> Only	None	Both Tests	<u>ELA</u> Only	<u>Math</u> Only	None
A. Yes, all of them.	96.9	93.6	87.9	84.4	94.2	82.4	89.0	81.1
B. Most, but not all of them (two-thirds or more were covered).								
C. Many topics on the test were not covered in my courses (less than two-thirds were covered).	3.1	6.4	12.1	15.6	5.8	17.6	11.0	18.9

*Options “A” and “B” were combined.

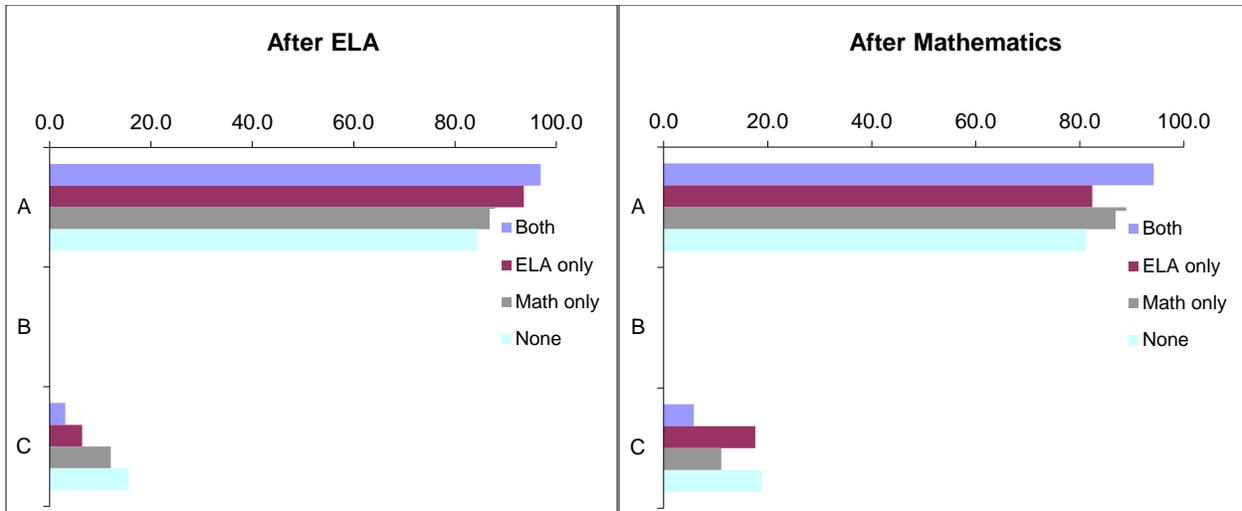


Figure 3.16. Responses of grade ten students as to whether topics tested on CAHSEE ELA and mathematics tests were covered in the courses they took, by tests passed in 2015, in percentages (Options A and B were combined).

Question 8: Were any of the questions on the test different from the types of questions or answer options you have encountered in your homework assignments or classroom tests?

Between 2005 and 2015 the percentage of students who reported CAHSEE question types being similar to those encountered in homework and classroom tests has increased by approximately 9 percent for ELA and 10 percent for mathematics. With the exception of ELA in 2015, there has also been a slight decrease over time in those reporting the questions were different from anything they had seen before (see Table 3.20).

Table 3.20. Question 8: Were Any of the Questions on the Test Different From the Types of Questions or Answer Options You Have Encountered in Your Homework Assignments or Classroom Tests? (Grade Ten Students' Responses, 2005–2015)

After ELA	Percentage										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. Yes, many were different from anything I had seen before.	9.3	11.9	11.37	11.3	11.1	10.1	9.7	9.5	9.8	9.9	9.7
B. Yes, a few were different from anything I had seen before.	49.5	48.9	47.84	49.0	45.1	43.5	41.3	40.6	41.5	41.6	40.3
C. No, all were similar to ones used in my classes.	41.2	39.1	40.73	39.7	43.8	46.4	48.9	49.9	48.8	48.5	50.0

After Mathematics	Percentage										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. Yes, many were different from anything I had seen before.	14.4	13.5	12.62	11.7	12.4	11.9	12.3	11.7	11.6	11.5	11.9
B. Yes, a few were different from anything I had seen before.	51.0	49.2	47.22	45.7	44.9	44.4	43.8	43.1	41.9	41.7	43.3
C. No, all were similar to ones used in my classes.	34.7	37.3	40.07	42.7	42.7	43.6	43.9	45.3	46.5	46.8	44.8

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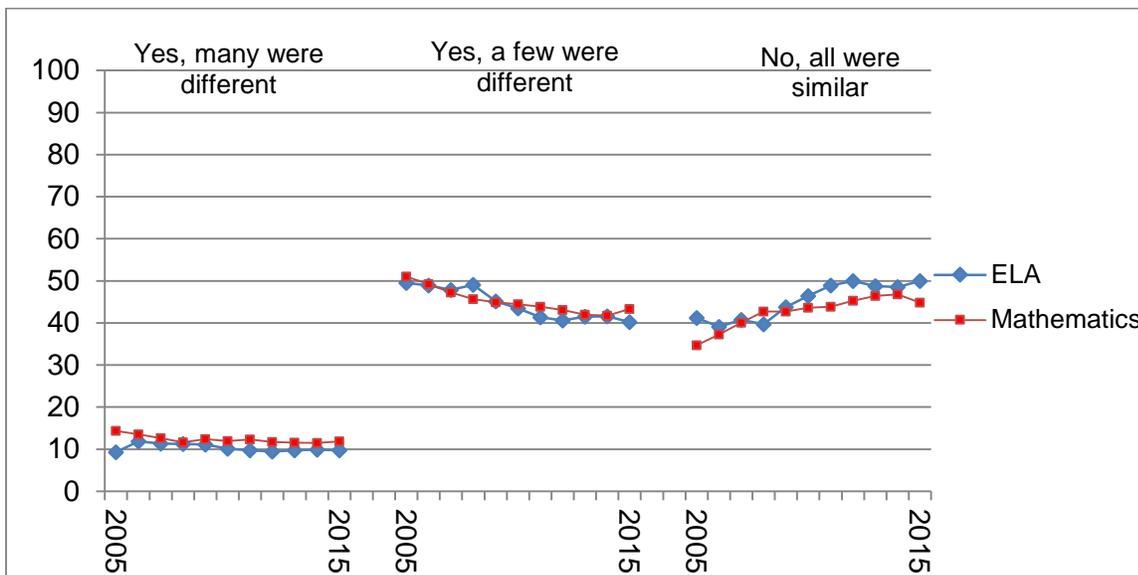


Figure 3.17. Percentage of grade ten students, 2005–2015, who said questions were the same or different from those encountered in class tests, in percentages.

When broken down by test passing category, the data reveal that the majority of those who passed both tests in 2015 reported that all questions were similar to those they had seen before. For those who did not pass one or both tests, the most common response was that a few questions were different from anything they had seen before (see Table 3.21).

Table 3.21. Question 8: Were Any of the Questions on the Test Different From the Types of Questions or Answer Options You Have Encountered in Your Homework Assignments or Classroom Tests? (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	<u>ELA</u> Only	<u>Math</u> Only	None	Both Tests	<u>ELA</u> Only	<u>Math</u> Only	None
A. Yes, many were different from anything I had seen before.	7.3	11.3	19.9	25.1	9.1	20.4	18.9	26.9
B. Yes, a few were different from anything I had seen before.	37.5	49.3	55.3	51.3	40.5	56.9	56.6	52.1
C. No, all were similar to ones used in my classes	55.3	39.4	24.8	23.7	50.3	22.6	24.5	21.0

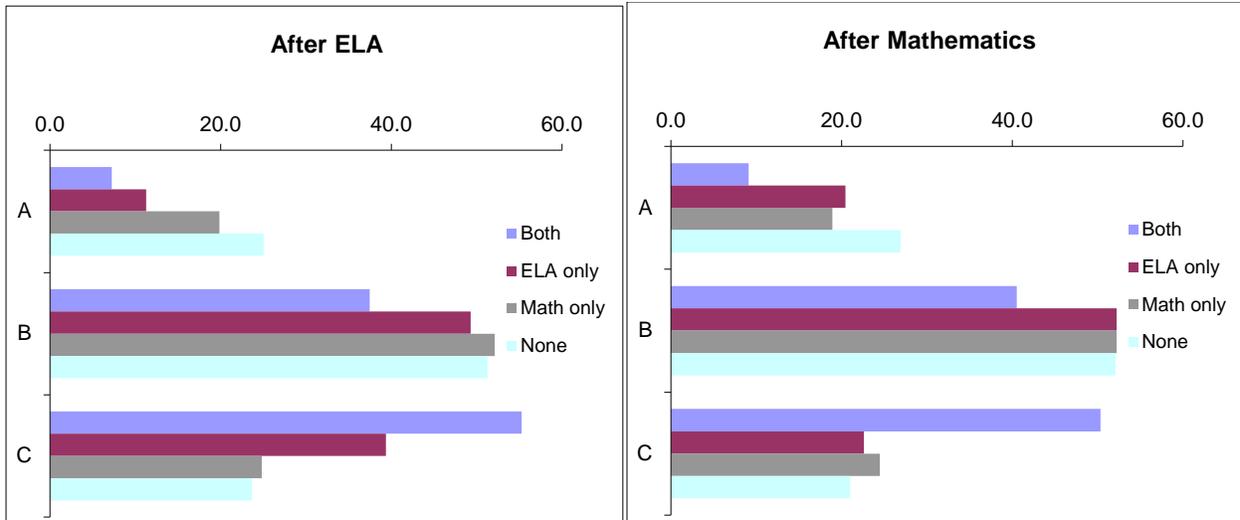


Figure 3.18. Grade ten students' responses regarding difference or similarity of CAHSEE tests to classroom tests, by CAHSEE tests passed in 2015, in percentages.

Question 9: Were the questions on this test more difficult than questions you were given in classroom tests or homework assignments?

Table 3.22 provides a summary of the percentage of students who felt test items were more difficult, the same, or easier than those they had encountered in class. Percentages for options “B” and “C” are combined because questions on the CAHSEE are intended to be either equally difficult or less difficult than those encountered in class. There has been a general upward trend between 2005 and 2015 in the percentage of students who found the test questions easier than or at the same difficulty as those encountered in their coursework. For both ELA and mathematics the percentages were lowest in this category in 2005 and highest in 2015.

Table 3.22. Question 9: Were the Questions on This Test More Difficult Than Questions You Were Given in Classroom Tests or Homework Assignments? (Grade Ten Students' Responses, 2005–2015)

After ELA	Percentage										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. Yes, the test questions were generally more difficult than the questions I encountered in my course work.	17.5	16.3	16.5	16.6	14.1	12.3	12.1	12.1	12.6	11.5	10.8
B. The test questions were generally about as difficult as the questions I encountered in my course work.	82.5	83.7	83.5	83.4	85.9	87.7	87.9	87.9	87.4	88.5	89.2
C. The test questions were generally easier than the questions I encountered in my course work.											
After Mathematics	Percentage										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. Yes, the test questions were generally more difficult than the questions I encountered in my course work.	22.3	20.8	19.2	17.8	17.6	16.9	19.0	17.2	16.5	16.2	16.2
B. The test questions were generally about as difficult as the questions I encountered in my course work.	77.7	79.2	80.8	82.2	82.4	83.1	81.0	82.8	83.5	83.9	83.8
C. The test questions were generally easier than the questions I encountered in my course work.											

*Options "B" and "C" were combined.

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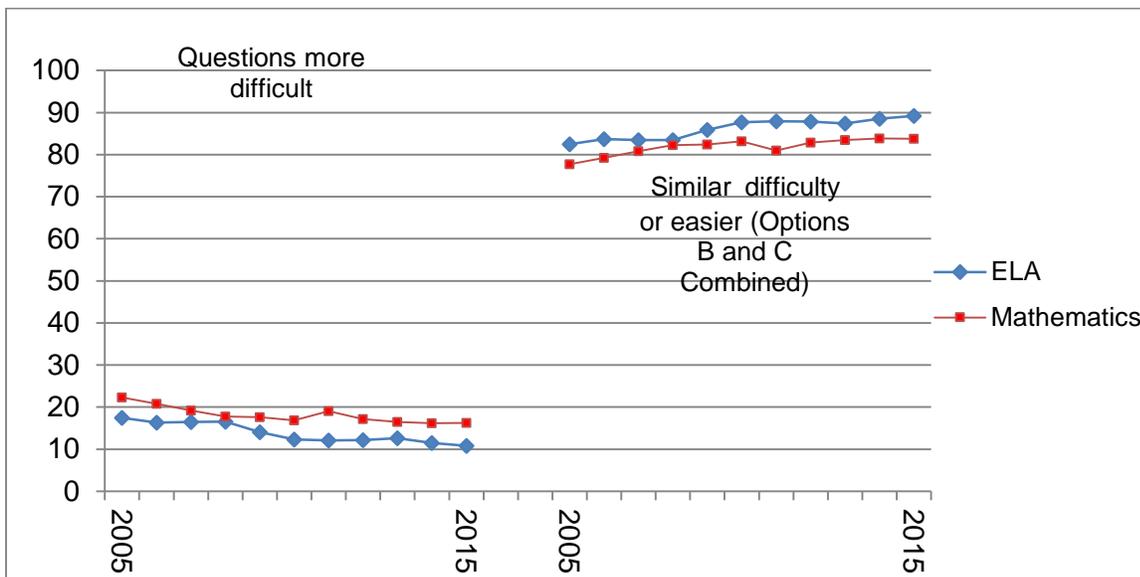


Figure 3.19. Percentage of grade ten students taking the CAHSEE, 2005–2015, who found the CAHSEE test questions more difficult, the same as, or less difficult than those encountered in course work (“B” and “C” combined in chart).

The majority of all students, regardless of tests passed, found the questions’ difficulty to be similar to or easier than what they had encountered in class; however, a much larger percentage of those who did not pass either test found the test questions to be more difficult than what they had seen compared to those who passed both tests (see Table 3.23).

Table 3.23. Question 9: Were the Questions on This Test More Difficult Than Questions You Were Given in Classroom Tests or Homework Assignments? (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. Yes, the test questions were generally more difficult than the questions I encountered in my course work.	7.2	14.1	26.8	31.3	12.0	33.2	25.1	37.8
B. The test questions were generally about as difficult as the questions I encountered in my course work.	92.8	85.9	73.2	68.7	88.0	66.8	74.9	62.2
C. The test questions were generally easier than the questions I encountered in my course work.								

*Options "B" and "C" Combined.

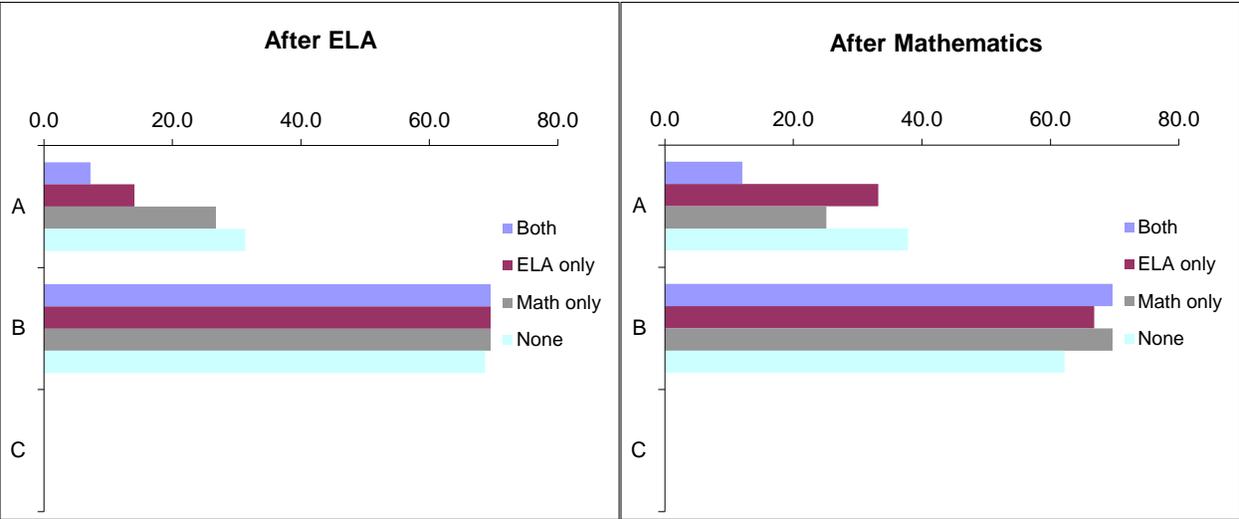


Figure 3.20. Percentages of grade ten students who thought the CAHSEE test questions were more difficult, the same, or less difficult than those encountered in the classroom or homework assignments, by tests passed in 2015 (Options B and C combined).

Question 10: If some topics on the test were difficult for you, was it because:

There has been a decrease in the percentage of students reporting that CAHSEE topics were not covered in the courses they took between 2005 and 2015, and a slight increase in the percentage who expressed they found none of the topics to be difficult. A larger percentage of students reported the mathematics topics were not covered in their courses or that they had trouble with the mathematics topics or had forgotten them than reported this for ELA. The most common reason reported for finding the test topics difficult was forgetting things they had been taught (see Table 3.24).

Table 3.24. Question 10: If Some Topics on the Test Were Difficult for You, Was It Because: (Grade Ten Students' Responses, 2005–2015)

After ELA	Percentage										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. I did not take courses that covered these topics.	8.2	7.6	7.2	7.2	7.3	6.6	6.4	5.6	6.0	5.7	5.6
B. I had trouble with these topics when they were covered in courses I took.	18.1	17.5	17.2	17.3	17.7	17.6	16.0	16.3	17.2	16.2	16.0
C. I have forgotten things I was taught about these topics.	37.9	37.8	41.6	42.5	39.0	40.2	40.1	39.4	40.5	38.6	39.5
D. None of the topics was difficult for me.	35.8	37.1	33.3	33.0	35.9	35.6	37.5	38.8	36.3	39.5	38.9

After Mathematics	Percentage										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A. I did not take courses that covered these topics.	13.5	12.6	10.8	9.5	10.6	9.9	9.7	9.0	8.9	8.5	8.9
B. I had trouble with these topics when they were covered in courses I took.	22.6	23.8	21.9	22.8	24.1	23.9	23.5	22.2	22.6	22.7	22.2
C. I have forgotten things I was taught about these topics.	44.7	43.8	45.0	46.1	44.2	44.2	46.0	46.7	46.4	45.1	47.3
D. None of the topics was difficult for me.	19.2	19.8	20.8	21.7	21.2	21.9	20.8	22.2	22.2	23.8	21.6

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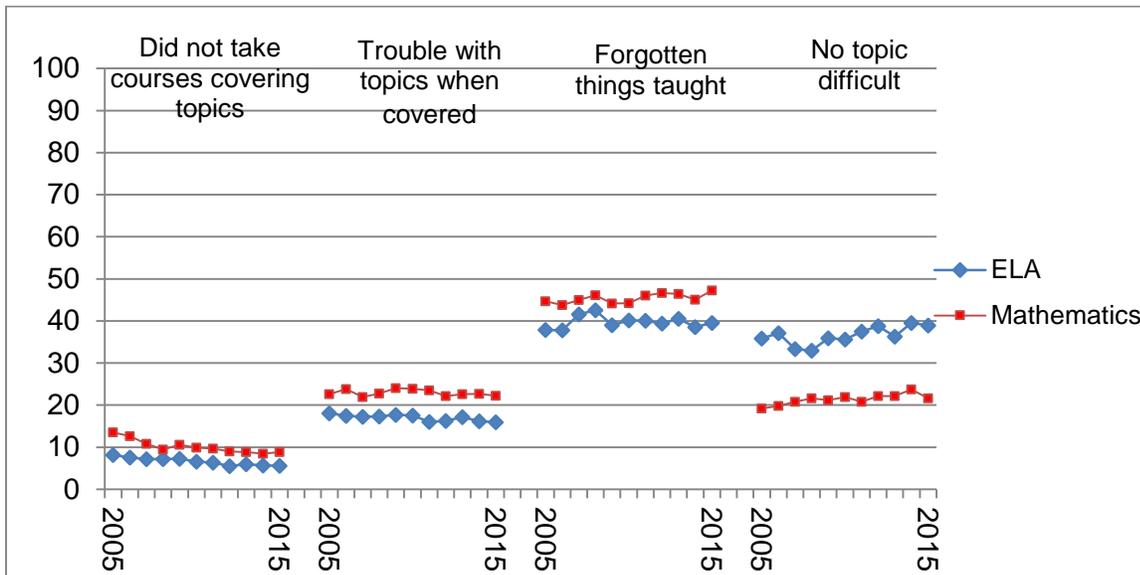


Figure 3.21. Reasons given by grade ten students, 2005–2015, as to whether and why they found the CAHSEE test questions difficult, in percentages.

Students who did not pass either test were the most likely of all groups to report that they did not take courses that covered the topics. Students from all test-passing categories were more likely to report difficulty with mathematics topics than with ELA topics (see Table 3.25).

Table 3.25. Question 10: If Some Topics on the Test Were Difficult for You, Was It Because: (Percentages of Grade Ten Students’ Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I did not take courses that covered these topics.	3.8	7.6	13.2	16.1	6.7	16.1	15.2	19.6
B. I had trouble with these topics when they were covered in courses I took.	13.4	21.6	28.8	28.1	19.0	40.5	30.8	34.8
C. I have forgotten things I was taught about these topics.	39.6	42.4	40.6	36.9	49.7	37.7	41.7	34.3
D. None of the topics was difficult for me.	43.3	28.4	17.5	18.9	24.5	5.7	12.3	11.3

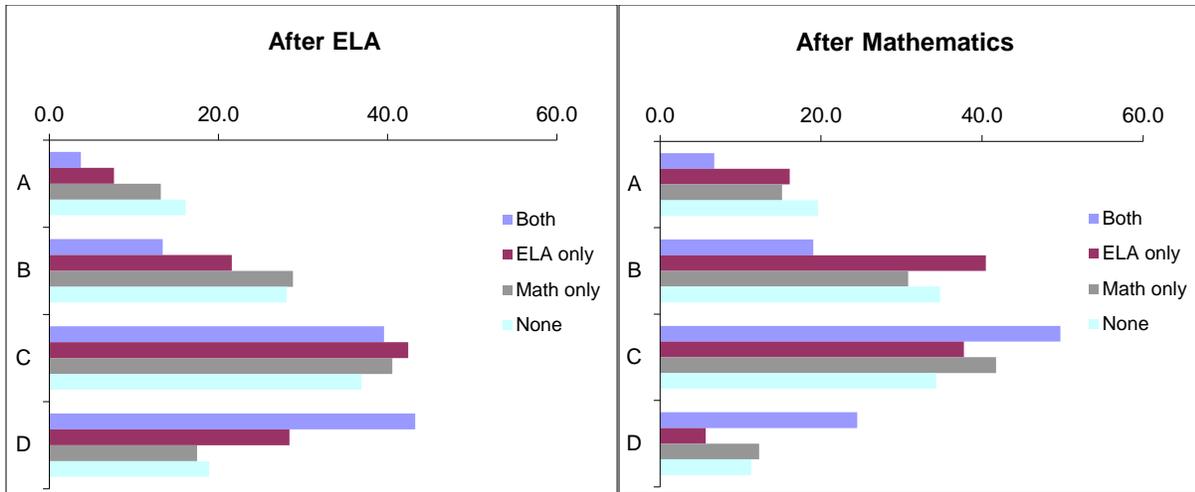


Figure 3.22. Reasons given by grade ten students for whether and why they found test questions difficult, in percentages, by tests passed in 2015.

Effort Put into the CAHSEE

Question 11: Have you worked or will you work harder to learn the English-language arts or mathematics skills tested by the CAHSEE?

In 2015 there was a slight increase in the percentage of students reporting they did not have to work any harder to pass the CAHSEE compared to the first year the question was administered in 2009. There has been a decrease in those reporting they would stay in school an extra year to learn the CAHSEE material (see Table 3.26).

Table 3.26. Question 11: Have You Worked or Will You Work Harder to Learn the English-Language Arts or Mathematics Skills Tested by the CAHSEE? (Mark All That Apply) (Grade Ten Students' Responses, 2009–2015)

After ELA	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. I do not have to work any harder to meet the CAHSEE requirement.	46.6	48.1	50.1	50.3	49.7	50.7	50.0
B. I am taking additional courses.	5.9	5.5	5.2	4.9	5.0	4.5	4.7
C. I am working harder in the courses I am taking.	41.4	40.7	38.8	40.1	40.2	40.5	40.7
D. I am getting help outside of the classroom.	7.3	6.8	6.8	6.8	6.8	6.6	6.9
E. I am repeating a course to learn the material better.	3.6	3.4	3.4	3.3	3.1	3.0	3.0
F. I will stay in school an additional year to learn the required material.	3.9	3.5	3.4	3.1	2.8	2.4	2.4

After Mathematics	Percentage						
	2009	2010	2011	2012	2013	2014	2015
A. I do not have to work any harder to meet the CAHSEE requirement.	44.5	45.5	47.8	47.8	48.3	48.5	47.3
B. I am taking additional courses.	6.2	5.9	5.8	5.3	5.6	5.3	5.4
C. I am working harder in the courses I am taking.	41.0	40.5	40.6	39.7	38.1	38.8	39.6
D. I am getting help outside of the classroom.	8.1	7.9	8.2	7.8	8.0	7.9	8.3
E. I am repeating a course to learn the material better.	5.0	4.8	5.3	5.0	4.6	4.5	4.4
F. I will stay in school an additional year to learn the required material.	4.2	3.9	3.9	3.6	3.1	2.8	2.8

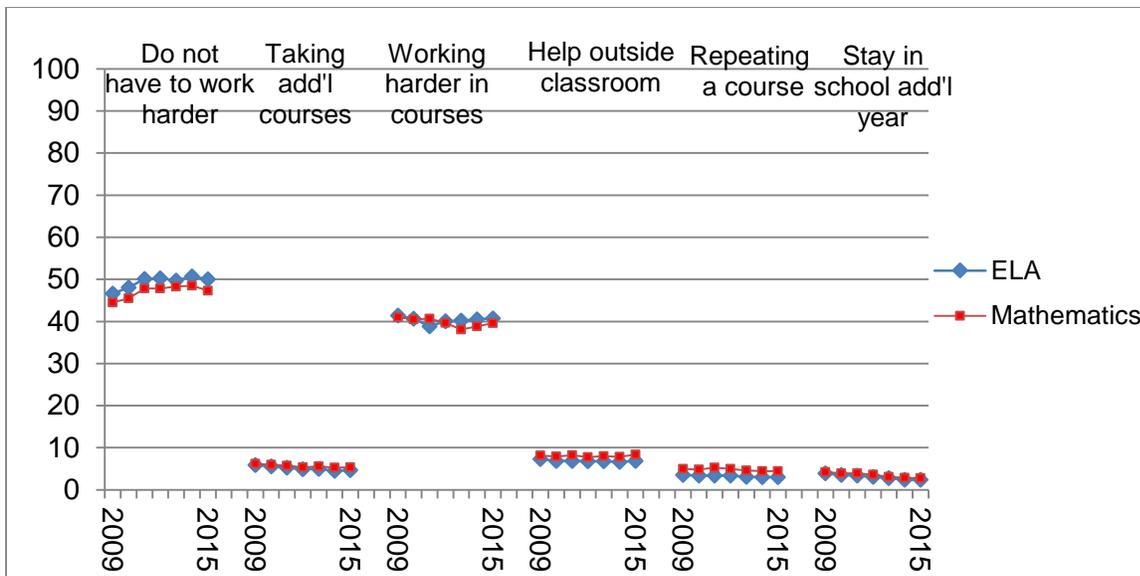


Figure 3.23. Percentage of grade ten students, 2009–2015, who said they have worked or will work harder, and in what ways, to meet the CAHSEE requirement.

As shown in Table 3.27, students who passed only one test were more likely than other students, including those who passed neither test, to report that they were working harder in the courses they were taking to learn the skills required by the CAHSEE. More than half of students who passed both tests in 2015 reported not having to work any harder to meet the CAHSEE requirement after both ELA and mathematics.

Table 3.27. Question 11: Have You Worked or Will You Work Harder to Learn the English-Language Arts or Mathematics Skills Tested by the CAHSEE? (Mark All That Apply) (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I do not have to work any harder to meet the CAHSEE requirement.	57.1	26.1	21.1	17.4	54.6	15.9	23.3	16.2
B. I am taking additional courses.	3.2	7.4	11.2	12.2	3.8	9.4	12.0	13.0
C. I am working harder in the courses I am taking.	38.6	54.7	51.2	45.8	37.3	56.6	49.1	45.3
D. I am getting help outside of the classroom.	5.4	11.1	13.2	13.5	7.0	14.4	13.0	14.0
E. I am repeating a course to learn the material better.	1.9	5.3	7.4	8.7	3.1	10.5	7.7	10.1
F. I will stay in school an additional year to learn the required material.	1.1	4.0	7.1	10.0	1.6	4.6	6.0	9.5

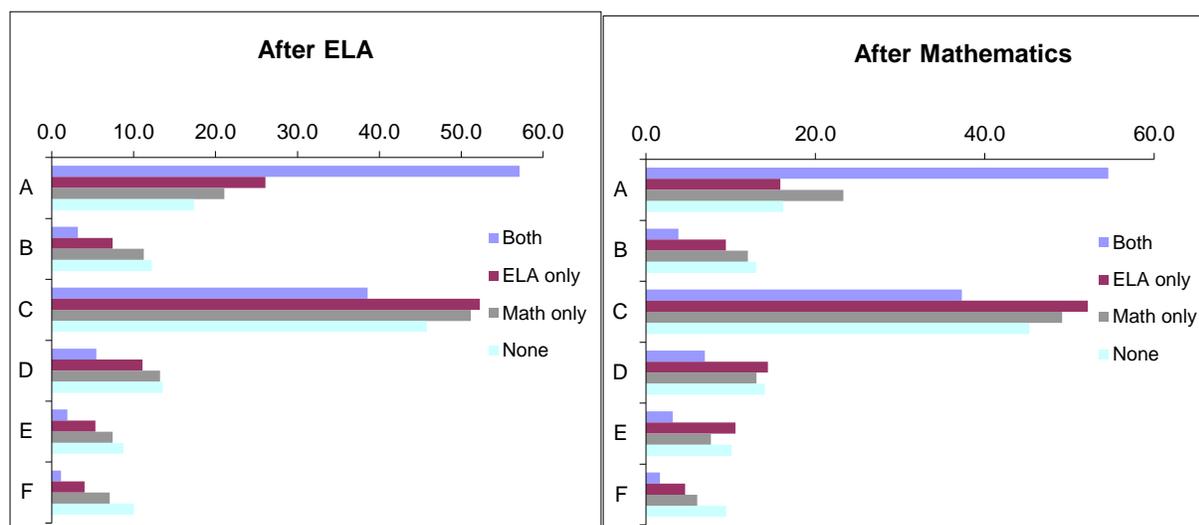


Figure 3.24. Percentage of grade ten students, by tests passed in 2015, who said they had or had not worked harder (and by which method) or will work harder in the future to pass the CAHSEE skills test(s).

Question 12: If you do not pass the CAHSEE in this administration, what are you most likely to do?

The response options for question 12 were modified to consider short-term options beginning in 2013; therefore, we have only three years of trend data for this question. There was a slight wording change in options “A”, “B”, and “C” for 2014. Table 3.28 shows fairly consistent results between 2013 and 2015, with only a small percentage of grade ten students’ reporting they will give up trying to pass the CAHSEE if they do not pass this administration. The majority of students plan to take the test again, with or without special courses.

Table 3.28. Question 12: If You Do Not Pass the CAHSEE in This Administration, What Are You Most Likely to Do? (Mark the Most Likely Option) (Grade Ten Students’ Responses, 2013–2015)

After ELA	Percentage		
	2013	2014	2015
A. I will take a special class during the regular school day that covers the topics on the CAHSEE.	23.5	24.0	23.2
B. I will take a special class after school or during the summer that covers the topics on the CAHSEE.	23.6	23.2	23.9
C. I will try again to pass the CAHSEE without taking a special class.	43.0	43.9	44.2
D. I will give up trying to pass the CAHSEE.	2.0	1.7	1.8
E. I do not know what I will do.	7.9	7.2	6.9

After Mathematics	Percentage		
	2013	2014	2015
A. I will take a special class during the regular school day that covers the topics on the CAHSEE.	24.0	25.2	24.6
B. I will take a special class after school or during the summer that covers the topics on the CAHSEE.	22.4	21.5	22.2
C. I will try again to pass the CAHSEE without taking a special class.	38.1	38.2	38.6
D. I will give up trying to pass the CAHSEE.	2.5	2.3	2.3
E. I do not know what I will do.	13.0	12.9	12.5

* In 2014 the questionnaire was modified to read “an additional class” from “a special class” for Options “A,” “B,” and “C.”

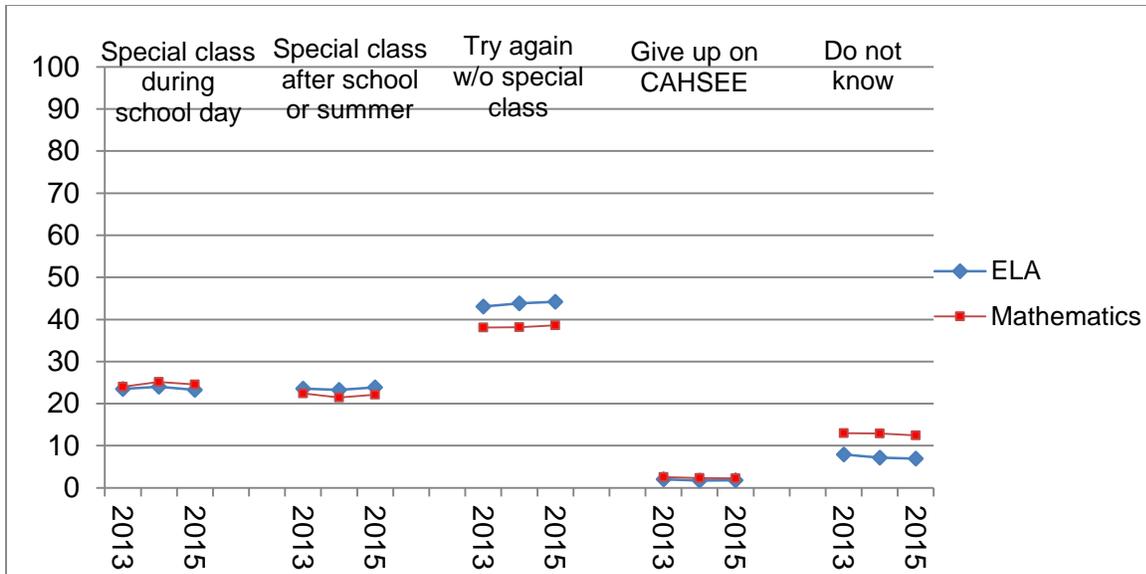


Figure 3.25. Plans of grade ten students, 2013–2015, for what they will do if they fail to pass the CAHSEE this administration.

Table 3.29 shows that, across all passing categories, students said that they would attempt to take the CAHSEE again if they did not pass during this administration. Note that the questionnaire respondents did not know yet whether they had passed the test. Those who passed both tests were more likely than others to report they would attempt to take the CAHSEE again without taking additional courses to help learn the CAHSEE material. Those who did not pass either test were most likely to report they would give up trying to take the CAHSEE; however, only approximately 6 percent of these students selected this option after both ELA and mathematics.

Table 3.29. Question 12: If You Do Not Pass the CAHSEE in This Administration, What Are You Most Likely to Do? (Mark the Most Likely Option) (Percentages of Grade Ten Students' Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I will take an additional class during the regular school day that covers the topics on the CAHSEE.	21.0	32.7	33.4	32.2	22.5	33.7	33.8	32.1
B. I will take an additional class after school or during the summer that covers the topics on the CAHSEE.	23.9	25.6	23.3	22.9	21.8	25.2	22.3	23.3
C. I will try again to pass the CAHSEE without taking an additional class.	47.7	32.1	31.1	28.1	41.3	28.1	29.8	25.7
D. I will give up trying to pass the CAHSEE.	1.1	2.5	3.9	5.8	1.7	2.5	3.5	6.0
E. I do not know what I will do.	6.3	7.2	8.3	11.1	12.6	10.5	10.6	12.9

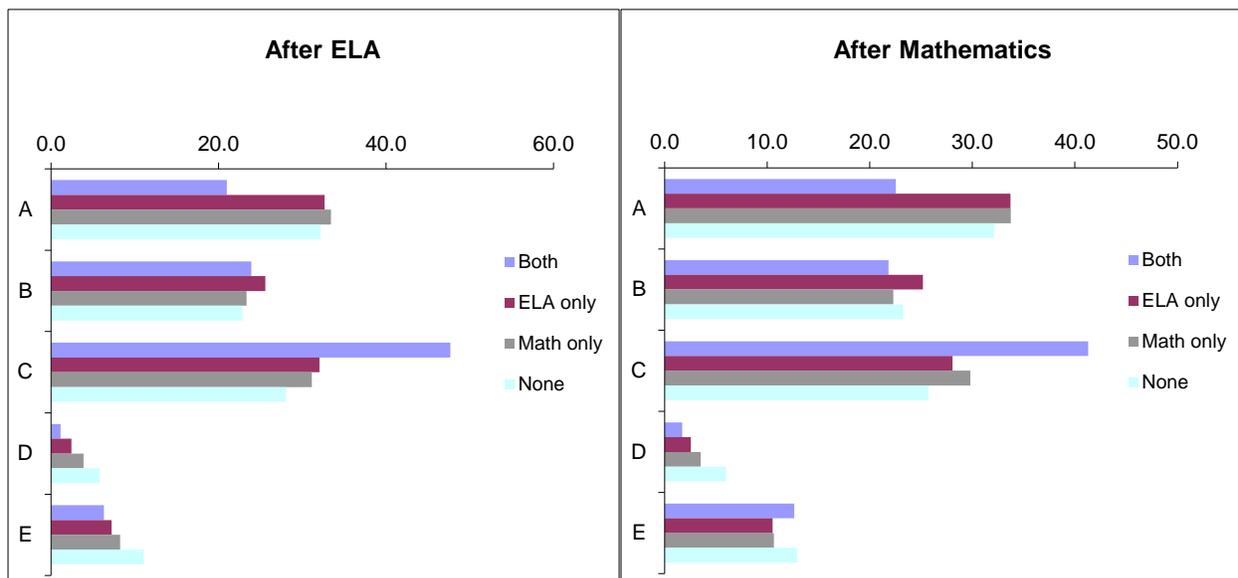


Figure 3.26. Most likely planned courses of action for grade ten students if they do not pass the CAHSEE by the time they complete high school, by tests passed in 2015, in percentages.

*****Question 13: If you do not pass the CAHSEE by the end of grade twelve, what are you most likely to do?**

Question 13 was a new question for 2013; therefore there are only three years of comparable data. Table 3.30 shows that almost one third of students believe that if they do not pass the CAHSEE by the end of grade twelve they will stay in school and try

again to pass; almost as many students would plan to take courses at a community college and attempt to pass. The percentage indicating they would take courses at a community college has increased very slightly between 2013 and 2015. Only a small percentage indicate they would give up trying to get a diploma altogether, across all years and after both tests.

Table 3.30. Question 13: If You Do Not Pass the CAHSEE by the End of Grade Twelve, What Are You Most Likely to Do? (Mark the Most Likely Option) (Grade Ten Students' Responses, 2015)

After ELA	Percentage		
	2013	2014	2015
A. I will stay in school and try again to pass the CAHSEE.	31.0	30.6	30.3
B. I will take courses at a community college and try again to pass the CAHSEE.	29.1	29.4	30.2
C. I will participate in some other type of program that will help me to pass the CAHSEE.	14.7	15.3	15.2
D. I will try to get a GED certificate.	4.6	4.5	4.3
E. I will give up trying to get a diploma altogether.	1.8	1.7	1.7
F. I do not know what I will do.	18.9	18.5	18.4

After Mathematics	Percentage		
	2013	2014	2015
A. I will stay in school and try again to pass the CAHSEE.	31.8	31.7	31.4
B. I will take courses at a community college and try again to pass the CAHSEE.	28.0	28.9	29.7
C. I will participate in some other type of program that will help me to pass the CAHSEE.	12.1	12.1	12.3
D. I will try to get a GED certificate.	4.5	4.4	4.1
E. I will give up trying to get a diploma altogether.	2.5	2.4	2.3
F. I do not know what I will do.	21.1	20.6	20.1

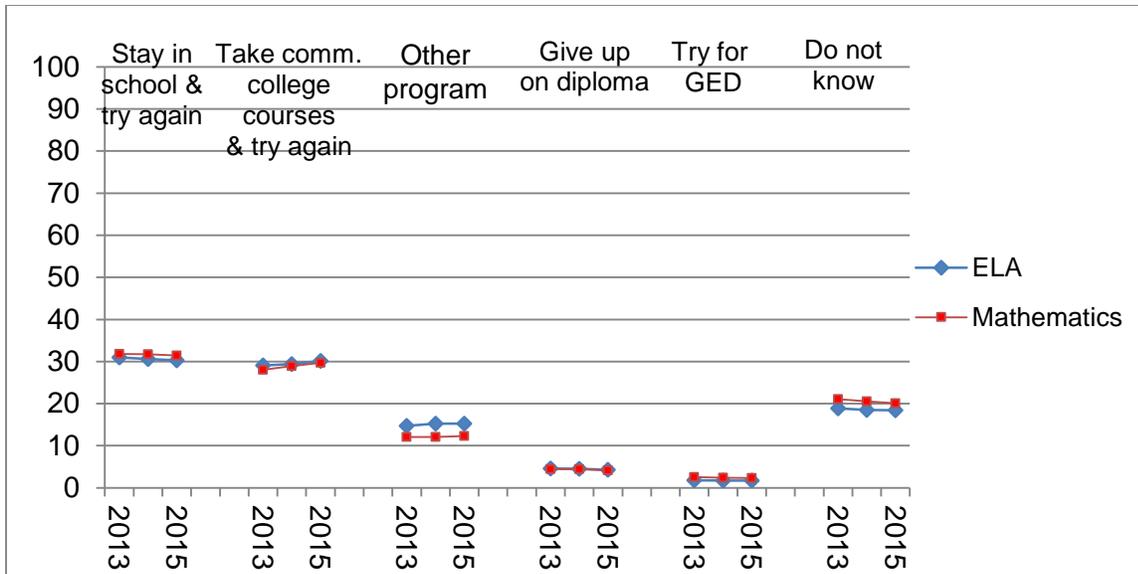


Figure 3.27. Percentage of grade ten students, 2013–2015 reporting their intentions of what to do if they do not pass the CAHSEE by the end of grade twelve.

Table 3.31 shows a higher percentage of those who passed neither test compared to other groups reported that they would either give up trying to get a diploma or try to get a GED®¹⁴ if they were unable to pass by the end of grade twelve; however, the majority of all respondents selected options “A”, “B”, or “C”, indicating they would continue to attempt to pass the CAHSEE.

Table 3.31. Question 13: If You Do Not Pass the CAHSEE by the End of Grade Twelve, What Are You Most Likely to Do? (Mark the Most Likely Option) (Percentages of Grade Ten Students’ Responses in 2015 by Tests Passed)

Response Choice	Tests Passed, After ELA Questionnaire				Tests Passed, After Math Questionnaire			
	Both Tests	ELA Only	Math Only	None	Both Tests	ELA Only	Math Only	None
A. I will stay in school and try again to pass the CAHSEE.	29.5	31.1	35.9	33.0	30.8	31.6	37.3	33.7
B. I will take courses at a community college and try again to pass the CAHSEE.	31.0	30.2	26.6	24.7	30.4	30.5	27.1	25.2
C. I will participate in some other type of program that will help me to pass the CAHSEE.	15.0	16.7	15.2	16.5	11.8	14.6	12.8	15.0
D. I will try to get a GED certificate.	3.7	5.6	5.4	7.8	3.6	5.5	5.1	7.5
E. I will give up trying to get a diploma altogether.	1.4	1.6	2.4	3.8	2.1	2.1	2.7	4.1
F. I do not know what I will do.	19.4	14.8	14.5	14.1	21.4	15.7	15.0	14.6

¹⁴ The GED® is now a registered trademark of the American Council on Education (“ACE”).

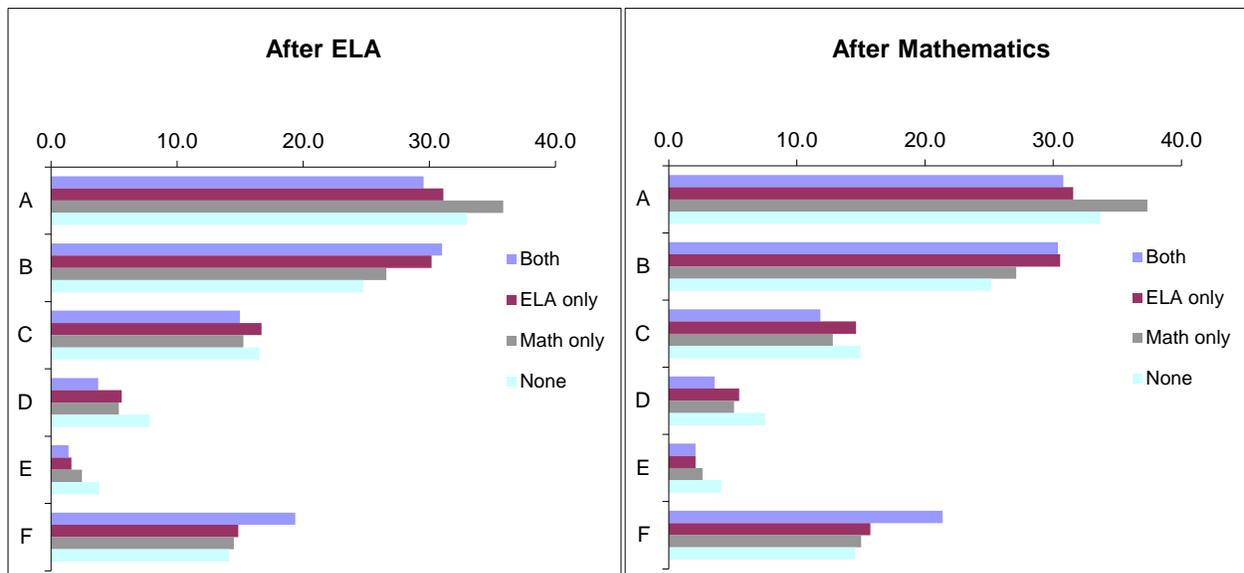


Figure 3.28. Most likely planned courses of action for grade ten students if they do not pass the CAHSEE by the time they complete high school, by tests passed in 2015, in percentages.

Comparisons of Grade Ten Student Responses in 2015 by Demographic Characteristics

We next compared student questionnaire responses on five demographic variables: gender, ethnicity, SWD, EL status, and ED status (based on NSLP participation). For SWDs and ELs, we examine students who were classified as both ELs and SWDs and those who were classified as only ELs or SWDs. Although the perspectives after ELA testing generally provide more positive perspectives than after mathematics, the response differences for the demographic groups were very similar for both questionnaires; therefore they will be discussed together. The questionnaire results from students who took the ELA test are presented in Table 3.32 and the questionnaire results from those who took the mathematics test are presented in Table 3.33.

Test Preparation (Tables 3.32 and 3.33, Questions 1–2, 14)

- Those who were ED were more likely than those who were not to report that they had taken measures to prepare for the CAHSEE; including that they practiced on similar test items to prepare, and that a teacher helped them prepare in class. Those who were not labeled ED were most likely to report that they did nothing additional to prepare.
- Asians were less likely than any other race/ethnic group to report using materials to prepare for the CAHSEE; Hispanics were the most likely to report using released (sample) test questions to prepare.

- Females were more likely than males to report using released (sample) test questions to prepare for the CAHSEE.
- EL students were less likely than the general population to report that middle school teachers helped them to learn study skills or the ELA and mathematics topics to help them prepare for the CAHSEE.

Graduation from High School and Post-High School Plans (Tables 3.32 and 3.33, Questions 3–5)

- The majority of all grade ten students, regardless of demographic group, expect to graduate with the rest of their class (or earlier); however, this percentage is notably smaller for those who are both ELs and SWDs. A higher percentage of these students, compared to other groups, report they may need to stay in high school longer to earn a diploma, or that they may pursue a diploma in adult education.
- Those who were both ELs and SWDs reported at higher levels than other groups that the CAHSEE may prevent them from earning a high school diploma; 40 percent responded this way after ELA and 43 percent after mathematics.
- Hispanic or Latino students are more likely than any other race/ethnic group to believe the CAHSEE or a required course may prevent them from earning a high school diploma. Asian and White students were most confident they would earn a high school diploma.
- Males more frequently report plans to work full time, join the military, or do something else (besides school, work, or military) than females. Females more frequently reported plans to attend a 4-year college or university than males.

Test Performance and Influencing Factors (Tables 3.32 and 3.33, Question 6)

- Students identified as SWDs and EL or EL only were more likely than those who were identified as SWDs only to report nervousness as a reason for not doing as well as they could.
- The majority of students from all race/ethnicities reported they did as well as they could on the CAHSEE.

Content and Instruction Coverage (Tables 3.32 and 3.33, Questions 7–9)

- A higher percentage of females than males reported similarity between class content and instruction coverage and familiarity with the topics and types of questions on the CAHSEE.

- ELs and SWDs more frequently responded that test items were more difficult and content differed from what they had encountered in class than the general population. Those who are classified as both ELs and SWDs were most likely to respond that items were more difficult and content was different.
- Filipino, Asian, and White students were more likely than other race/ethnic groups to respond that the CAHSEE topics were similar to those they had encountered, that the question types were similar to those they had seen, and that questions on the CAHSEE were easier than those they had experience in their courses.
- Overall, a larger percentage of students expressed familiarity with the CAHSEE content and question types after the ELA exam than did those responding after the mathematics exam.

Effort Put into the CAHSEE (Tables 3.32 and 3.33, Questions 10–13)

- Hispanic or Latino and Black or African American students were less likely than other racial or ethnic groups to report that they did not have to work harder to meet the CAHSEE requirement.
- Fewer than 20 percent of respondents who were both ELs and SWDs said that they did not have to work harder to meet the CAHSEE requirements, after both ELA and mathematics tests.
- A larger percentage of non-ED students reported that they did not have to work harder to meet the requirement than did ED students.
- More than half of the ED students responded that they would take an additional class to learn the CAHSEE material (either during or outside normal school hours) if they did not pass the CAHSEE this administration; more than half of those who are not ED said they would attempt the CAHSEE again without taking an additional course.
- Only a small percentage of students across all demographic groups said that they would give up trying to get a diploma if they did not pass the CAHSEE after this administration or if they had not passed by the end of grade twelve.
- Approximately 60 percent of students, across all groups, expect to either stay in school to try to pass the CAHSEE again, or take community college courses and try to pass the CAHSEE again if they have not passed by the end of grade twelve.

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Table 3.32. Distribution of Grade Ten Students' Responses to Questionnaire After Taking CAHSEE ELA Examination in 2015, by Gender, Ethnicity, Disability, EL Status, and ED

After Taking CAHSEE ELA Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am. Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
1. How did you prepare for this test? (Mark all that apply.)															
A. I practiced on questions similar to those on the test.	36.8	31.0	32.5	25.4	34.5	34.8	38.8	36.6	26.8	28.3	36.2	33.4	38.1	38.9	28.2
B. A teacher spent time in class helping me to get ready to take the test.	45.0	39.3	41.5	29.9	43.8	43.3	46.8	43.6	36.7	37.0	38.8	38.2	42.3	46.4	37.4
C. I took an additional class during the regular school day that covered the topics on the CAHSEE.	5.1	5.5	5.1	2.3	5.2	2.8	7.0	7.5	2.9	4.0	12.1	7.8	10.2	7.3	3.0
D. I took an additional class after school or during the summer that covered the topics on the CAHSEE.	3.0	3.1	2.1	1.7	2.2	2.0	4.2	3.8	1.3	1.8	4.9	3.8	5.6	4.3	1.6
E. I did not do anything in addition to regular course work to prepare for this test.	32.5	37.7	36.2	53.8	33.8	37.6	25.9	27.6	47.7	45.1	19.5	31.0	20.6	25.9	45.5
2. What materials did you use to prepare for this test: (Mark all that apply.)															
A. Textbooks	7.6	9.1	8.6	5.0	8.5	6.9	9.8	9.9	6.5	7.3	13.9	10.9	14.4	10.1	6.2
B. Math Student Guide	13.6	13.3	13.2	7.8	14.4	12.1	16.2	17.4	9.4	10.4	18.2	15.3	19.0	16.5	9.9
C. CAHSEE Online Prep	18.2	14.7	14.6	11.1	17.0	16.0	19.3	20.6	12.0	12.6	21.5	17.2	22.7	19.7	12.8
D. Released (sample) test questions	40.8	31.6	35.2	28.8	35.0	37.9	40.1	33.2	31.8	31.7	19.8	25.5	27.0	39.5	32.6
E. Other resources	18.6	20.0	20.0	12.9	24.1	20.4	21.8	20.6	16.0	17.3	21.4	22.6	22.2	21.9	16.3
F. I did not use any materials to prepare.	28.1	32.7	31.4	50.1	27.9	32.5	20.8	23.1	43.3	40.3	19.9	27.7	16.9	21.0	41.0
3. Do you think you will receive a high school diploma?															
A. Yes, with the rest of my class (or earlier).	88.6	83.1	81.5	91.7	83.6	90.7	82.2	83.1	91.0	87.5	57.3	71.5	65.4	81.8	90.7
B. Yes, but I will likely have to take classes after my original graduation date.	7.5	10.6	11.3	4.6	10.3	6.3	11.7	10.8	5.3	7.7	23.2	16.1	21.6	11.9	5.8
C. Yes, but I will pursue a diploma in Adult Education.	1.7	2.9	3.1	1.5	3.0	1.6	2.6	3.0	1.8	2.3	7.1	5.1	5.0	2.7	1.8
D. No, I probably will not receive a high school diploma.	1.5	2.1	2.3	1.1	1.8	0.8	2.4	1.9	0.9	1.2	8.1	4.2	5.3	2.4	1.0
E. No, I plan to take the GED.	0.3	0.6	1.0	0.3	0.4	0.2	0.5	0.6	0.5	0.6	1.6	1.2	0.9	0.5	0.4
F. No, but I plan to go to community college.	0.5	0.8	0.8	0.8	1.0	0.4	0.7	0.7	0.5	0.7	2.8	1.9	1.7	0.8	0.4

Table 3.32. (Continued)

After Taking CAHSEE ELA Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
4. What might prevent you from receiving a high school diploma? (Mark all that apply.)															
A. I may not pass all the required courses.	18.1	21.4	23.1	11.6	22.1	17.6	23.7	18.7	15.1	17.8	22.9	26.0	26.3	23.5	15.3
B. I may not pass the CAHSEE exam.	17.4	15.3	16.4	11.1	17.8	14.2	20.8	18.1	9.5	12.5	40.0	30.6	34.7	21.2	10.7
C. I may drop out before the end of 12th grade.	1.4	2.5	2.8	1.6	2.1	1.2	2.2	2.4	1.6	2.1	4.8	3.9	4.5	2.3	1.5
D. I may not meet some other graduation requirement.	10.7	13.2	14.4	8.8	13.8	14.0	14.0	11.0	8.8	11.5	12.4	16.2	14.5	14.3	9.3
E. I am confident I will receive a high school diploma.	69.4	62.5	62.5	78.2	62.7	71.6	58.3	63.7	76.5	70.4	35.5	44.7	40.1	58.0	75.2
5. What do you think you will do after high school?															
A. Join the military.	3.3	9.0	8.3	1.9	8.0	6.3	7.0	5.8	5.9	5.9	10.5	10.2	9.0	7.3	4.8
B. Go to a community college.	17.5	17.1	19.7	8.1	17.3	14.1	19.6	13.2	17.4	16.8	27.3	26.7	23.2	18.9	15.4
C. Go to a 4-year college or university.	71.4	58.1	54.2	85.4	64.0	74.0	59.7	68.8	65.3	65.6	36.9	41.8	49.4	59.8	70.5
D. Go to a vocational, technical, or trade school.	2.6	4.5	4.5	1.6	2.6	1.9	3.9	3.5	3.7	3.7	4.7	5.4	4.4	3.9	3.1
E. Work full-time.	2.5	5.5	6.3	1.0	3.6	1.2	5.1	4.1	3.3	3.3	12.1	7.3	8.1	5.2	2.6
F. Do something else (besides school, work, or the military).	2.7	5.8	7.0	1.9	4.4	2.5	4.8	4.6	4.3	4.8	8.4	8.6	6.0	4.9	3.5
6. How well did you do on this test? (Mark all that apply)															
A. I did as well as I could.	89.6	85.8	87.6	86.4	86.6	90.8	86.0	87.1	91.0	88.6	69.4	80.4	72.7	85.9	89.9
B. I was too nervous to do as well as I could.	9.1	8.1	7.6	7.0	9.2	7.2	11.0	7.9	5.0	6.7	20.8	12.2	20.7	10.8	6.1
C. I was not motivated to do well.	2.7	4.8	3.8	4.9	4.3	3.5	3.7	4.2	3.3	3.9	6.5	5.4	5.8	3.9	3.6
D. I did not have time to do as well as I could.	0.9	1.6	1.3	1.5	1.1	1.1	1.4	1.6	0.9	1.2	3.6	2.4	2.5	1.4	1.0
E. Conditions in the testing room made it difficult to concentrate.	3.9	3.5	3.9	4.9	3.1	3.8	3.5	3.2	3.9	4.0	3.8	4.1	4.1	3.6	3.8
F. There were other reasons why I did not do as well as I could.	3.3	3.8	3.5	5.0	3.8	3.6	3.4	3.0	3.5	3.9	4.8	5.1	4.6	3.6	3.5

Table 3.32. (Continued)

After Taking CAHSEE ELA Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
7. Were the topics on the test covered in courses you have taken?															
A. Yes, all of them.	67.5	60.4	61.6	67.9	62.9	71.4	60.0	57.4	70.9	66.7	33.4	47.0	38.8	58.6	70.3
B. Most, but not all of them (two-thirds or more were covered).	28.8	33.5	33.5	26.8	32.5	25.6	34.7	35.8	25.4	28.8	52.0	42.3	49.2	35.5	26.1
C. Many topics on the test were not covered in my courses (less than two-thirds were covered).	3.7	6.1	5.0	5.3	4.6	3.0	5.4	6.9	3.7	4.5	14.6	10.8	11.8	5.9	3.7
8. Were any of the questions on the test different from the types of questions or answer options you have encountered in your homework assignments or classroom tests?															
A. Yes, many were different from anything I had seen before.	7.0	12.5	8.9	10.9	9.8	8.2	10.2	11.7	8.3	9.3	25.2	18.3	19.5	10.8	8.4
B. Yes, a few were different from anything I had seen before.	36.4	44.1	39.5	37.7	41.3	37.8	43.5	41.6	34.9	37.3	53.9	48.6	54.0	44.0	35.9
C. No, all were similar to ones used in my classes.	56.7	43.5	51.6	51.4	49.0	54.1	46.3	46.7	56.8	53.4	20.9	33.1	26.6	45.1	55.7
9. Were the questions on this test more difficult than questions you were given in classroom tests or homework assignments?															
A. Yes, the test questions were generally more difficult than the questions I encountered in my course work.	8.1	13.5	11.2	8.7	10.1	6.9	12.5	13.9	8.1	9.6	31.8	21.8	25.9	13.2	7.9
B. The test questions were generally about as difficult as the questions I encountered in my course work.	48.3	48.7	52.5	35.5	50.1	44.2	54.2	47.6	42.6	43.3	47.1	49.6	53.1	53.7	42.5
C. The test questions were generally easier than the questions I encountered in my course work.	43.6	37.8	36.4	55.9	39.9	48.9	33.3	38.5	49.3	47.0	21.1	28.6	21.0	33.1	49.6

Table 3.32. (Continued)

After Taking CAHSEE ELA Examination (Student Responses in grade ten)	Gender		Ethnicity							SWD & EL Status			ED		
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
10. If some topics on the test were difficult for you, was it because:															
A. I did not take courses that covered these topics.	4.2	6.9	5.7	5.9	4.9	3.2	6.3	7.4	4.1	5.3	15.5	10.2	14.1	6.7	4.3
B. I had trouble with these topics when they were covered in courses I took.	15.2	16.7	15.9	10.7	18.2	12.6	19.0	17.0	12.0	13.5	28.9	23.5	26.2	19.0	12.5
C. I have forgotten things I was taught about these topics.	41.9	37.2	39.8	37.7	40.5	41.9	42.8	37.2	34.0	37.4	38.0	36.8	42.3	42.4	36.3
D. None of the topics was difficult for me.	38.6	39.2	38.7	45.8	36.4	42.3	31.8	38.4	49.9	43.7	17.6	29.5	17.6	32.0	47.0
11. Have you worked or will you work harder to learn the mathematics skills tested by the CAHSEE? (Mark all that apply.)															
A. I do not have to work any harder to meet the CAHSEE requirement.	48.2	51.8	48.4	62.3	40.1	51.7	40.5	43.2	65.6	57.0	17.6	32.0	19.6	40.5	61.1
B. I am taking additional courses.	3.8	5.5	4.8	3.0	5.4	3.0	5.8	6.3	2.9	3.7	12.0	8.5	10.9	6.0	3.2
C. I am working harder in the courses I am taking.	44.6	36.9	39.7	34.3	47.4	46.5	46.6	42.8	30.2	35.8	47.8	45.7	52.9	46.5	34.1
D. I am getting help outside of the classroom.	7.0	6.8	8.9	5.7	10.9	6.2	7.9	9.8	4.6	6.1	12.6	12.0	12.2	8.3	5.2
E. I am repeating a course to learn the material better.	2.9	3.1	3.0	1.5	4.2	1.6	4.0	3.5	1.7	2.5	8.2	5.0	7.3	4.0	1.9
F. I will stay in school an additional year to learn the required material.	2.3	2.5	2.9	1.4	2.5	0.9	3.3	2.7	1.2	2.0	10.2	5.5	7.6	3.3	1.3

Table 3.32. (Continued)

After Taking CAHSEE ELA Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
12. If you do <u>not</u> pass the CAHSEE in this administration, what are you most likely to do? (Mark the most likely option.)															
A. I will take an additional class during the regular school day that covers the topics on the CAHSEE.	23.7	22.8	23.2	11.6	24.9	16.6	28.8	27.5	16.9	19.4	32.3	26.3	33.8	28.4	17.5
B. I will take an additional class after school or during the summer that covers the topics on the CAHSEE.	28.2	19.7	21.0	20.0	24.3	23.4	27.2	26.9	18.6	20.8	22.2	19.2	26.9	26.3	21.2
C. I will try again to pass the CAHSEE without taking a special class.	41.1	47.2	45.1	60.3	43.2	54.3	35.5	36.7	55.1	51.3	28.3	39.8	28.0	36.5	52.9
D. I will give up trying to pass the CAHSEE.	1.2	2.4	2.3	1.4	1.8	1.0	2.1	2.3	1.4	1.6	5.3	3.2	4.1	2.1	1.4
E. I do not know what I will do.	5.8	8.0	8.4	6.8	5.8	4.8	6.5	6.7	8.0	7.0	11.9	11.6	7.2	6.7	7.1
13. If you do not pass the CAHSEE by the end of grade 12, what are you most likely to do? (Mark the most likely option.)															
A. I will stay in school and try again to pass the CAHSEE.	24.8	35.4	29.7	25.6	29.5	28.4	32.6	29.6	28.0	28.9	34.1	32.1	33.9	32.6	27.1
B. I will take courses at a community college and try again to pass the CAHSEE.	35.6	25.0	29.8	30.1	30.2	33.9	29.6	31.5	30.5	30.4	24.0	26.1	27.7	29.0	31.5
C. I will participate in some other type of program that will help me to pass the CAHSEE.	17.8	12.8	14.3	16.4	16.7	17.1	15.7	16.7	13.3	14.8	16.4	13.5	17.4	15.8	14.6
D. I will try to get a GED certificate.	3.8	4.8	6.1	2.8	4.7	2.6	4.4	5.2	4.6	4.9	5.9	6.2	5.1	4.5	3.9
E. I will give up trying to get a diploma altogether.	0.9	2.4	2.1	1.7	1.2	1.0	1.7	1.9	1.7	1.7	3.3	2.6	2.4	1.8	1.6
F. I do not know what I will do.	17.1	19.6	18.1	23.4	17.7	17.1	16.1	15.1	22.0	19.4	16.3	19.5	13.6	16.3	20.7

Table 3.32. (Continued)

After Taking CAHSEE ELA Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
14. Thinking back to your middle school years, what helped you do well on this test? (Mark all that apply.)															
A. Teachers helped me learn study skills and test taking skills.	59.8	52.7	52.0	55.0	58.9	65.8	57.8	54.2	53.0	53.6	50.0	49.2	50.3	57.0	55.3
B. ELA teachers covered topics that were on the CAHSEE.	30.9	24.2	24.7	28.3	29.1	33.8	27.4	26.9	26.8	26.9	19.4	18.9	22.7	27.7	27.5
C. I kept up with my school assignments in ELA.	29.2	22.0	22.9	32.1	27.5	35.5	22.9	21.6	28.0	26.8	13.9	16.0	14.7	23.4	28.2
D. Teachers helped me learn the English language.	16.7	15.7	13.4	20.4	16.5	20.0	15.3	12.7	17.1	15.9	15.8	14.6	22.3	15.8	16.7
E. I was in a support program (AVID, GEAR UP, other).	7.2	5.2	5.4	3.2	8.5	5.1	8.0	7.6	3.6	4.7	5.8	6.1	5.4	8.0	4.2
F. I do not recall any activity that helped me do well on this test.	14.1	20.5	21.7	18.9	15.1	12.0	15.8	16.5	20.3	20.2	14.2	21.9	15.1	16.1	18.7

Table 3.33. Distribution of Grade Ten Students' Responses to Questionnaire After Taking CAHSEE Math Examination in 2015, by Gender, Ethnicity, Disability, EL Status, and ED.

After Taking CAHSEE Mathematics Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am. Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
1. How did you prepare for this test? (Mark all that apply.)															
A. I practiced on questions similar to those on the test.	42.6	36.7	38.8	26.4	41.2	38.5	46.9	43.3	29.8	31.9	43.7	40.5	47.3	46.7	31.6
B. A teacher spent time in class helping me to get ready to take the test.	26.6	23.7	25.2	12.8	27.5	24.0	30.5	28.7	18.7	20.1	31.5	28.4	30.8	30.4	19.3
C. I took an additional class during the regular school day that covered the topics on the CAHSEE.	4.5	4.9	4.7	1.9	5.4	2.4	6.1	6.7	2.7	3.4	10.0	6.7	8.4	6.4	2.8
D. I took an additional class after school or during the summer that covered the topics on the CAHSEE.	2.8	2.8	2.3	1.5	2.2	2.0	3.9	3.4	1.4	1.8	4.3	3.4	4.6	3.9	1.7
E. I did not do anything in addition to regular course work to prepare for this test.	41.8	45.3	44.4	65.6	40.2	48.9	32.4	33.9	58.6	55.0	21.9	34.6	24.7	32.5	56.1
2. What materials did you use to prepare for this test: (Mark all that apply.)															
A. Textbooks	10.2	12.4	12.8	7.2	12.9	9.9	12.6	13.6	9.7	10.2	16.1	14.8	16.3	13.1	9.1
B. Math Student Guide	21.0	18.3	18.6	9.6	21.5	16.0	25.2	23.3	12.1	14.2	27.6	22.0	31.0	24.9	13.7
C. CAHSEE Online Prep	14.9	11.8	11.5	8.8	14.3	13.4	15.7	17.1	9.6	10.9	17.8	14.9	17.7	16.2	10.1
D. Released (sample) test questions	28.7	21.3	24.5	16.7	23.5	25.9	29.5	24.2	19.3	19.9	15.4	19.3	20.3	29.1	20.4
E. Other resources	14.2	15.3	15.9	9.0	18.0	15.8	16.9	16.7	11.7	13.2	19.0	19.6	17.6	17.1	12.0
F. I did not use any materials to prepare.	36.6	39.9	38.4	61.4	34.1	42.9	26.9	28.4	53.4	49.4	19.6	29.3	20.1	27.2	50.9
3. Do you think you will receive a high school diploma?															
A. Yes, with the rest of my class (or earlier).	87.8	81.9	80.2	91.4	82.9	90.4	81.2	81.2	89.9	85.9	57.2	70.3	65.1	80.8	89.7
B. Yes, but I will likely have to take classes after my original graduation date.	7.9	10.8	12.1	4.5	10.8	6.3	12.0	11.4	5.7	8.2	22.5	16.5	21.2	12.2	6.0
C. Yes, but I will pursue a diploma in Adult Education.	1.6	3.0	3.5	1.6	2.5	1.4	2.6	3.2	1.9	2.4	7.0	4.9	5.1	2.7	1.8
D. No, I probably will not receive a high school diploma.	1.8	2.5	2.5	1.2	2.0	1.1	2.8	2.4	1.2	1.7	8.6	4.9	6.0	2.8	1.3
E. No, I plan to take the GED.	0.4	0.8	0.9	0.3	0.8	0.3	0.6	0.8	0.6	0.8	1.8	1.5	0.9	0.7	0.5
F. No, but I plan to go to community college.	0.6	1.0	0.8	1.0	1.0	0.5	0.8	1.0	0.7	1.0	2.8	2.1	1.8	0.9	0.7

Table 3.33. (Continued)

After Taking CAHSEE Mathematics Examination (Student Responses in grade ten)	Gender		Ethnicity							SWD & EL Status			ED		
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
4. What might prevent you from receiving a high school diploma? (Mark all that apply.)															
A. I may not pass all the required courses.	19.1	22.7	24.2	12.4	22.9	18.8	25.2	19.3	15.9	18.9	23.8	26.7	28.2	25.0	16.2
B. I may not pass the CAHSEE exam.	22.0	17.6	21.8	11.7	20.1	16.9	24.9	22.1	12.2	16.3	43.1	35.2	37.4	25.1	13.5
C. I may drop out before the end of 12th grade.	1.6	3.0	2.9	1.9	1.8	1.3	2.5	2.7	2.0	2.5	4.8	4.3	4.5	2.6	1.9
D. I may not meet some other graduation requirement.	8.8	10.8	12.1	7.9	11.5	11.9	11.2	9.2	7.4	9.4	10.2	13.4	11.9	11.6	7.7
E. I am confident I will receive a high school diploma.	65.0	59.1	55.9	76.6	58.8	68.9	53.7	59.2	73.2	66.6	31.8	40.1	36.4	53.6	71.9
5. What do you think you will do after high school?															
A. Join the military.	3.5	9.6	9.0	2.5	8.7	6.5	7.4	6.5	6.4	6.4	11.2	10.7	9.5	7.7	5.3
B. Go to a community college.	17.3	16.8	20.0	8.1	16.7	14.0	19.3	13.3	17.0	16.3	26.0	26.0	23.2	18.7	15.1
C. Go to a 4-year college or university.	71.3	57.6	53.1	84.8	64.1	73.9	59.6	67.8	64.9	65.3	37.9	41.8	49.3	59.6	70.1
D. Go to a vocational, technical, or trade school.	2.3	4.2	5.0	1.3	2.4	1.6	3.6	3.2	3.6	3.6	4.8	5.2	3.9	3.6	2.9
E. Work full-time.	2.7	5.8	6.4	1.1	3.8	1.5	5.3	4.4	3.6	3.6	12.2	7.6	8.2	5.4	2.9
F. Do something else (besides school, work, or the military).	2.9	6.0	6.7	2.2	4.4	2.6	4.8	4.9	4.5	4.8	8.0	8.7	6.0	5.1	3.7
6. How well did you do on this test? (Mark all that apply):															
A. I did as well as I could.	86.3	84.4	82.9	89.3	83.9	90.1	83.0	82.5	88.7	86.0	69.1	76.3	73.0	83.1	88.0
B. I was too nervous to do as well as I could.	11.5	8.5	10.0	5.4	10.8	7.7	12.9	10.3	6.2	7.9	20.3	13.9	20.2	12.4	7.2
C. I was not motivated to do well.	3.2	4.7	5.1	4.1	4.3	3.3	4.2	4.8	3.5	4.1	6.8	6.4	6.1	4.3	3.6
D. I did not have time to do as well as I could.	0.8	1.5	1.6	0.9	1.1	0.9	1.3	1.7	1.0	1.2	3.4	2.6	2.1	1.4	0.9
E. Conditions in the testing room made it difficult to concentrate.	3.0	2.7	3.4	3.1	2.6	2.5	2.6	2.8	3.2	3.2	3.5	3.8	3.1	2.7	2.9
F. There were other reasons why I did not do as well as I could.	5.4	4.8	6.4	4.3	5.5	4.4	5.2	5.4	5.0	5.6	5.9	7.6	5.4	5.4	4.8

Table 3.33. (Continued)

After Taking CAHSEE Mathematics Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispani c /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
7. Were the topics on the test covered in courses you have taken?															
A. Yes, all of them.	53.4	52.7	47.2	72.7	51.9	64.9	46.5	43.7	60.0	56.5	26.3	33.6	33.7	46.3	61.0
B. Most, but not all of them (two-thirds or more were covered).	39.9	38.2	43.1	22.8	41.4	30.7	44.7	45.2	33.1	35.6	57.3	49.8	53.5	44.6	32.6
C. Many topics on the test were not covered in my courses (less than two-thirds were covered).	6.7	9.1	9.7	4.5	6.7	4.4	8.9	11.2	6.8	7.9	16.4	16.7	12.9	9.1	6.4
8. Were any of the questions on the test different from the types of questions or answer options you have encountered in your homework assignments or classroom tests?															
A. Yes, many were different from anything I had seen before.	9.6	14.1	12.8	9.0	11.0	9.1	13.1	15.3	10.1	11.4	26.8	22.3	20.5	13.4	10.0
B. Yes, a few were different from anything I had seen before.	42.9	43.7	46.6	28.7	45.4	37.1	48.9	47.6	37.1	40.0	54.6	51.8	55.2	48.6	37.2
C. No, all were similar to ones used in my classes.	47.5	42.2	40.6	62.3	43.6	53.8	38.0	37.1	52.8	48.6	18.6	25.9	24.3	38.0	52.8
9. Were the questions on this test more difficult than questions you were given in classroom tests or homework assignments?															
A. Yes, the test questions were generally more difficult than the questions I encountered in my course work.	15.0	17.4	19.6	7.3	14.5	9.2	19.1	22.5	13.0	15.0	37.3	32.9	28.2	19.4	12.4
B. The test questions were generally about as difficult as the questions I encountered in my course work.	49.5	44.8	49.3	29.0	51.1	43.9	53.6	48.5	40.7	42.4	46.2	46.9	52.7	52.7	40.7
C. The test questions were generally easier than the questions I encountered in my course work.	35.5	37.8	31.2	63.7	34.4	46.9	27.3	29.0	46.3	42.7	16.6	20.2	19.1	27.9	46.9

Table 3.33. (Continued)

After Taking CAHSEE Mathematics Examination (Student Responses in grade ten)	Gender		Ethnicity							SWD & EL Status			ED		
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
10. If some topics on the test were difficult for you, was it because:															
A. I did not take courses that covered these topics.	7.1	10.6	10.9	5.3	9.0	5.0	9.8	11.7	8.0	9.5	19.2	17.6	16.1	10.1	7.4
B. I had trouble with these topics when they were covered in courses I took.	24.3	20.3	24.3	9.4	23.6	15.7	26.9	27.1	17.4	19.4	33.1	29.7	31.1	26.4	17.4
C. I have forgotten things I was taught about these topics.	51.7	43.0	46.3	42.7	49.6	54.0	48.8	44.4	45.6	46.1	36.6	38.7	42.5	48.1	46.4
D. None of the topics was difficult for me.	17.0	26.1	18.5	42.6	17.8	25.4	14.5	16.9	29.1	25.0	11.2	14.1	10.4	15.4	28.8
11. Have you worked or will you work harder to learn the mathematics skills tested by the CAHSEE? (Mark all that apply.)															
A. I do not have to work any harder to meet the CAHSEE requirement.	43.1	51.5	42.3	68.1	39.2	53.0	36.9	37.4	62.2	53.7	16.9	28.3	20.2	37.4	58.9
B. I am taking additional courses.	4.5	6.2	5.9	2.9	6.5	3.2	6.6	8.0	3.5	4.4	12.2	9.8	11.1	6.8	3.7
C. I am working harder in the courses I am taking.	45.1	34.2	40.4	26.3	45.5	42.0	46.6	43.8	29.3	34.9	47.9	45.9	50.9	46.1	32.2
D. I am getting help outside of the classroom.	9.3	7.3	10.0	5.4	11.1	7.5	9.5	11.7	6.3	8.1	13.4	13.2	12.7	9.6	6.8
E. I am repeating a course to learn the material better.	4.8	4.1	6.1	1.9	4.9	2.5	5.7	4.8	3.1	4.0	8.9	6.6	8.6	5.6	3.1
F. I will stay in school an additional year to learn the required material.	2.5	3.0	3.5	1.7	2.6	1.2	3.4	3.3	1.8	2.7	9.0	5.7	6.8	3.6	1.8

Table 3.33. (Continued)

After Taking CAHSEE Mathematics Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaskan Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
12. If you do <u>not</u> pass the CAHSEE in this administration, what are you most likely to do? (Mark the most likely option.)															
A. I will take an additional class during the regular school day that covers the topics on the CAHSEE.	25.1	24.0	24.2	13.6	26.0	18.3	29.6	28.3	18.9	20.7	33.3	27.6	33.6	29.3	19.1
B. I will take an additional class after school or during the summer that covers the topics on the CAHSEE.	26.3	18.2	20.9	17.7	22.5	21.6	25.5	25.8	16.9	19.4	21.7	18.7	25.8	24.6	19.5
C. I will try again to pass the CAHSEE without taking a special class.	35.8	41.3	39.5	50.2	38.0	48.0	32.0	32.5	46.9	43.9	26.3	35.3	27.2	32.9	45.0
D. I will give up trying to pass the CAHSEE.	1.5	3.0	2.4	2.2	2.7	1.5	2.3	2.8	2.1	2.5	4.9	3.9	3.8	2.4	2.1
E. I do not know what I will do.	11.3	13.5	13.1	16.3	10.9	10.7	10.7	10.6	15.2	13.4	14.0	14.4	9.6	10.8	14.3
13. If you do not pass the CAHSEE by the end of grade 12, what are you most likely to do? (Mark the most likely option.)															
A. I will stay in school and try again to pass the CAHSEE.	26.5	36.1	31.7	26.4	30.7	29.4	34.1	30.4	28.6	29.3	34.2	32.5	36.0	34.1	28.4
B. I will take courses at a community college and try again to pass the CAHSEE.	35.3	24.4	27.8	28.3	31.2	33.2	29.7	30.8	29.5	30.0	24.9	26.6	28.0	29.0	30.5
C. I will participate in some other type of program that will help me to pass the CAHSEE.	14.2	10.5	12.5	12.8	12.8	14.5	12.8	15.0	10.4	11.9	14.3	11.9	14.2	13.0	11.6
D. I will try to get a GED certificate.	3.6	4.6	6.1	2.8	4.5	2.6	4.2	5.2	4.3	4.4	6.4	6.1	4.7	4.5	3.7
E. I will give up trying to get a diploma altogether.	1.4	3.2	2.3	2.6	2.2	1.5	2.2	2.3	2.6	2.6	3.4	3.1	2.7	2.2	2.4
F. I do not know what I will do.	19.1	21.1	19.7	27.1	18.7	18.9	17.0	16.4	24.5	21.8	16.7	19.8	14.3	17.2	23.4

Table 3.33. (Continued)

After Taking CAHSEE Mathematics Examination (Student Responses in grade ten)	Gender		Ethnicity								SWD & EL Status			ED	
	F	M	Am Indian/ Alaska Native	Asian	Pacific	Filipino	Hispanic /Latino	Black / African Am	White	Two or More Races	SWD & EL	SWD only	EL only	Yes	No
14. Thinking back to your middle school years, what helped you do well on this test? (Mark all that apply.)															
A. Teachers helped me learn study skills and test taking skills.	54.8	49.5	47.2	49.5	55.8	59.8	53.9	51.3	49.0	50.0	47.6	46.2	49.0	53.6	50.6
B. Math teachers covered topics that were on the CAHSEE.	41.7	32.1	33.1	41.9	36.1	45.9	35.3	33.1	37.8	36.5	23.3	25.4	27.9	35.5	38.5
C. I kept up with my school assignments in math.	35.7	26.6	27.9	41.2	30.8	42.7	27.8	23.6	34.3	32.6	19.0	21.1	20.0	28.1	34.7
D. Teachers helped me learn the English language.	6.3	7.3	6.1	8.8	7.2	8.2	6.7	5.7	6.5	6.6	8.4	6.7	11.4	7.0	6.6
E. I was in a support program (AVID, GEAR UP, other).	6.5	5.0	5.0	2.8	7.2	5.2	7.3	7.2	3.5	4.3	5.3	5.7	4.9	7.3	4.0
F. I do not recall any activity that helped me do well on this test.	14.8	21.0	22.7	17.6	16.0	12.6	16.8	17.6	20.8	20.4	16.0	23.0	16.6	17.0	19.0

Summary of Grade Ten Findings

Comparisons of Grade Ten Students' Responses 2005–2015

The trend data reveal multiple positive changes in student perception of the CAHSEE since 2005. Over time there has been an increase in the frequency of students reporting:

- They will earn a high school diploma with the rest of their class (or earlier).
- They used the CAHSEE online prep to prepare.
- They will attend a four-year college or university after high school.
- They did as well as they could on the CAHSEE.
- All or most of the test items and topics were similar to those that they had seen in class.
- The test questions were generally as difficult as, or easier than, those they had seen in class.
- That none of the test topics were difficult for them.
- That they do not have to work any harder to pass the CAHSEE.

A decreased percentage of students reported that:

- They used textbooks to prepare for the CAHSEE.
- They would probably not receive a high school diploma.
- The CAHSEE may prevent them from receiving a high school diploma.

Comparisons of Grade Ten Students' Responses in 2015 by Whether They Passed the Tests

We compared student responses for those who passed both tests, passed only ELA, passed only mathematics, and passed neither. Overall, students who passed both tests reported the most positive perceptions about their performance on the CAHSEE and the least need to take extra measures to pass the CAHSEE; those who passed neither test reported the most negative perceptions. The findings in 2015 were consistent with those reported in previous years of the evaluation.

Specifically, a higher percentage of students who passed both tests were most likely to report that:

- They did not take extra measures to prepare for the CAHSEE.
- They would graduate with the rest of their class or earlier.

- They were confident that they would receive a high school diploma.
- They would attend a four-year college or university after high school.
- The topics and test questions were familiar and similar or easier in difficulty to those they had seen in class.
- They would attempt to take the CAHSEE again without taking a special course if they did not pass the CAHSEE during this administration.
- That middle school teachers helped them to prepare for the CAHSEE by teaching study skills and CAHSEE topics.

Differences in Grade Ten Students' Responses in 2015 by Key Demographic Characteristics

The differences in response by demographic characteristics in 2015 proved to be very similar to what was found in previous years of the evaluation. We highlight some of the findings below.

By Gender. The data generally reveal more positive perceptions about the CAHSEE for females than males. Females are more likely to respond that they are confident they will earn a high school diploma with the rest of their class, and that they are confident they will receive a diploma. Females are more likely to report taking extra measures to prepare for the CAHSEE than males, and that a teacher helped them to prepare for the CAHSEE. In addition, females are more likely than males to plan to attend a four-year college or university or a community college than males. Females also reported more familiarity with the CAHSEE topics and item types than males.

By Ethnicity. Student perspectives across some of the questionnaire items differed between ethnic groups. Hispanic or Latino students were the most likely of all ethnic groups to believe the CAHSEE or an inability to pass required course work may prevent them from earning a high school diploma, while Asian students were most likely to be confident that they would earn a high school diploma. Asian, White, and Filipino students reported familiarity with CAHSEE topics and test questions at higher levels than other groups, while more Black or African American students than others reported unfamiliarity with the topics and that test questions were more difficult than what they had encountered in their courses. A higher percentage of Asian students reported not having to do any additional preparation outside of course work to prepare for the CAHSEE compared to other groups. Filipino students reported highest levels of middle school teachers helping them learn study skills and content relevant to CAHSEE.

By Disability and EL Status. Students classified as both SWDs and ELs generally reported more negative perspectives across the CAHSEE questionnaire compared to the general population. Those who were only ELs or only SWDs were typically more positive than those who were both SWDs and ELs, but also more negative than the general population. These students expressed less confidence in their ability to earn a high school

diploma with their class than other groups and were less likely to have plans to attend college (either four-year or community) after high school than their peers. Fewer SWDs and ELs compared to the general population reported familiarity with the CAHSEE topics and question types. These students were also less likely than others to find the questions to be easier than what they had been exposed to in class. Students designated as ELs, SWDs, or both were more likely to get outside help or take an additional class to help learn CAHSEE topics than other students.

By ED Status. In general, students who are not labeled as ED have a more positive perspective on the CAHSEE. ED students were more likely than the general student population to report that CAHSEE topics and questions were unfamiliar to them, and were more likely to respond that they had to work harder to learn the skills necessary to pass the tests. Students who were not ED were more likely to express plans to attend a four-year college and were more likely to report that keeping up with their middle school assignments helped them to prepare for the CAHSEE.

Overall Summary of Grade Ten Responses

The findings examining trend and passing category data between 2005 and 2015 have generally found student perspectives of the CAHSEE are positive and are either staying consistent or improving over time. Students are generally being exposed to CAHSEE content and feel their course work sufficiently prepares them for the tests. Student responses after taking the ELA exam tend to be slightly more positive than those after taking the mathematics exam. Consistent with previous years' findings, those who are SWDs and/or ELs are most likely to be unfamiliar with CAHSEE content and item types in 2015. Additionally, Hispanic or Latino, Black or African American, and American Indian/Alaska Native students report less familiarity with CAHSEE content than other racial/ethnic groups, and those classified as ED report less familiarity than those who are not ED.

Findings from 2015 Grade Twelve Students

The next section examines a selection of responses to the student questionnaires of 2015 grade twelve students in 2013, when they first took the examination as grade ten students, and again in 2015. The questions selected were those pertaining to post-graduation plans and content and instruction coverage. We were interested in how grade twelve students who are still taking the CAHSEE respond to these topics toward the end of their education compared to when they were grade ten students. We compare the responses of those who passed the CAHSEE in 2015 with those who did not. Because questions 12 and 13 were newly revised in 2013, this is the first year we have been able to include them in this section.

Grade Twelve Demographic Information

Table 3.34 provides the frequencies of grade twelve students who had taken the CAHSEE in 2013 and were still attempting to pass the ELA and/or mathematics CAHSEE in 2015 by whether they passed or did not pass in 2015. More students who

were still taking the CAHSEE in 2015 as grade twelve students failed than passed both ELA and mathematics; however, just over one-third of those still taking the CAHSEE in grade twelve did pass.

Table 3.34 Frequency of 2015 Grade Twelve Students Who Took the CAHSEE as Grade Ten Students in 2013 and Again in 2015 Who Passed and Who did Not Pass the Tests in 2015

Grade Twelve Passing Category	ELA	Mathematics
Passed in 2015	11,692	11,215
Did not pass in 2015	20,601	20,351
Total Test Takers	32,293	31,566

Graduation Expectations and Post-High School Plans

In 2015, grade twelve students who were still taking the CAHSEE were more likely to believe that the CAHSEE would prevent them from earning a high school diploma than they were in 2013 (see Table 3.35); particularly, approximately half of the students reported in 2015 that the CAHSEE might prevent them from graduating. Grade twelve students still taking the CAHSEE in 2015 were less concerned that not passing required courses would prevent them from earning a diploma than they were as grade ten students in 2013, possibly due to more having passed that requirement. The majority of students still taking the CAHSEE in grade twelve were not confident they would receive a high school diploma in 2015. A somewhat smaller percentage, but still a significant number, had similarly thought that not passing the CAHSEE might be a graduation obstacle when asked this question as tenth graders in 2013 compared to their grade twelve responses.

Table 3.35. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and 2015 After CAHSEE Tests, as to What Might Prevent Them From Receiving a Diploma, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 4. What might prevent you from receiving a high school diploma? (Mark all that apply.)	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not Passing		Students Passing		Students Not Passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. I may not pass all the required courses.	28.2	15.2	22.7	16.4	31.3	14.4	25.9	16.4
B. I may not pass the CAHSEE exam.	38.6	51.3	39.0	46.7	41.1	56.2	42.8	48.1
C. I may drop out before the end of 12th grade.	4.7	3.2	6.5	6.6	4.2	3.5	5.3	5.9
D. I may not meet some other graduation requirement.	13.7	9.0	11.4	9.2	12.2	8.6	11.0	9.2
E. I am confident I will receive a high school diploma.	33.6	33.6	32.5	29.2	30.0	28.0	28.3	27.8

A higher percentage of grade twelve students who were still taking the CAHSEE in 2015 responded that they would attend a community college after high school in 2015 than did in 2013. Among grade twelve students still attempting to pass the CAHSEE in 2015, a smaller percentage reported they would attend a four-year college or university than had given this response in 2013 (see Table 3.36).

Table 3.36. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and in 2015 After ELA and Mathematics Tests, as to What They Would Do After High School, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 5. What do you think you will do after high school?	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not Passing		Students Passing		Students Not Passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. Join the military.	11.9	10.9	12.8	11.6	11.9	10.6	12.6	11.8
B. Go to a community college.	23.8	46.3	23.2	40.9	26.7	48.5	25.0	42.9
C. Go to a 4-year college or university.	41.5	22.5	35.7	19.2	39.1	20.5	34.5	17.7
D. Go to a vocational, technical, or trade school.	5.0	6.5	6.0	6.8	5.0	6.4	5.5	7.0
E. Work full-time.	10.1	10.3	12.9	15.3	9.6	9.5	12.8	14.3
F. Do something else (besides school, work, or the military).	7.8	3.5	9.4	6.4	7.8	4.4	9.7	6.3

Content and Instruction Coverage

The majority of grade twelve students still taking the CAHSEE responded that most or all of the CAHSEE topics had been covered in the courses they had taken. Those who did not pass in 2015 were more likely to respond that many topics were not covered in their courses in 2015 compared to how they responded in 2013. This is possibly due to a longer period of time between the CAHSEE and when the material was covered (see Table 3.37).

Table 3.37. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and in 2015 After CAHSEE Tests, as to Whether the Tested Topics Had Been Covered in Courses Taken, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 7. Were the topics on the test covered in courses you have taken?	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not passing		Students Passing		Students Not passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. Yes, all of them.	33.7	35.1	33.4	29.4	27.4	27.4	27.1	25.4
B. Most, but not all of them (two-thirds or more were covered).	53.0	50.8	50.2	49.0	56.0	57.8	54.5	52.4
C. Many topics on the test were not covered in my courses (less than two-thirds were covered).	13.3	14.1	16.4	21.6	16.7	14.8	18.4	22.2

Table 3.38 shows a slight increase in the percentage of students reporting that test questions were easier or similar to those they had encountered in 2015 compared to their responses in 2013. The students who passed in 2015 were less likely to respond that the types of questions on the CAHSEE were different from anything they had seen before compared to those who did not pass in grade twelve.

Table 3.38. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and 2015 After CAHSEE Tests, as to Whether Test Questions Differed From Those Encountered in Homework or Classroom Tests, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 8. Were any of the questions on the test different from the types of questions or answer options you have encountered in your homework assignments or classroom tests?	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not passing		Students Passing		Students Not passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. Yes, many were different from anything I had seen before.	22.0	17.9	28.3	27.5	22.1	19.9	27.9	26.8
B. Yes, a few were different from anything I had seen before.	53.8	54.2	50.5	48.5	56.4	57.3	52.0	50.0
C. The test questions were generally easier than the questions I encountered in my course work.	24.2	27.9	21.2	24.1	21.5	22.8	20.2	23.2

The grade twelve students were less likely to report in 2015 that questions on the CAHSEE were generally more difficult than those they had seen in class than they had been in 2013 (see Table 3.39). A larger percentage of mathematics test takers than ELA test takers reported that the questions were more difficult than they had encountered in course work.

Table 3.39. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and 2015 After CAHSEE Tests, Regarding the Comparative Difficulty of the Test Questions, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 9. Were the questions on this test more difficult than questions you were given in classroom tests or homework assignments?	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not passing		Students Passing		Students Not passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. Yes, the test questions were generally more difficult than the questions I encountered in my course work.	30.9	24.4	36.7	31.8	35.1	32.1	40.1	35.9
B. The test questions were generally about as difficult as the questions I encountered in my course work.	50.2	56.2	42.9	47.2	50.4	55.8	43.7	47.1
C. The questions were generally easier than the questions I encountered in my course work.	18.9	19.4	20.4	21.0	15.4	12.1	16.2	17.0

Students who were taking the CAHSEE in grade twelve in 2015 were more likely to report that they did not take courses that covered CAHSEE topics than in 2013. Both students who passed the test and those who did not were less likely to report that they had forgotten things they were taught about the topics in 2015 compared to 2013. Those who did not pass mathematics were more likely to report that none of the topics was difficult for them compared to those who did pass; the opposite was true after ELA (see Table 3.40).

Table 3.40. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and 2015 After CAHSEE Tests, as to Why Some Topics Were Difficult for Them, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 10. If some topics on the test were difficult for you, was it because:	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not Passing		Students Passing		Students Not Passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. I did not take courses that covered these topics.	14.7	16.8	17.2	22.5	17.1	18.8	19.0	22.9
B. I had trouble with these topics when they were covered in courses I took.	31.2	31.0	30.5	30.6	38.9	42.7	36.7	37.2
C. I have forgotten things I was taught about these topics.	40.0	33.4	35.8	29.9	36.2	32.0	33.8	28.8
D. None of the topics was difficult for me.	14.2	18.8	16.6	17.0	7.7	6.5	10.5	11.2

The next two questions, questions 12 and 13, are similar. Question 12 asks students their plans if they do not pass the CAHSEE at this administration, while question 13 asked what they would do if they did not pass by the end of grade twelve. For this particular group of students, this administration and the end of grade twelve are approximately the same; therefore, we might expect to see similar results for the similar response options.

Table 3.41 shows that there was an increase in students responding that they would give up trying to pass the CAHSEE after this administration between 2013 and their grade twelve responses in 2015. However, a majority still expressed that they would make another attempt to take the CAHSEE if they did not pass.

Table 3.41. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and 2015 After CAHSEE Tests, as to What They Plan to do if They Do Not Pass the CAHSEE in this Administration, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 12. If you do not pass the CAHSEE in this administration, what are you most likely to do? (Mark the most likely option.)	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not Passing		Students Passing		Students Not Passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. I will take a special class during the regular school day that covers the topics on the CAHSEE.	32.3	38.5	30.0	27.7	32.9	36.8	29.6	26.7
B. I will take a special class after school or during the summer that covers the topics on the CAHSEE.	24.8	19.9	22.6	20.3	25.1	22.0	23.5	21.6
C. I will try again to pass the CAHSEE without taking a special class.	28.8	24.3	28.6	24.2	27.1	21.4	27.8	21.8
D. I will give up trying to pass the CAHSEE.	4.7	5.0	6.5	9.2	4.4	5.2	5.5	8.3
E. I do not know what I will do.	9.6	12.4	12.3	18.7	10.5	14.6	13.6	21.7

Table 3.42 summarizes the findings for question 13. Between 2013 and 2015 there was a decrease in the percentage of students who stated they would stay in school and try again to pass the CAHSEE if they did not pass by the end of grade twelve, and a slight increase in the percentage who stated they would take courses at a community college and try again to pass. Regardless of whether they passed or did not pass in 2015, only a very small percentage of students stated they would give up trying for a diploma all together.

Table 3.42. Responses of 2015 Grade Twelve Students, in 2013 as Grade Ten Students and 2015 After CAHSEE Tests, as to What They Plan to do if They Do Not Pass the CAHSEE by the End of Grade Twelve, by Those Who Passed in 2015 and Those Who Did Not (in Percentages)

Question 13. If you do not pass the CAHSEE by the end of grade twelve, what are you most likely to do? (Mark the most likely option.)	ELA Questionnaire Responses				Math Questionnaire Responses			
	Students Passing		Students Not Passing		Students Passing		Students Not Passing	
	2013	2015	2013	2015	2013	2015	2013	2015
A. I will stay in school and try again to pass the CAHSEE.	34.9	34.4	34.5	27.4	35.3	31.1	33.4	26.3
B. I will take courses at a community college and try again to pass the CAHSEE.	25.1	31.4	22.1	28.1	26.1	33.5	24.4	29.2
C. I will participate in some other type of program that will help me to pass the CAHSEE.	16.1	12.4	16.0	13.3	14.7	12.6	14.5	12.0
D. I will try to get a GED certificate.	6.8	6.3	8.0	8.9	6.2	6.4	7.5	8.8
E. I will give up trying to get a diploma altogether.	2.6	2.4	3.9	4.9	2.7	2.7	3.6	5.0
F. I do not know what I will do.	14.6	13.2	15.6	17.5	15.0	13.8	16.5	18.7

Summary of Grade Twelve Student Responses

A larger percentage of grade twelve students in 2015 who were still taking the CAHSEE were more concerned as seniors that the CAHSEE might prevent them from earning a high school diploma than they were as sophomores. These same students were less concerned as seniors than they were as sophomores with other barriers, such as course requirements, preventing them from earning a diploma.

Grade twelve students in 2015 who were still taking the CAHSEE reported a change in post-graduation plans compared to their grade ten responses in 2013. Particularly, a larger percentage reported plans to attend a community college and a smaller percentage reported they would attend a four-year college or university.

There was generally very little difference in reported familiarity with test topics and question types between 2013 and 2015 for these students, indicating that those who were not exposed to CAHSEE-like topics and questions in grade ten were unlikely to be exposed later in high school. There was some indication that grade twelve students had forgotten CAHSEE content they had once learned, given a slight increase in students responding that they had not been exposed to topics compared to their grade ten responses.

Most grade twelve students still attempting the CAHSEE indicated plans to continue to try to pass the CAHSEE if they did not pass by the end of the school year. Slightly more

of these students reported in 2015 that they would take courses at community college and try again rather than planning to stay in school longer and try again.

Overall Conclusions

The student questionnaire responses between 2005 and 2015 have provided valuable information concerning the student perspective towards their level of preparedness, opportunity to learn, confidence levels, and post-graduation plans. We found overall evidence that the majority of students were given the opportunity to learn the ELA and mathematics CAHSEE content in their courses, and most did not feel the CAHSEE would prevent them from earning a diploma. Most grade ten students were confident they would earn a diploma and had plans to attend a community college or four-year college or university after graduation. We found that over the years of CAHSEE administration, student responses in the areas of test preparedness and post-graduation plans typically became more positive.

By breaking down the responses by various demographic characteristics each year, we were able to highlight important differences in student perspectives for select groups. Particularly, each year of the evaluation we consistently found that a higher percentage of SWDs and ELs were not as familiar with the CAHSEE content as the general population. We also found that economically disadvantaged students may not have had the same level of exposure to CAHSEE content and question types as those who were not disadvantaged. More than half of respondents qualified as economically disadvantaged in 2015.

Similarly, those who identified as Hispanic or Latino, Black or African American, or Native American reported lower levels of familiarity with CAHSEE content compared to other race/ethnicities, particularly after mathematics. Approximately 60 percent of students are identified as belonging to one of these groups. Specifically, approximately 60 percent of Hispanic or Latino students reported all ELA topics were covered in courses they had taken compared to just over 70 percent of White and Filipino students. For mathematics, slightly less than half of the Native American, Hispanic or Latino, and Black or African American students reported that all topics had been covered in their courses compared to approximately 73 percent of Asian students and 60 percent of White students. However, the majority of all groups found at least some of the topics were covered in their course work for both ELA and mathematics. Looking back to previous CAHSEE years, this gap between racial/ethnic groups seems to be fairly consistent, with all groups making similar increases in familiarity over time. Similar differences between racial/ethnic groups were found for exposure to CAHSEE question types—with most students reporting exposure to at least some of the question types—Asian students most frequently reporting that all question types were similar to what they had seen. Additionally, Asian students were approximately twice as likely to report CAHSEE mathematics questions were easier than anything they had encountered before compared to Black or African American, Hispanic or Latino, or Native American students.

As California moves toward the use of new content standards and new testing requirements, it will be important to continue to monitor student perspectives to continue to help better understand student test preparedness, opportunity to learn, and post-graduation plans. This information should help inform where California may need to focus resources to increase the learning and performance of all students.

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Chapter 4: Comparing Student Performance on CAHSEE and Smarter Balanced

Rebecca L. Norman Dvorak and Laress Wise

Beginning in 2001, California began administering the English language arts (ELA) and Mathematics California High School Exit Examination (CAHSEE) to all public high school students to act as a graduation requirement (first meant to be applied to the class of 2004, but then deferred to the class of 2006). Subsequently, the CAHSEE was also adopted as California's high school accountability test. Students first take the CAHSEE in grade ten and are allowed to retest during multiple administrations throughout subsequent years until they pass both the ELA and mathematics tests.

On August 2, 2010, California adopted the Common Core State Standards (CCSS) which are considered more rigorous than the previous state standards. This change has resulted in a change to curriculum. California joined the Smarter Balanced Assessment Consortium (Smarter Balanced) to participate in the development of new assessment systems designed to assess the CCSS for reading and mathematics in grades three through eight and once in high school at grade eleven. In 2014 California was one of 21 states to participate in the Smarter Balanced Field Test in ELA/literacy and mathematics. More than 17,000 grade eleven students in California took Smarter Balanced ELA/literacy and mathematics tests. The first operational administration of the Smarter Balanced assessment in California occurred in the spring of 2015.

As California moves to a new system for accountability, it is important to understand the degree to which proficiency levels for the Smarter Balanced assessments reflect higher and more rigorous requirements for student achievement. In addition, pending legislation would suspend the CAHSEE graduation requirement while other options are considered. It may be important to understand how the Smarter Balanced high school tests administered at grade eleven compare to the current CAHSEE. This study examines how the CAHSEE performance standards for graduation and for proficiency, as used in accountability, compare to the new accountability performance level standards for the Smarter Balanced high school (grade eleven) assessments.

Background and Alignment of the Smarter Balanced Assessment

In 2014, HumRRO conducted an alignment study to provide validity evidence for the Smarter Balanced ELA/literacy and mathematics assessments, including high school tests administered at grade eleven. The assessments were developed using Evidence Centered Design (ECD), which is a different and more complex approach to test development than that used by many traditional state assessments. Content specifications were developed based on the CCSS. The Smarter Balanced ELA/literacy and mathematics Claims and Targets were designed with claims describing the general content and the intent that a single target (of the multiple assessment targets) might align to more than one standard of the CCSS. For mathematics, assessment targets may also align to one or more of the CCSS Mathematical Practices. Evidence Statements were developed to provide more detailed examples of the types of items that might be written to an assessment target for both content areas. The Smarter Balanced assessment

system was to be an adaptive test operationally; test blueprints were developed to guide a computer adaptive test (CAT) algorithm for use in generating summative test forms.

HumRRO's alignment study included five workshops to examine various connections between different aspects of the Smarter Balanced assessment system, including (but not limited to):

- the content specifications (claims and targets) and the CCSS;
- the test blueprints and the content specifications;
- the items and performance tasks and the content specifications; and
- the items and performance tasks and CCSS.

Because HumRRO did not have access to the CAT algorithm or sample summative forms, our item review was based on a pool of approximately 50 percent of the items, and a small selection of performance tasks. There were 223 educators representing 19 Smarter Balanced states who participated in the various workshops.

Identifying the alignment between the CCSS and content specifications was the most challenging task for reviewers due to the design of the content specifications. Our study found evidence that the content and knowledge required for each target was encompassed by a set of CCSS; however, reviewers often did not identify the exact same set of CCSS as intended by Smarter Balanced content specification writers. Our review found strong evidence that the Smarter Balanced evidence statements were aligned to the content specifications. The test blueprint was aligned to the content specifications, and in most cases, the review found very strong alignment of the items (and performance tasks) to the content specifications, evidence statements, and CCSS.

Methods

HumRRO took the following steps to complete this special study comparing CAHSEE and Smarter Balanced field test performance:

- Matched individual student Smarter Balanced 2014 grade eleven field test scores with corresponding CAHSEE scores.
- Examined correlations between CAHSEE and Smarter Balanced scores.
- Conducted simple linear regression analyses to predict CAHSEE scores from Smarter Balanced scores, overall and for demographic subgroups.
- Used the resulting prediction equations to project Smarter Balanced cut points onto the CAHSEE scale.

- Matched corresponding percentile points from the CAHSEE and Smarter Balanced score distributions to identify more robust linkages that account for ceiling and floor effects.¹⁵
- Examined the impact of district technological advancement on the relationships between CAHSEE and Smarter Balanced scores.

The remainder of this chapter summarizes the findings from each of the analyses listed above.

Student Sample

The California Department of Education (CDE) provided a file that contained student performance data from the Smarter Balanced field test conducted in 2014. Just over 17,000 grade eleven students had Smarter Balanced score estimates¹⁶ for ELA (17,318) and for mathematics (17,091).

Statewide student identifiers (SSIDs) were used to merge the Smarter Balanced records with records for students who took the CAHSEE one or more times from 2011 through 2015. CAHSEE records were found for over 16,000 of the students on the Smarter Balanced data file. We then extracted two samples of interest for further analyses:

- **Longitudinal File** – All students with grade ten (census testing) CAHSEE scores in 2013 and grade eleven Smarter Balanced scores in 2014. There were 16,731 matched records with ELA scores and 16,442 matched records with mathematics scores
- **Concurrent File** – All students with grade eleven CAHSEE scores in 2014 and corresponding Smarter Balanced scores also from 2014. There were 2,243 students with matched ELA scores and 1,970 with matched mathematics scores.

The concurrent file allows for the comparison of students on the two tests within the same school year; however, it is restricted to students who did not pass the CAHSEE in grade ten. The longitudinal file, on the other hand, includes a fully representative sample of California students because all students take the CAHSEE in grade ten; however, there is a one-year time lag between their CAHSEE and Smarter balanced field test administrations. This one-year lag may prove useful for some questions, such

¹⁵ Ceiling effects occur when a notable proportion of students earn the top score on a test, and indicates the test is incapable of detecting differences in performance of high achievers. Floor effects occur when a notable proportion of students earn the lowest score on a test, and indicates the test is incapable of detecting differences in performance of low achievers.

¹⁶ The Smarter Balanced scores on the field test records were on an underlying item response theory (IRT) scale where examinees have an average score near 0 with a standard deviation of about 1.0. This scale is sometimes referred to as a “theta” scale because the Greek letter theta is used to represent examinee ability in the IRT equations specifying the probability of answering each question correctly for examinees at a given level of ability.

as how students who take the CAHSEE now in grade ten might perform when they take the Smarter Balanced assessments a year later.

Table 4.1 compares the demographics of the full grade eleven Smarter Balanced field test California sample to the longitudinal and concurrent samples for ELA and mathematics. For both subject areas, the matched longitudinal samples provide a close approximation to the demographics of the full Smarter Balanced field test sample. The concurrent samples include a higher proportion of disadvantaged students than the full samples – particularly, the percentage of students who are English learners (ELs) and those with disabilities is much higher for the concurrent samples. In addition, the racial makeup of the concurrent sample differs from that of the full Smarter Balanced sample. Such differences are fully expected given differential CAHSEE grade ten passing rates for these different groups.

Table 4.1. Demographic comparisons between the Full Smarter Balanced Field Test Sample, Longitudinal, and Concurrent Samples for ELA and Mathematics

Group	ELA			Mathematics		
	Full SBFT	Longitudinal	Concurrent	Full SBFT	Longitudinal	Concurrent
N	17,318	16,731	2,243	17,091	16,442	1,970
Male	50.6%	50.4%	60.1%	48.8%	48.4%	48.1%
Asian	10.8%	10.8%	8.0%	15.2%	15.4%	4.8%
Black or African American	4.4%	4.3%	6.8%	5.1%	5.1%	8.0%
Hispanic or Latino	47.5%	47.6%	61.6%	52.7%	52.8%	68.0%
EL	7.6%	7.3%	34.7%	8.8%	8.4%	34.0%
SWD	7.0%	6.9%	27.3%	5.6%	5.6%	23.2%

Correlation Results

Correlation analyses were conducted to examine the relationships between Smarter Balanced field test and CAHSEE performance for each sample-type and content area. Correlations between performances on the two tests were relatively strong. Despite the one-year time lag of the longitudinal sample, the correlations were slightly higher than those for the concurrent sample for both ELA and mathematics. Table 4.2 provides a summary of the correlations.

Table 4.2. Correlations between Smarter Balanced Field Test Performance and CAHSEE Performance, by Sample and Content Area

Sample	Subject	Matched	CAHSEE Score		SBFT Theta Score		<i>r</i>	Sig. (<i>p</i>) ¹
		<i>N</i>	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>		
Longitudinal								
	ELA	16,731	390.7	33.3	0.62	1.21	0.67	<.001
	Mathematics	16,442	397.6	34.4	0.51	1.47	0.67	<.001
Concurrent								
	ELA	2,243	351.4	31.2	-0.57	1.06	0.60	<.001
	Mathematics	1,970	356.2	28.9	-0.81	1.33	0.53	<.001

¹ Sig.(*p*) gives the probability of obtaining a correlation (*r*) as high as was observed by random chance. Small values indicate that the correlational relationship of the two variables is statistically different from zero.

Regression Results: Predicting CAHSEE Scores from Smarter Balanced Scores

As a first step in examining the ability to predict CAHSEE scores from Smarter Balanced performance, we conducted simple linear regression analyses¹⁷ using our longitudinal and concurrent samples for ELA and mathematics. We then used the resulting equations to plot the predicted CAHSEE scores and to identify the percentage of grade ten students in 2013 who would be expected to meet each Smarter Balanced performance cut point. Results for the longitudinal sample analyses are discussed first followed by results based on the concurrent sample.

Longitudinal Sample

Table 4.3 summarizes the regression results for the longitudinal sample for ELA and mathematics. As shown, Smarter Balanced performance acted as a significant predictor of CAHSEE performance for both subject areas, with R^2 values¹⁸ of 0.45 for each.

¹⁷ Linear regression is a statistical technique that identifies a linear translation of the predictor scores that are as close as possible to the observed criterion scores.

¹⁸ R^2 provides an indication of how much of the variance of an outcome variable (for example, CAHSEE score) can be explained by a predictor variable (for example, Smarter Balanced score). The range of values is between 0 and 1, with higher values indicating the predictor accounts for more variance.

Table 4.3. Summary of Regression Analysis for Predicting CAHSEE performance from Smarter Balanced Field Test Scores from the Longitudinal Sample, by Content Area¹⁹

ELA (N = 16,731)					
Variable	B	SE(B)	β	t	Sig. (p)
Smarter Balanced Score	18.39	0.22	0.67	116.01	<.001
Constant	379.26	0.16		1762.11	<.001
$R^2 = 0.45$					
Mathematics (N = 16,442)					
Variable	B	SE(B)	β	t	Sig. (p)
Smarter Balanced Score	15.74	0.14	0.67	116.55	<.001
Constant	389.59	0.21		1855.35	<.001
$R^2 = 0.45$					

Regression analyses by subgroup for the longitudinal sample were examined to determine how they compared to the full group. Table 4.4 shows that, in general, the regression equations and R^2 values for each group were similar to that of the full group, with the exception of ELs; this category had significantly lower correlations and slopes. For ELs, there was noticeably less correlation of scores between the two tests. The cause of this difference may have been a result of differences in the complexity of language used in the texts between the two assessments or to the much more restricted range of performance of ELs; however, this is speculative and cannot be determined by the data.

¹⁹ In this table, and subsequent regression tables, B is the non-standardized regression coefficient. Beta (β) is the standardized regression coefficient. The value t and associated p test the significance of the regression equation. The first B listed (Smarter Balanced Score) is the slope for a linear equation. To generate a regression equation to predict CAHSEE scores from Smarter Balanced theta, one would multiply the slope by a Smarter Balanced theta score and add the constant to get the predicted equivalent CAHSEE score.

Table 4.4. Summary of Regression Analyses by Subgroup for Predicting CAHSEE performance from Smarter Balanced Field Test Scores from the Longitudinal Sample, by Content Area

Subgroup		ELA				Mathematics			
		N	B (Slope)	Constant	R ²	N	B (Slope)	Constant	R ²
All		16,731	18.39	379.26	0.45	16,442	15.74	389.58	0.45
Gender	Female	8,298	18.82	379.43	0.45	8,415	15.73	388.19	0.45
	Male	8,433	17.89	378.96	0.43	8,027	15.73	391.06	0.45
Race/ Ethnicity	Asian	1,804	18.58	381.46	0.46	2,523	14.10	400.05	0.42
	Black	718	18.19	377.42	0.42	831	15.14	382.12	0.41
	Hispanic	7,961	18.03	374.96	0.41	8,679	14.84	386.55	0.39
	White	5,566	16.26	386.82	0.40	3,899	14.34	394.15	0.41
EL	Yes	1,220	12.52	350.59	0.20	1,382	11.58	368.36	0.23
	No	15,511	16.70	382.43	0.40	15,060	14.92	391.75	0.43
SWD	Yes	457	19.07	357.77	0.40	923	15.39	368.24	0.38
	No	1,513	16.78	382.03	0.41	15,519	15.00	391.26	0.43

We next examined the relationship between the tests through scatterplots and tested for non-linearity. Figure 4.1 presents graphically the relationship between ELA Smarter Balanced theta scores and ELA CAHSEE scores. As shown, there is a general positive linear relationship between the two measures, with both ceiling and floor effects present. These effects indicate that the Smarter Balanced assessment measures higher level skills than the CAHSEE does. Many test takers who had average performance results (a theta of around 0) on the Smarter Balanced test obtained a maximum score on the CAHSEE.²⁰

²⁰ An alternative explanation for large differences between CAHSEE and Smarter Balanced scores for some students is that motivation to perform well on the CAHSEE may have been considerably greater than their motivation to perform well on the Smarter Balanced field test. For example, the top left corner of Figure 4.1 shows that some students with high scores on the CAHSEE had very low scores on Smarter Balanced.

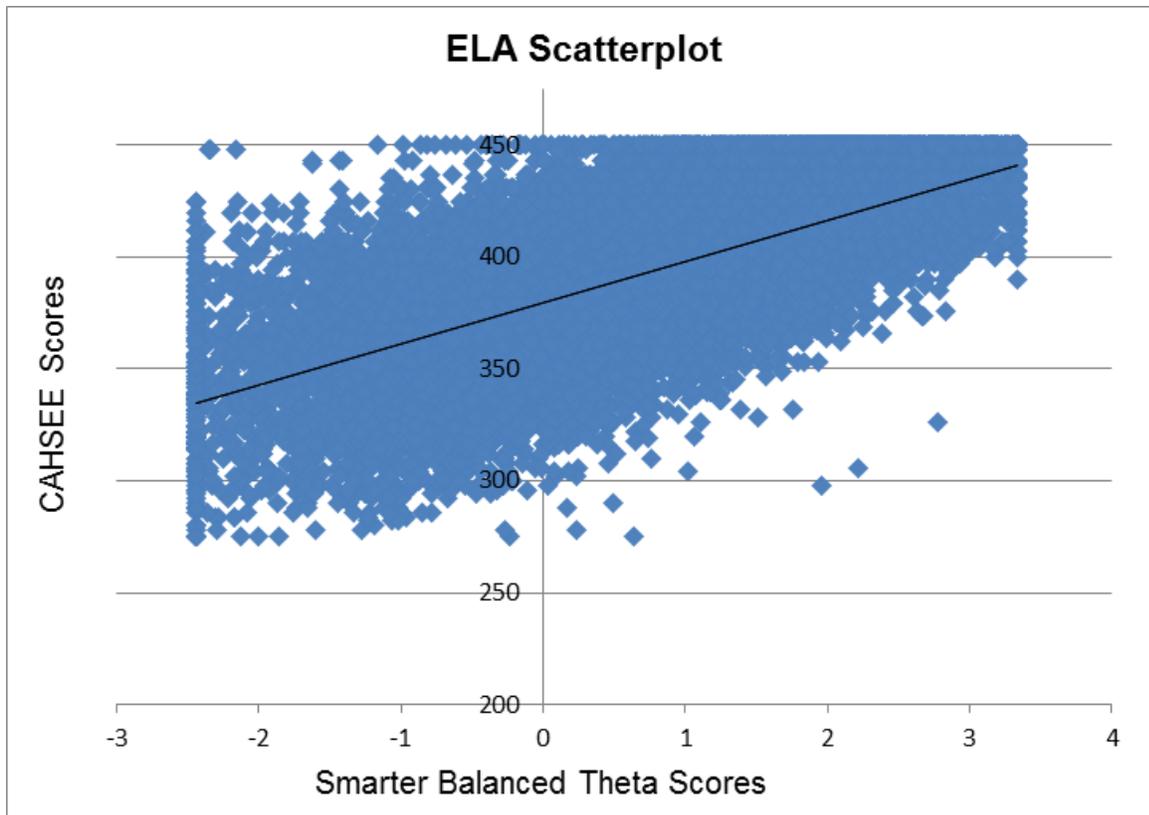


Figure 4.1. Scatterplot illustrating the relationship between Smarter Balanced theta scores and CAHSEE ELA performance for the longitudinal sample.

Figure 4.2 illustrates the relationship between mathematics scores on the Smarter Balanced theta scale and the CAHSEE scale scores for the longitudinal sample. Similar to the ELA findings, the scatterplot reveals a positive linear relationship with floor effects on the Smarter Balanced scores and an even more pronounced ceiling effect on the CAHSEE scores. Many students with high CAHSEE scores earned average Smarter Balanced scores. It appears that the Smarter Balanced mathematics assessment tests knowledge and skills well beyond those covered by the CAHSEE.

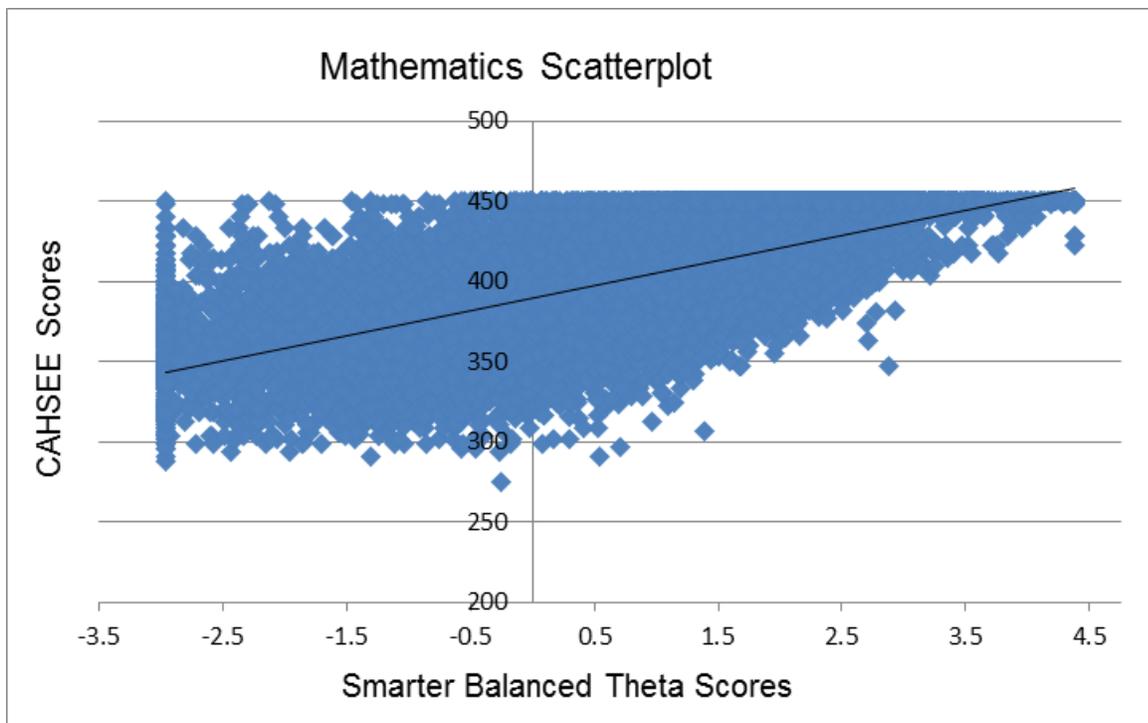


Figure 4.2. Scatterplot illustrating the relationship between Smarter Balanced theta scores and CAHSEE mathematics performance for the longitudinal sample.

We examined the scatterplots to determine if a linear or curvilinear regression equation was most appropriate for using Smarter Balanced theta scores to predict CAHSEE performance, using the longitudinal ELA and mathematics samples. We also examined the impact of adding a quadratic term. Table 4.5 shows that adding a quadratic (squared) term (to model curvature in the relationship of the two sets of scores) had little impact on the R^2 values or the regression coefficients; therefore, the following linear equations were identified:

$$\text{Predicted CAHSEE ELA} = 379.26 + 18.39(\text{Smarter Balanced Theta})$$

$$\text{Predicted CAHSEE mathematics} = 389.59 + 15.74(\text{Smarter Balanced Theta})$$

Table 4.5. Summary of Results Examining Impact of Adding a Quadratic Term to Regression Equations in the Longitudinal Sample, by Content Area

ELA (N=16,731)								
	R^2	F	df1	df2	Sig. (p)	Constant	B1	B2
Linear	0.45	13458.43	1	16729	<.001	379.26	18.39	
Quadratic	0.45	6803.57	2	16728	<.001	378.12	17.48	0.92
Mathematics (N=16,442)								
	R^2	F	df1	df2		Constant	B1	B2
Linear	0.45	13584.02	1	16440	<.001	389.59	15.74	
Quadratic	0.47	7179.95	2	16439	<.001	386.59	14.88	1.42

We next consulted the recent Educational Testing Service (ETS) study comparing California’s Early Assessment Program (EAP) to the Smarter Balanced field test (CDE, 2015). We identified the slope and intercept for the equation to convert Smarter Balanced scale score proficiency cut points at their three performance levels (Levels 2, 3, and 4) to the equivalent theta scores. Table 4.6 presents the slope and intercept used in the linear equation, and Table 4.7 presents the Smarter Balanced scale scores and equivalent theta scores.

Table 4.6. Slope and intercept values used to Convert Smarter Balanced Theta Values to Scale Scores

Subject	Slope (a)	Intercept (b)
ELA	85.8	2508.2
Mathematics	79.3	2514.9

Table 4.7. Smarter Balanced Scale Scores at each Proficiency Cut Point, and Equivalent Theta Values

SB Assessment	Scale Scores			Equivalent Theta Values		
	Level 2	Level 3	Level 4	Level 2	Level 3	Level 4
ELA	2493	2583	2682	-0.177	0.872	2.026
Mathematics	2543	2628	2718	0.354	1.426	2.561

Using the linear regression equations for predicting CAHSEE scores from Smarter Balanced theta scores, and the theta cut points identified in Table 4.7, we computed the predicted CAHSEE scores at each of the three Smarter Balanced performance level cut points. Figure 4.3 presents the predicted CAHSEE scores at Smarter Balanced Levels 2, 3, and 4 for ELA and mathematics (as defined in Table 4.7). As shown, all of the Smarter Balanced cut points are set at a higher level than the CAHSEE graduation cut point, but the Smarter Balanced Level 2 cut point is not much different than the CAHSEE proficiency cut used in accountability testing.

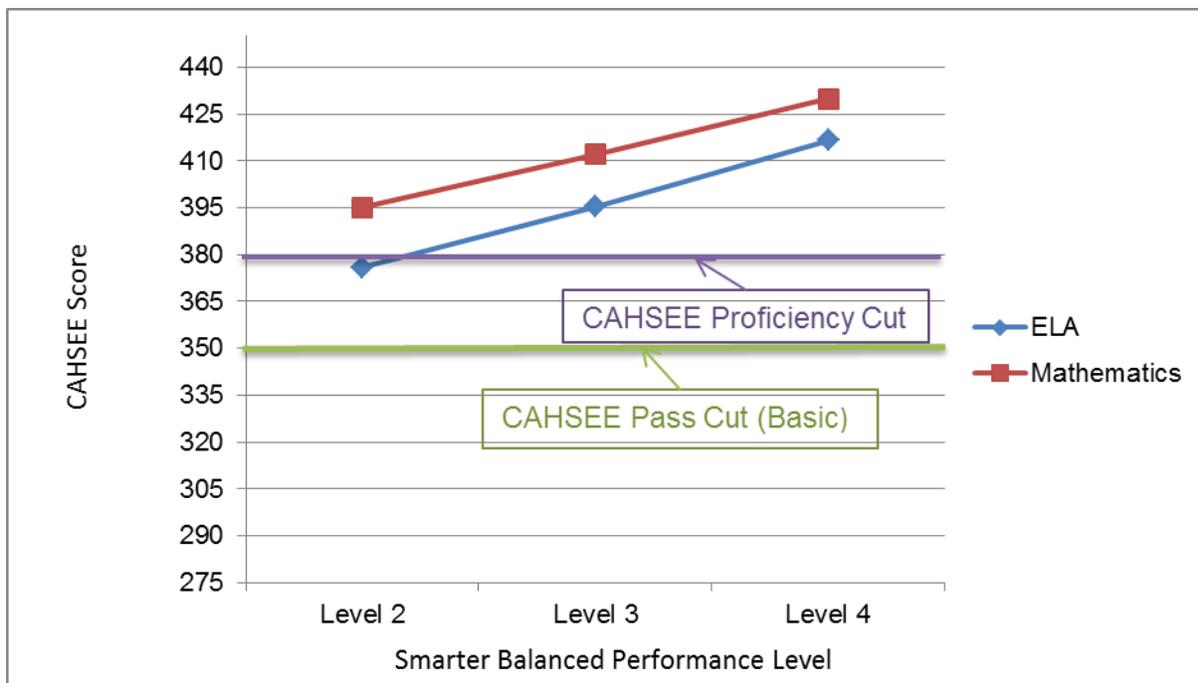


Figure 4.3. Predicted CAHSEE ELA and mathematics scores at Smarter Balanced performance cut points (longitudinal sample).

Concurrent Sample

Table 4.8 summarizes the regression results for predicting CAHSEE performance using Smarter Balanced scores for the concurrent sample, for ELA and mathematics. While the R² values were not as strong as those for the longitudinal sample, the results were similar and Smarter Balanced performance acted as a significant predictor of CAHSEE scores for grade eleven students who were still taking the CAHSEE in 2014.

Table 4.8. Summary of Regression Analysis for Predicting CAHSEE performance from Smarter Balanced Field Test Scores from the Concurrent Sample, by Content Area

ELA (N = 2,243)					
Variable	B	SE(B)	β	t	Sig. (p)
Smarter Balanced Score	17.65	0.50	0.60	35.33	<.001
Constant	361.44	0.60		603.68	<.001
$R^2 = 0.36$					
Mathematics (N = 1,970)					
Variable	B	SE(B)	β	t	Sig. (p)
Smarter Balanced Score	11.51	0.41	0.53	27.78	<.001
Constant	365.54	0.65		566.61	<.001
$R^2 = 0.28$					

Figure 4.4 illustrates the relationship between CAHSEE and Smarter Balanced performance for ELA in the concurrent sample. The scatterplot reveals a positive linear relationship.

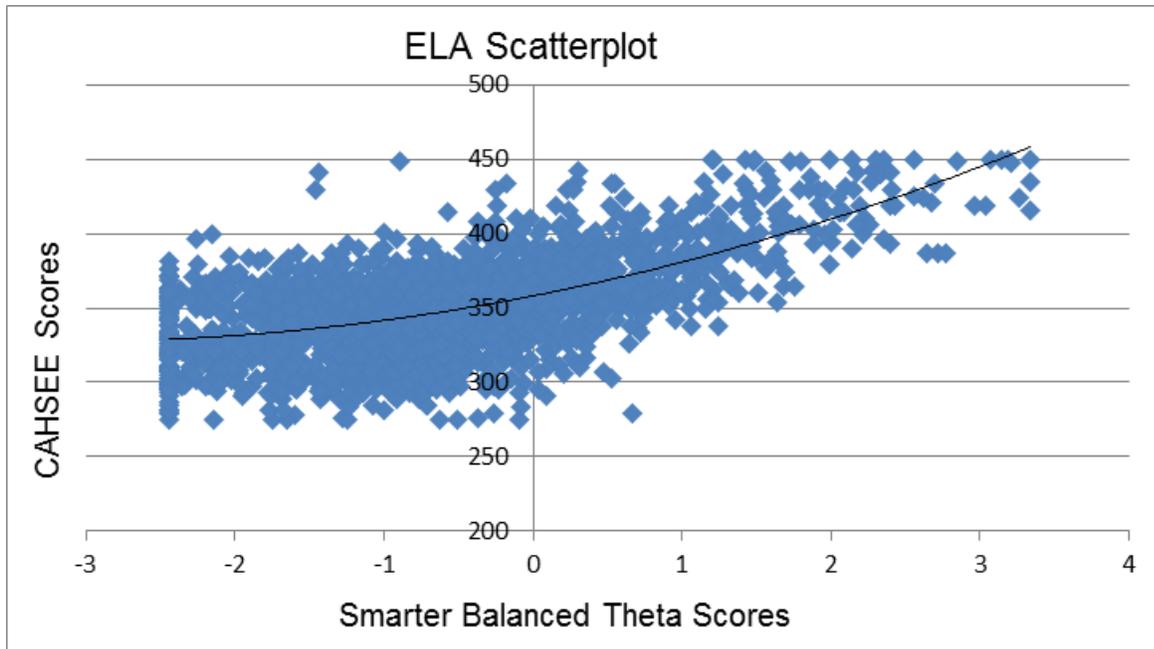


Figure 4.4. Scatterplot illustrating the relationship between Smarter Balanced theta scores and CAHSEE ELA performance for the concurrent sample.

Figure 4.5 illustrates the relationship between CAHSEE and Smarter Balanced mathematics field test performance for the concurrent sample. The scatterplot suggests a positive relationship that may be better defined as curvilinear rather than linear.

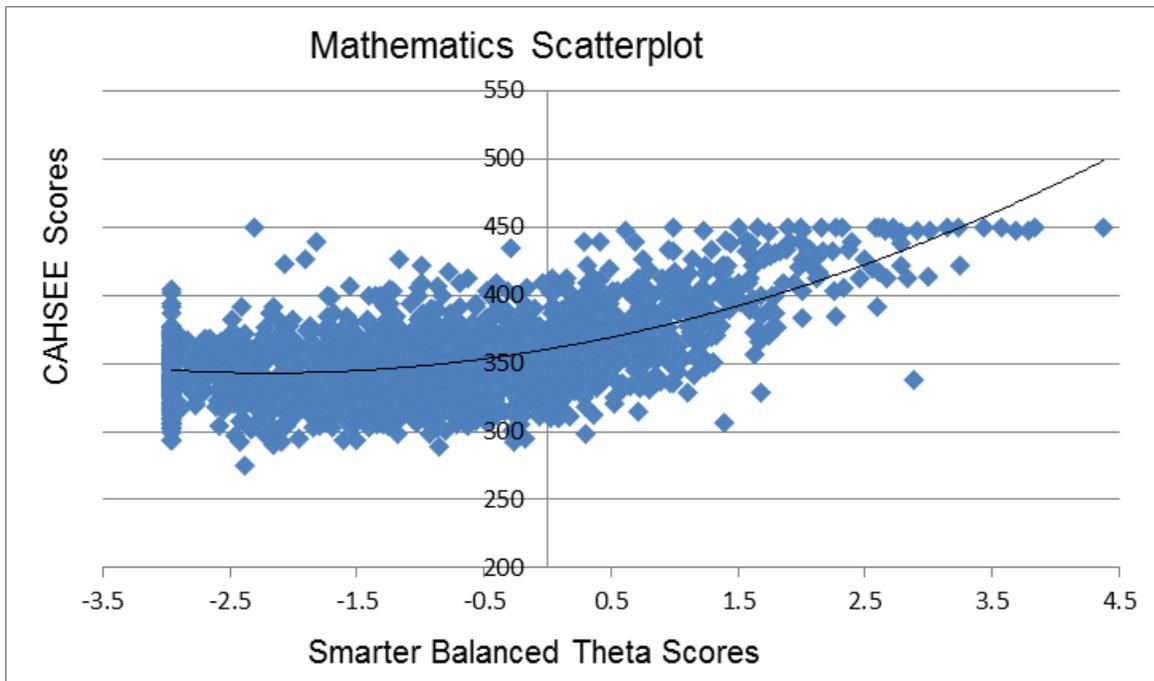


Figure 4.5. Scatterplot illustrating the relationship between Smarter Balanced theta scores and CAHSEE mathematics performance for the concurrent sample.

Table 4.9 reveals that adding in a quadratic term for the ELA concurrent regression equation does little to improve prediction. For mathematics, however, the R^2 value increases by .09 when a quadratic term is included. These results and the scatterplots above for ELA and mathematics, (Figures 4.4 and 4.5, respectively) suggest we use a linear equation for the ELA sample and the quadratic for the mathematics sample. The two equations identified for predicting CAHSEE performance from Smarter Balanced theta scores are:

$$\text{Predicted CAHSEE ELA} = 361.44 + 17.65(\text{Smarter Balanced Theta})$$

$$\text{Predicted CAHSEE mathematics} = 360.3 + 15.845(\text{Smarter Balanced Theta}) + 3.606(\text{Smarter Balanced Theta}^2)$$

Table 4.9. Summary of Results Examining Impact of Adding a Quadratic Term to Regression Equations in the Concurrent Sample, by Content Area

ELA (N=2,243)									
	R^2	F	df1	df2	Sig. (p)	Constant	B1	B2	
Linear	.358	1248.166	1	2241	.000	361.444	17.651		
Quadratic	.386	704.343	2	2240	.000	358.050	19.576	3.124	
Mathematics (N=1,970)									
	R^2	F	df1	df2		Constant	B1	B2	
Linear	.282	771.580	1	1968	.000	365.542	11.508		
Quadratic	.372	583.761	2	1967	.000	360.300	15.845	3.606	

Figure 4.6 presents the predicted CAHSEE ELA and mathematics scores for the concurrent sample at each of the Smarter Balanced cut points. To obtain these values we used the equations identified above and the theta cut points found in Table 4.7. The graph illustrates that the CAHSEE graduation requirement cut point of 350 is equivalent to a Smarter Balanced score below the Level 2 cut point for both ELA and mathematics. The CAHSEE proficient cut point for ELA falls just below the Smarter Balanced Level 3 cut point, and mathematics falls above by approximately 10 points. This suggests that a Smarter Balanced Level 3 (proficient) may be approximately the same as the CAHSEE proficient cut point.

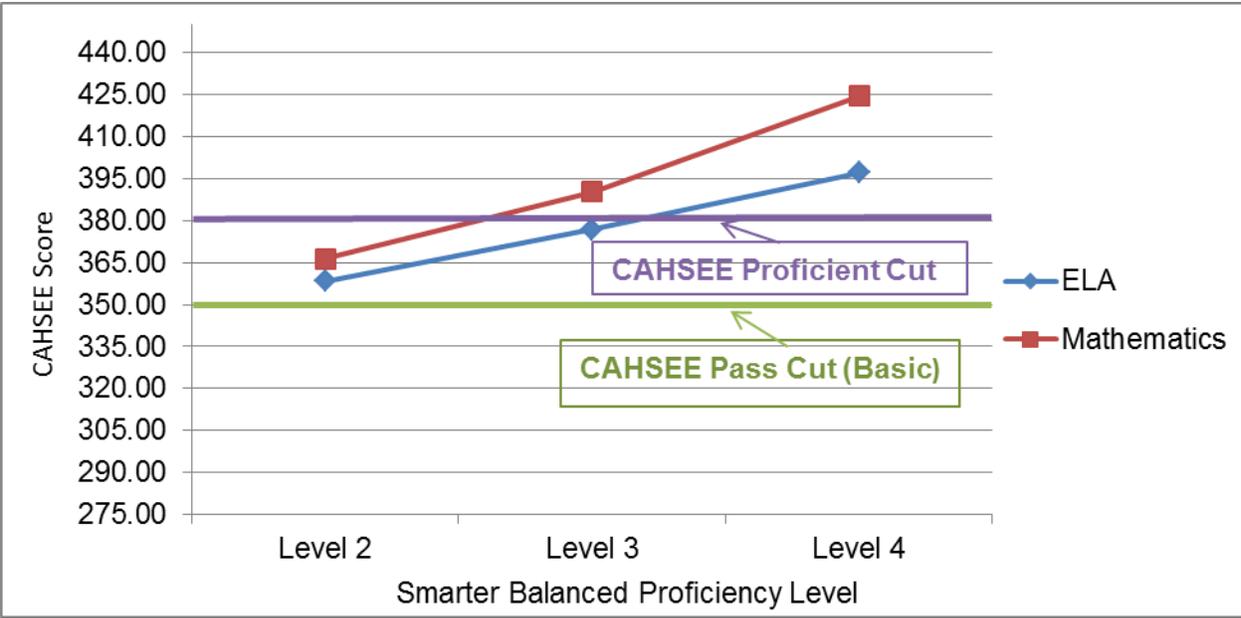


Figure 4.6. Predicted CAHSEE ELA and mathematics scores at Smarter Balanced cut points, concurrent sample.

Comparing the Longitudinal and Concurrent Samples

Table 4.10 compares the findings from the regression analyses presented above for the longitudinal and concurrent samples. The table also presents the Smarter Balanced theta performance cut points, the projections of these cuts onto the CAHSEE scale (based on the regression equations), the CAHSEE performance cut points, and the lowest and highest possible score on each test. As shown, there are some differences in the CAHSEE predictions depending on the sample used. Particularly, the predicted CAHSEE cut points were slightly higher for the longitudinal samples than for the concurrent samples for both ELA and mathematics.

Table 4.10. Performance Level Comparisons for the Longitudinal and Concurrent Samples, for ELA and Mathematics

Smarter Balanced Theta Performance Cut Points						
		1-2	2-3	3-4	Floor	Ceiling
ELA		-0.177	0.872	2.026	-2.500	3.500
Mathematics		0.354	1.426	2.561	-3.000	4.000
Projections onto the CAHSEE Scale						
ELA	Long.	376.0	395.3	416.5	333.3	443.6
	Conc.	358.8	374.2	391.1	324.8	412.7
Mathematics	Long.	395.2	412.0	429.9	342.4	452.6
	Conc.	366.4	390.2	424.6	345.2	481.4
CAHSEE Cuts						
ELA		350	380	403	275	450
Mathematics		350	380	424	275	450

Percentage of 2013 Grade Ten Students at or Above Cut Points

To determine the potential impact of using the Smarter Balanced assessment for accountability purposes, we used the equivalent CAHSEE scores at each Smarter Balanced cut point to determine the percentage of students who would have been identified at or above Basic (Smarter Balanced Level 2), and at or above Proficient (Smarter Balanced Level 3). Table 4.11 summarizes these results for ELA.

As shown, the percentage identified at or above Basic for the full group of students for ELA is slightly lower based on Smarter Balanced performance than what was found through CAHSEE results based on the concurrent sample, and approximately 20 percent lower when based on the regression equation of the longitudinal sample. Findings were similar at the various subgroups. The percentages at or above Proficient (or Level 3 for Smarter Balanced), showed a different trend. The percentage identified at or above Proficient based on the regression equations of the concurrent sample found a slightly higher percentage would have met the Smarter Balanced cut point in 2013 compared to the CAHSEE cut point. However, approximately 15 percent fewer would have made the cut point using the equivalent CAHSEE score based on the longitudinal regression equation (see Table 4.11).

Table 4.11. Percentage of 2013 Grade Ten Students at or Above Smarter Balanced Cut Points for ELA, Based on Projected CAHSEE Equivalent Scores

ELA Group	N	Percent at or above Basic/L2			Percent at or above Prof./L3		
		CAHSEE	SB-Concurrent	SB-Longitudinal	CAHSEE	SB-Concurrent	SB-Longitudinal
All Students	460,972	83.1%	77.4%	62.7%	57.2%	62.7%	41.1%
Female	226,379	86.7%	81.4%	67.5%	62.2%	67.5%	46.2%
Male	234,593	79.7%	73.4%	58.0%	52.4%	58.0%	36.1%
Asian	41,621	91.6%	88.8%	80.5%	77.1%	80.5%	64.8%
Hispanic African American	233,956	77.9%	70.4%	52.4%	46.1%	52.3%	29.2%
American White Non-Hispanic	28,353	74.2%	66.4%	48.2%	42.2%	48.2%	26.9%
ED	122,210	92.0%	88.7%	78.4%	73.7%	78.4%	57.4%
EL	246,838	78.0%	70.5%	52.3%	46.0%	52.2%	29.1%
SWD	56,555	41.5%	29.7%	12.0%	8.5%	12.0%	2.9%
	47,656	40.9%	32.2%	18.6%	15.2%	18.6%	8.1%

Note. ED = economically disadvantaged

The mathematics findings were similar to those of ELA. Using the CAHSEE projected scores, we find that a smaller percentage of students would have made the Smarter Balanced Basic cut compared to the grade ten students in 2013 who met the Basic level cut point on the CAHSEE. Using the concurrent sample, the percentages would have been fairly similar. Projecting those who would have been identified at or above proficient on the Smarter Balanced exam based on the regression equations for mathematics, we found that more students would have made the cut based on the concurrent sample, and 16 percent fewer would have made it based on the longitudinal sample (see Table 4.12). These results are similar across subgroups.

Table 4.12. Percentage of 2013 Grade Ten Students at or Above Smarter Balanced Cut Points for Mathematics, Based on Projected CAHSEE Equivalent Scores

Mathematics Group		Percent at or above Basic/L2			Percent at or above Prof./L3		
		CAHSEE	SB-Concurrent	SB-Longitudinal	CAHSEE	SB-Concurrent	SB-Longitudinal
All Students	460,961	83.8%	77.5%	63.5%	59.3%	64.0%	43.3%
Females	226,526	84.8%	78.0%	62.9%	58.7%	63.5%	42.1%
Males	234,435	82.9%	77.1%	64.0%	60.0%	64.5%	44.4%
Asians	41,592	96.3%	94.3%	88.8%	86.8%	89.1%	77.2%
Hispanic African American	233,979	78.9%	70.9%	53.9%	49.1%	54.4%	37.9%
American White Non-ED	28,389	71.5%	62.3%	44.6%	39.8%	45.2%	24.3%
Hispanic	122,160	91.6%	87.5%	76.5%	72.8%	77.1%	56.5%
ED	246,851	79.4%	71.5%	54.8%	50.2%	55.4%	33.2%
EL	56,367	54.7%	42.8%	24.6%	20.8%	24.9%	10.7%
SWD	47,536	44.5%	35.2%	21.6%	18.7%	22.0%	10.7%

Equipercetile Linking

Regression results for the two samples differed somewhat. A key reason for this difference is that there is a “regression to the mean” effect when prediction is less than perfect and the two samples had very different means. Specifically the longitudinal sample was a representative cross-section of an entire grade cohort, as was the Smarter Balanced field test sample. By contrast, the concurrent sample was limited to students who did not pass the CAHSEE in grade ten and were thus considerably lower scoring on both the CAHSEE and the Smarter Balanced field test.

An alternate form of linking, equipercetile linking, lines up the medians and other percentile points from the distributions for each of the two scores (across a common sample). There is no regression to the mean effect and the linkage is entirely symmetric. The prediction of CAHSEE from Smarter Balanced scores is the exact inverse of the prediction of Smarter Balanced scores from CAHSEE scores.

Figures 4.7 and 4.8 plot the 1, 5, 10, 25, 50, 75, 90, 95 and 99 percentile points for the two measures using both the longitudinal and concurrent samples. For ELA, results from the two samples lie along the same line, which is linear except for Smarter Balanced floor effects in the concurrent sample and CAHSEE ceiling effects in the longitudinal sample. The mathematics results show the same floor and ceiling effects and also modest differences between the two samples in the middle of the score range.

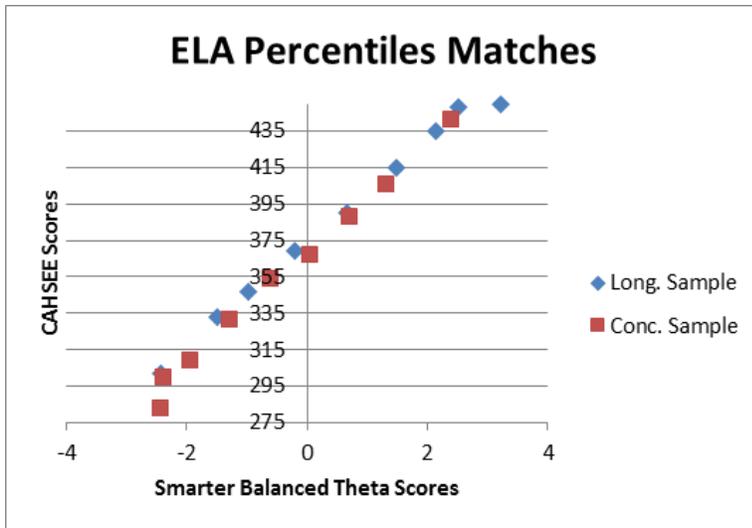


Figure 4.7. Comparison of Smarter Balanced and CAHSEE ELA percentile points

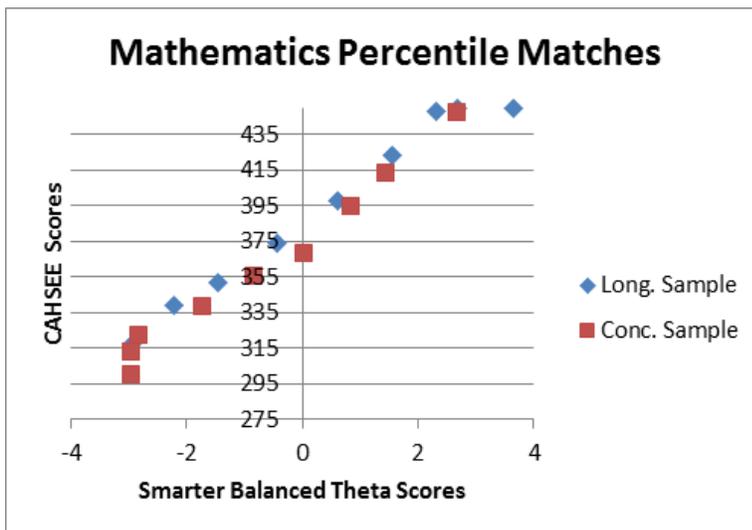


Figure 4.8. Comparison of Smarter Balanced and CAHSEE mathematics percentile points.

Based on the analyses of corresponding percentile points, shown in Figures 4.7 and 4.8, it was decided that linear projections would be sufficient. However, the linear relationship breaks down at the top and bottom of the scales due to differential floor and ceiling effects, so we used robust statistics to eliminate effects of extreme scores that might be differentially limited by these floor or ceiling effects. Thus, slopes (the multiplicative constant for predicting one score from the other) were estimated as the ratio of the interquartile ranges (75th percentile minus 25th percentile) for the two assessments and intercepts (the constant added to the slope in the linear equation) were estimated from differences in medians. Table 4.13 shows the resulting linkage coefficients based on the longitudinal and concurrent samples. The coefficients from the longitudinal samples were used in the study described in the next section comparing

Smarter Balanced field test results for districts with different responses to a technology survey.

Table 4.13. Linkage Coefficients Based on Equipercntile Linkage Using the Longitudinal Samples

Subject	Longitudinal Sample			Concurrent Sample		
	Predicting	Slope	Intercept	Predicting	Slope	Intercept
ELA	CAHSEE	27.41	371.55	CAHSEE	27.07	370.37
	Smarter Balanced Theta	0.036	-13.557	SB Theta	0.037	-13.683
Mathematics	CAHSEE	24.40	383.22	CAHSEE	16.95	369.03
	Smarter Balanced Theta	0.041	-15.707	SB Theta	0.059	-21.770

Table 4.14 compares achievement level cut points for Smarter Balanced and CAHSEE using the equipercntile linkages to project the Smarter Balanced cut points onto the CAHSEE scale. For ELA, the projected Smarter Balanced cuts from the two samples are virtually identical, with the projected Level 2 cut falling midway between the projected cut points shown in Table 4.10, using the regression equations for each sample. For mathematics, the two samples yield different projected cut points for each level, although not quite as different as the regression-based projections shown in Table 4.10.

Note that at a given point on the Smarter Balanced theta scale, the corresponding CAHSEE score is lower for the concurrent sample and higher for the longitudinal sample. Thus, the differences are not likely due to knowledge and skill increases from grade ten to grade eleven. Differences could have been due to motivational differences between the two samples on the Smarter Balanced field test or to regression to the mean effects with the concurrent sample having considerably lower means. Whatever the reason, the results shown in Table 4.14 indicate that the Smarter Balanced achievement levels are somewhat more rigorous (higher) for ELA and considerably more rigorous for mathematics in comparison to the current CAHSEE achievement levels.

Table 4.14. Performance Level Comparisons Using Equipercntile Linkage for the Longitudinal and Concurrent Samples, for ELA and Mathematics

Smarter Balanced Theta Performance Cuts		1-2	2-3	3-4	Floor	Ceiling
ELA		-0.177	0.872	2.026	-2.500	3.500
Mathematics		0.354	1.426	2.561	-3.000	4.000
Projections onto the CAHSEE Scale						
ELA	Longitudinal	366.7	395.4	427.1	303.0	467.5
	Concurrent	365.6	394.0	425.2	302.7	465.1
Mathematics	Longitudinal	391.9	418.0	445.7	310.0	480.8
	Concurrent	375.0	393.2	412.4	318.2	436.8
CAHSEE Cuts						
ELA		350	380	403	275	450
Mathematics		350	380	424	275	450

Analyses of Results by Technology Level

We conducted a study of the impact of differences in technological preparedness across local educational agencies (LEA) on scores from the Smarter Balanced field test. This study was designed to illustrate the power of using grade ten CAHSEE data to create expected grade eleven Smarter Balanced scores and then examining the extent to which actual grade eleven scores for students in different conditions scored above or below expected score levels.

We used data from a technology survey of California schools and districts to classify districts into low, moderate, and high levels of technological preparedness and then looked at whether Smarter Balanced field test scores for students in those districts at each level were above or below expectation based on their 2013 paper-and-pencil CAHSEE test results. The analyses were limited because the technology information was available only at the district level and there is likely considerable variation in technology across schools within many of the larger districts. Survey results were also available for a handful of charter schools, which were analyzed separately as there were likely administrative and possibly resource differences between these charters and other schools within the same districts.

Identifying Districts and Charters with High and Low Levels of Technology

Following the Smarter Balanced field test administration, school and LEA staff were asked to respond to a post-test survey. Two of the included questions focused on the technology preparedness of the LEA/school for the 2014 field test:

- Question 35: Was your LEA's technology infrastructure (e.g., computing devices, networks, Internet, etc.) sufficient for the Field Test? (Select one answer)
- Question 108: Before the Field Test, how technologically ready did you think your LEA/school was? (Select one answer)

The survey data included responses from participants in various positions within the California school districts, and had information to match responses at the district level. Not all respondents were asked all survey questions; for example, teachers were not asked question 35, but were asked to respond to question 108. By using both variables as indicators of technology preparedness for the field test we were able to include a fuller sample than had we included only one.

To categorize each question's response to a technology variable of high, moderate, and low levels of technology, we examined the response options for each question. Responses that indicated district or school staff felt they were adequately prepared or better, or technologically ready or better, were coded to be a "2," or high technology. Responses indicating the school was somewhat prepared were coded as a "1," or moderate technology. Finally, responses indicating inadequacy in the infrastructure or minimal preparedness were coded as a "0," or low technology.

We next needed to identify one technology level for each district. If only one question was responded to, the final technology level reflected the 2, 1, or 0 from that one question. Some respondents provided answers to both questions—for this situation, if both responses were rated high technology the final technology level was also high. This was also true for common moderate or low ratings. If the responses differed by only 1 category, we gave question 35, asking about infrastructure, more weight and went with that rating. If there was a 2-category difference between responses (one a 2 and the other a 0) we rated the final technology level a 1.

Once each individual respondent had a final technology level rating we identified an overall district- or charter-level rating based on the most frequent rating. If there were an equal number of high and low responses we went with the lowest. This was done to provide a good distribution of districts/charters across each of the three technology levels.

It should be noted that most frequently there were only one or two responses to a technology survey in an entire district; while some of the respondents were district-level staff, in many cases the technology preparedness data reported for a district is based on a single response from a test administrator at one school within the district.

Matching Technology Survey Results to Smarter Balanced Field Test Data

We had technology survey records for 93 charter schools, but found Smarter Balanced ELA field test records for only 42 students in 14 of these schools (perhaps not surprising). This leaves 79 charter schools with technology survey records, but no ELA field test data.

We also have technology survey records for 331 different districts (excluding the Charter school records). We found ELA field test records for 9,076 students across 112 of these districts. This leaves 219 districts with technology survey records, but no grade eleven field test data. It is likely that these were elementary and/or middle school districts with no participation in the grade eleven Smarter Balanced field test (see Table 4.15).

Table 4.15. Number of Districts and Charters with Technology Data Which Were and Were Not Matched to Smarter Balanced Field Test Results

Units	# with Technology Data	# with Smarter Balanced Field Test Data	# with No Smarter Balanced Field Test Data
Results ELA			
Districts	331	112	219
Charters	93	14	79
Results for Mathematics			
Districts	331	98	233
Charters	93	17	76

We had 7,574 field test records that were not matched to any of the districts or charters with technology survey data.

Overall, we had 2,413 field test records from Tech Level 0 districts/charters, 3,934 from Tech Level 1 districts/charters, and 2,811 from Tech Level 2 districts/charters (see Table 4.16). We deemed these to be sufficient numbers to run the analyses of whether the Smarter Balanced scores were higher than expected for students from higher tech level districts/charters. The results follow:

Table 4.16. Number of Students with Smarter Balanced Field Test Data Who Were and Were Not Matched to Technology Survey Results

Subject	# with Field Test Data	# with Technology Levels	# with No Technology Data
ELA	16,688	9,076	7,612
Mathematics	16,411	8,833	7,578

Analyses of Differences in Smarter Balanced Field Test Scores

We examined the mean scores of observed and predicted Smarter Balanced theta scores for students in districts at each of the three technology levels. Tables 4.17 and 4.18 summarize the results for ELA and mathematics, respectively. For ELA, the samples were reasonably well matched with respect to 2013 CAHSEE grade ten ELA mean scores (390, 392, and 392, with standard deviations of about 34 respectively). For technology levels 0 and 1, the observed Smarter Balanced scores were close to predicted values (.67 compared to .67 and .76 compared to .77), but the observed Smarter Balanced values for the high technology sample were noticeably below predicted levels (mean of .51 compared to .75). Overall differences between the predicted and observed Smarter Balanced scores across the three conditions were statistically significant (F value of 57.750).

Table 4.17. Comparison of ELA Mean Scores Across Technology Levels

Variable	Tech Level 0		Tech Level 1		Tech Level 2	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Sample Size	3,217		3,431		2,770	
CAHSEE Score	389.9	33.07	392.4	33.69	392.0	33.68
Predicted Smarter Balanced Score	0.669	1.207	0.762	1.229	0.746	1.229
Observed Smarter Balanced Score	0.670	1.189	0.773	1.191	0.506	1.217
Difference	0.001	0.970	0.011	0.944	-0.240	1.005
F value	57.750					
df	2		9115			
p (Sig)	<.0001					

For mathematics, the samples were very similar for the low and high technology levels (CAHSEE mean scores of 402 and 403 respectively), but the Technology Level 1 sample was somewhat lower-scoring (CAHSEE mean of 392). For all three levels, observed Smarter Balanced means were slightly below predicted values (differences of -.08, -.06, and -.11). Differences between predicted and observed scores (mean residuals) were not statistically significant (F value=1.650), even with the relatively large sample sizes.

Table 4.18. Comparison of Mathematics Mean Scores Across Technology Levels

Variable	Tech Level 0		Tech Level 1		Tech Level 2	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Sample Size	2,226		3,431		2,770	
CAHSEE Score	402.1	33.31	391.9	35.32	402.8	34.23
Predicted Smarter Balanced Score	0.772	1.365	0.357	1.448	0.801	1.403
Observed Smarter Balanced Score	0.697	1.445	0.298	0.691	0.691	1.464
Difference	-0.075	1.183	-0.059	1.177	-0.109	1.118
F value	1.650					
df	2		8860			
Sig.(p)	0.192					

Discussion

There were several limitations to this study, including limited and sometimes conflicting information from the technology survey, the lack of school level information, the small number of survey respondents within each district and charter school, and general limitations of the Smarter Balanced field test administration data. However, the findings of the study suggest that students in districts with lower levels of technological implementation are not disadvantaged in taking the Smarter Balanced high school (grade eleven) tests on a computer. The somewhat anomalous finding that students in high tech districts did less well than expected on the Smarter Balanced ELA test

warrants further investigation. Otherwise, the results suggest that students in districts with lower technological preparedness ratings were in no way disadvantaged.

A more important study will be to collect information on the extent to which different schools and districts have implemented a CCSS-aligned curriculum and how they have done that, and then to examine the impact of any differences found in implementation on Smarter Balanced high school (grade eleven) assessment outcomes.

General Conclusions

Student performance on the Smarter Balanced field test was strongly correlated with performance on the CAHSEE. Correlations in the concurrent sample were .60 for ELA and .53 for mathematics; correlations for the longitudinal sample were .67 for both ELA and mathematics. The findings suggest that the Smarter Balanced performance levels appear to be more rigorous than the current CAHSEE performance levels, particularly for mathematics. As one of the goals of the Smarter Balanced assessment is to measure the effect of the CCSS, we expected the rigor of the Smarter Balanced assessment to be higher than that of the CAHSEE, and that appears to be true. The Smarter Balanced high school (grade eleven) assessment appears to have floor effects that are higher than the current CAHSEE score range, and the CAHSEE tests appear to have ceiling effects that are lower than the Smarter Balanced score range.

Overall, the Smarter Balanced high school (grade eleven) test may be reasonably similar to the CAHSEE. Based on the linear regression equations obtained using the concurrent sample to project CAHSEE scores on the Smarter Balanced scale, we found a very similar percentage of grade ten students in 2013 would have made the Basic and Proficient cut points. The results using the longitudinal sample were not as similar, possibly due to the one-year time lag between taking the CAHSEE and the Smarter Balanced field test. While linear regression was found to be sufficient for estimating CAHSEE performance in general, indicating a mostly positive linear relationship, making slight modifications to the coefficients in the prediction equations using equipercentile linking improved our estimates by accounting for ceiling and floor effects. Differences in coefficients to predict CAHSEE performance between the concurrent and longitudinal samples were virtually eliminated using an equipercentile linking approach.

Because the Smarter Balanced assessment is administered on a computer, we explored the impact of technological preparedness at the district level on student performance. Examining the impact of technology on predicted CAHSEE performance, using the regression coefficients identified through linear regression and equipercentile linking, we found unexpected results. Particularly, districts and charter schools labeled as having “low” technology fared better than those labeled “high.” While there were many limitations to this study—including low response rates, lack of school-level data, and sometimes conflicting responses within districts—the results may provide evidence that technology preparedness may not be much of a factor in student performance on a technology-based test. As suggested in the technology discussion, we believe an important future study will explore the impact of degree of CCSS implementation on Smarter Balanced performance as the test replaces the CAHSEE for accountability purposes.

Finally, while the Smarter Balanced high school assessment was found to be somewhat similar to the CAHSEE as far as Basic (Level 2) and Proficient (Level 3) cut points, the CAHSEE graduation cut point was still lower than that of the Level 2 cut point for Smarter Balanced. If the Smarter Balanced high school assessment is to be used as a graduation requirement, the state will need to consider an appropriate cut point for this requirement, and to examine the impact of such a cut point on graduation rates for all students and by demographic group.

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Chapter 5: Trends in Educational Achievement and Persistence During the CAHSEE Era

Caroline R.H. Wiley and D. E. (Sunny) Becker

Introduction

The California High School Exit Examination (CAHSEE) examination has been used to satisfy both Elementary and Secondary Education Act (ESEA) requirements (prior to 2015) and statewide high school graduation requirements. Therefore, it is a high-stakes examination for both students and school staff that could have profound effects on the education system as a whole.

While other chapters in this report address direct characteristics and results of the CAHSEE Program, this chapter explores a broader view of the educational environment in California, examining factors such as dropout rates, graduation rates, and college preparation. We look at year-by-year trends to reveal changes over time. While we cannot attribute any of the trends cited to CAHSEE alone, the trends reflect the presence of the CAHSEE as a significant determinant of educational policies and practices.

As in previous evaluation reports, we have gathered data from publicly available sources to inform this chapter. The analyses in this chapter are constrained to meaningful trend lines. When data are not comparable from one year to the next, due to definitional or data collection changes, we truncate trend lines to limit the information to meaningful comparisons. While other chapters in this report reflect data through the 2014–15 school year, many of the sources of information in this chapter lag at least a year behind. For example, graduation and dropout rates in this report reflect trends through the 2013–14 school year.

In the following sections, we look at outcomes for high school cohorts. We then look more carefully at graduation rates; dropout rates and other indicators of students who leave high school prematurely; indicators of achievement by college-bound students, such as SAT (formerly Scholastic Aptitude Test) and ACT (formerly American College Testing) participation and scores; as well as shifts in participation and success rates in Advanced Placement (AP) examinations.

Trends in Cohort Outcomes

The current DataQuest system provides a summary of outcomes for each graduating class, referred to as the “four-year adjusted cohort.” Outcomes include cohort graduation rate, cohort dropout rate, rate of special education students completing, percentage of students still enrolled, and percentage of students completing a General Educational Development (GED®) test. Appendix A (Definition 1.1) provides the official California Department of Education (CDE) explanation of the four-year adjusted cohort as described on the DataQuest Web site.

Table 5.1 provides the cohort outcome results, including both numbers and percentages of students, for the Class of 2014. Results are disaggregated by racial/ethnic category and other demographic groups (i.e., English learners [ELs], migrant education,²¹ special education, and socioeconomically disadvantaged students²²). Inspection of Table 5.1 reveals that 80.8 percent of students in the Class of 2014 graduated, 11.7 percent dropped out, 0.6 percent earned a special education completion certificate, 6.9 percent are still enrolled, and 0.2 percent earned a California High School Equivalency Certificate by passing the GED® in lieu of graduation. Table 5.1 also indicates that 1,628 students opted against reporting their race/ethnicity. This represents only 0.3 percent of the total student population and will be omitted from subsequent tables that disaggregate students by race/ethnicity.

²¹ The Human Resources Research Organization (HumRRO) evaluation first reported students in migrant education as a separate demographic group in the 2013 annual report. The inclusion of this group among CDE's cohorts provides a window into performance of these students. Some programs for migrant students are developed by migrant educational regional offices and others are administered statewide. Statewide services are managed by the CDE Migrant Education Office and include the Migrant Education Program's (MEP) State Service Delivery Plan (SSDP), the Migrant State Parent Advisory Council (SPAC), the Migrant Student Information Network (MSIN), the School Readiness Program, and the Statewide Student Leadership Institute. In addition, the Mini-Corps Program offers tutoring from college students with a migrant family background and the Portable Assisted Study Sequence (PASS) assists high school students to receive credits toward graduation.

²² Previous chapters refer to students with disabilities (SWD) rather than special education students. SWD includes students with individualized education program (IEP) plans and students with 504 Plans. Throughout this chapter we use the same terminology as CDE's DataQuest Web site, the source of most of our data. The "Special Education Certificate of Completion," for example, is the official name of a certificate. Additionally, in this chapter, we use the terms "socioeconomically disadvantaged students" and "African American, Not Hispanic," whereas we use "economically disadvantaged (ED) students" and "Black or African American" in previous chapters.

Table 5.1. Cohort Outcome Data for Class of 2014

Cohort Group	Cohort Students	Cohort Graduates		Cohort Dropouts		Cohort Special Ed Completers		Cohort Still Enrolled		Cohort GED® Completer		Total*
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
All Students	493,694	398,832	80.8%	57,091	11.6%	2,962	0.6%	34,045	6.9%	764	0.2%	100%
Hispanic or Latino of Any Race	248,135	189,651	76.4%	34,714	14.0%	1,425	0.6%	21,960	8.9%	385	0.2%	100%
American Indian or Alaska Native, Not Hispanic	3,735	2,619	70.1%	705	18.9%	30	0.8%	365	9.8%	16	0.4%	100%
Asian, Not Hispanic	44,031	40,638	92.3%	2,050	4.7%	201	0.5%	1,119	2.5%	23	0.1%	100%
Pacific Islander, Not Hispanic	2,835	2,266	79.9%	352	12.4%	24	0.8%	187	6.6%	*	0.2%	100%
Filipino, Not Hispanic	13,883	12,785	92.1%	622	4.5%	81	0.6%	387	2.8%	*	0.1%	100%
African American, Not Hispanic	34,712	23,628	68.1%	7,042	20.3%	323	0.9%	3,644	10.5%	75	0.2%	100%
White, Not Hispanic	134,470	117,473	87.4%	10,219	7.6%	819	0.6%	5,739	4.3%	220	0.2%	100%
Two or More Races, Not Hispanic	10,265	8,770	85.4%	866	8.4%	54	0.5%	551	5.4%	24	0.2%	100%
Race/Ethnicity Not Reported	1,628	1002	61.6%	521	32.0%	*	0.3%	93	5.7%	*	0.4%	100%
English Learners	93,713	61,162	65.3%	19,551	20.9%	1043	1.1%	11,845	12.6%	112	0.1%	100%
Migrant Education	8,810	6,678	75.8%	1,430	16.2%	41	0.5%	654	7.4%	*	0.1%	100%
Special Education	55,473	34,527	62.2%	8,889	16.0%	2,927	5.3%	9,049	16.3%	81	0.1%	100%
Socioeconomically Disadvantaged	330,095	248,989	75.4%	47,863	14.5%	2,216	0.7%	30,391	9.2%	636	0.2%	100%

Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (retrieved on July 20, 2015).
 An asterisk (*) appears in cells to protect student privacy where there are ten or fewer students.

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Calculations based on the four-year adjusted cohort were implemented beginning with the Class of 2010. At the time of this report, the results in Table 5.1 were available for the Classes of 2010 through 2014. Table 5.2 simplifies the presentation of information from Table 5.1 to include only rates, and provides the rates of each outcome for each graduating class.

Table 5.2. Four-Year Adjusted Cohort Outcome Data Rates for Classes of 2010 Through 2014

Demographic Group	Graduating Class	Cohort Graduation Rate	Cohort Dropouts Rate	Cohort Special Ed Completers Rate	Cohort Still Enrolled Rate	Cohort GED® Completer Rate
All Students	2014	80.8%	11.6%	0.6%	6.9%	0.2%
	2013	80.2%	11.6%	0.5%	7.5%	0.2%
	2012	78.5%	13.2%	0.6%	7.5%	0.2%
	2011	77.1%	14.7%	0.5%	7.4%	0.3%
	2010	74.7%	16.6%	0.4%	7.9%	0.4%
Hispanic or Latino of Any Race	2014	76.4%	14.0%	0.6%	8.9%	0.2%
	2013	75.4%	14.1%	0.5%	9.8%	0.2%
	2012	73.2%	16.2%	0.6%	9.8%	0.2%
	2011	71.4%	18.3%	0.5%	9.6%	0.2%
	2010	68.1%	20.8%	0.4%	10.3%	0.4%
American Indian or Alaska Native, Not Hispanic	2014	70.1%	18.9%	0.8%	9.8%	0.4%
	2013	72.6%	17.5%	0.5%	9.1%	0.3%
	2012	72.4%	18.5%	0.6%	8.1%	0.4%
	2011	68.5%	21.4%	0.6%	9.1%	0.4%
	2010	67.3%	22.1%	0.8%	9.5%	0.4%
Asian, Not Hispanic	2014	92.3%	4.7%	0.5%	2.5%	0.1%
	2013	91.6%	4.7%	0.4%	3.3%	0.1%
	2012	91.0%	5.6%	0.3%	2.9%	0.1%
	2011	90.3%	6.0%	0.3%	3.2%	0.1%
	2010	89.0%	7.2%	0.2%	3.4%	0.1%
Pacific Islander, Not Hispanic	2014	79.9%	12.4%	0.8%	6.6%	0.2%
	2013	78.4%	14.3%	0.4%	6.6%	0.3%
	2012	76.8%	15.8%	0.6%	6.3%	0.3%
	2011	74.9%	17.7%	0.2%	7.0%	0.1%
	2010	72.3%	19.6%	0.4%	7.1%	0.5%
Filipino, Not Hispanic	2014	92.1%	4.5%	0.6%	2.8%	0.1%
	2013	91.5%	4.8%	0.5%	3.2%	0.1%
	2012	90.6%	5.4%	0.5%	3.3%	0.1%
	2011	89.9%	6.4%	0.4%	3.3%	0.1%
	2010	87.4%	7.8%	0.4%	4.2%	0.2%

Demographic Group	Graduating Class	Cohort Graduation Rate	Cohort Dropouts Rate	Cohort Special Ed Completers Rate	Cohort Still Enrolled Rate	Cohort GED® Completer Rate
African American, Not Hispanic	2014	68.1%	20.3%	0.9%	10.5%	0.2%
	2013	67.9%	19.9%	0.9%	11.0%	0.3%
	2012	65.7%	22.2%	0.9%	10.9%	0.3%
	2011	62.8%	25.3%	0.8%	10.7%	0.3%
	2010	60.5%	26.7%	0.7%	11.5%	0.5%
White, Not Hispanic	2014	87.4%	7.6%	0.6%	4.3%	0.2%
	2013	87.6%	7.6%	0.5%	4.1%	0.2%
	2012	86.4%	8.4%	0.5%	4.4%	0.3%
	2011	85.7%	8.9%	0.5%	4.7%	0.3%
	2010	83.5%	10.7%	0.4%	4.9%	0.4%
Two or More Races, Not Hispanic	2014	85.4%	8.4%	0.5%	5.4%	0.2%
	2013	85.0%	9.9%	0.5%	4.4%	0.3%
	2012	84.3%	9.7%	0.6%	5.1%	0.4%
	2011	81.9%	11.1%	0.4%	6.1%	0.5%
	2010	82.8%	10.1%	0.3%	6.4%	0.3%
Race/Ethnicity Not Reported	2014	61.6%	32.0%	0.3%	5.7%	0.4%
	2013	41.6%	31.0%	0.1%	26.8%	0.5%
	2012	43.5%	33.3%	0.4%	22.6%	0.2%
	2011	49.6%	42.0%	0.3%	7.8%	0.3%
	2010	53.8%	41.6%	0.3%	3.9%	0.4%
English Learners	2014	65.3%	20.9%	1.1%	12.6%	0.1%
	2013	63.1%	21.6%	1.1%	14.1%	0.2%
	2012	61.6%	23.7%	1.0%	13.5%	0.2%
	2011	61.5%	24.8%	0.7%	12.8%	0.2%
	2010	56.4%	29.0%	0.7%	13.6%	0.3%
Migrant Education	2014	75.8%	16.2%	0.5%	7.4%	0.1%
	2013	76.4%	14.7%	0.4%	8.3%	0.2%
	2012	74.3%	16.4%	0.6%	8.5%	0.2%
	2011	73.0%	17.4%	0.5%	8.7%	0.3%
	2010	71.1%	18.8%	0.6%	9.2%	0.3%
Special Education	2014	62.2%	16.0%	5.3%	16.3%	0.1%
	2013	61.9%	15.5%	4.8%	17.6%	0.2%
	2012	60.8%	17.2%	4.7%	17.2%	0.2%
	2011	59.5%	19.0%	3.9%	17.4%	0.3%
	2010	56.7%	21.9%	3.5%	17.5%	0.4%
Socioeconomically Disadvantaged	2014	75.4%	14.5%	0.7%	9.2%	0.2%
	2013	74.8%	14.5%	0.6%	9.9%	0.3%
	2012	72.7%	16.4%	0.6%	10.0%	0.3%

Demographic Group	Graduating Class	Cohort Graduation Rate	Cohort Dropouts Rate	Cohort Special Ed Completers Rate	Cohort Still Enrolled Rate	Cohort GED® Completer Rate
	2011	71.1%	18.1%	0.5%	9.9%	0.3%
	2010	68.0%	20.1%	0.5%	10.9%	0.4%

Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (retrieved on July 20, 2015).

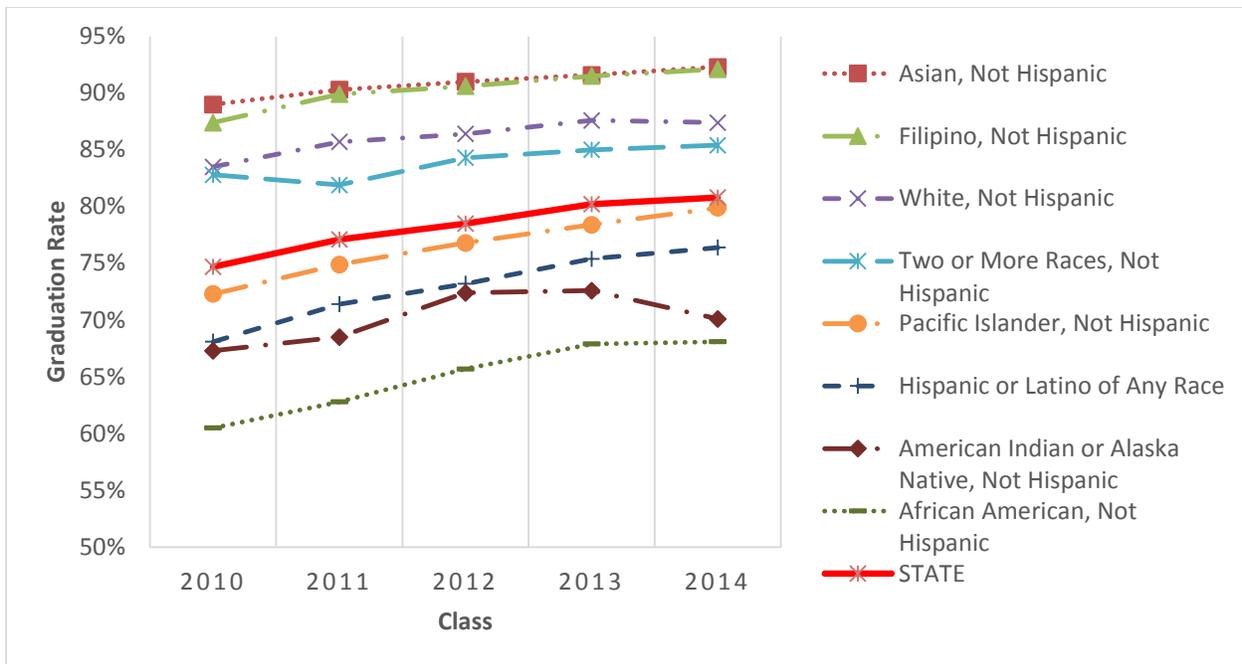
Table 5.2 provided information for several outcome analyses. In the following sections we discuss each outcome listed in the columns in turn: graduation, dropout, special education completion, ongoing enrollment, and GED® completion. For each measure we provide the official CDE definition of each rate. Where available, we discuss corroborating evidence.

Graduation Rates

One indicator that could conceivably be affected by the CAHSEE requirement is the high school graduation rate. Appendix A (Definition 1.2) provides the CDE definition of the four-year adjusted cohort graduation rate. This rate includes students who obtain standard high school diplomas, students who earned high school diplomas through an adult education program, and students who passed the California High School Proficiency Examination (CHSPE). The cohort also includes special education students who were identified as exempt from the CAHSEE requirement or who received a passing grade on the CAHSEE with modifications and obtained a waiver. These special education rules were in place for all three graduation cohorts for whom we present data, resulting in comparable data.

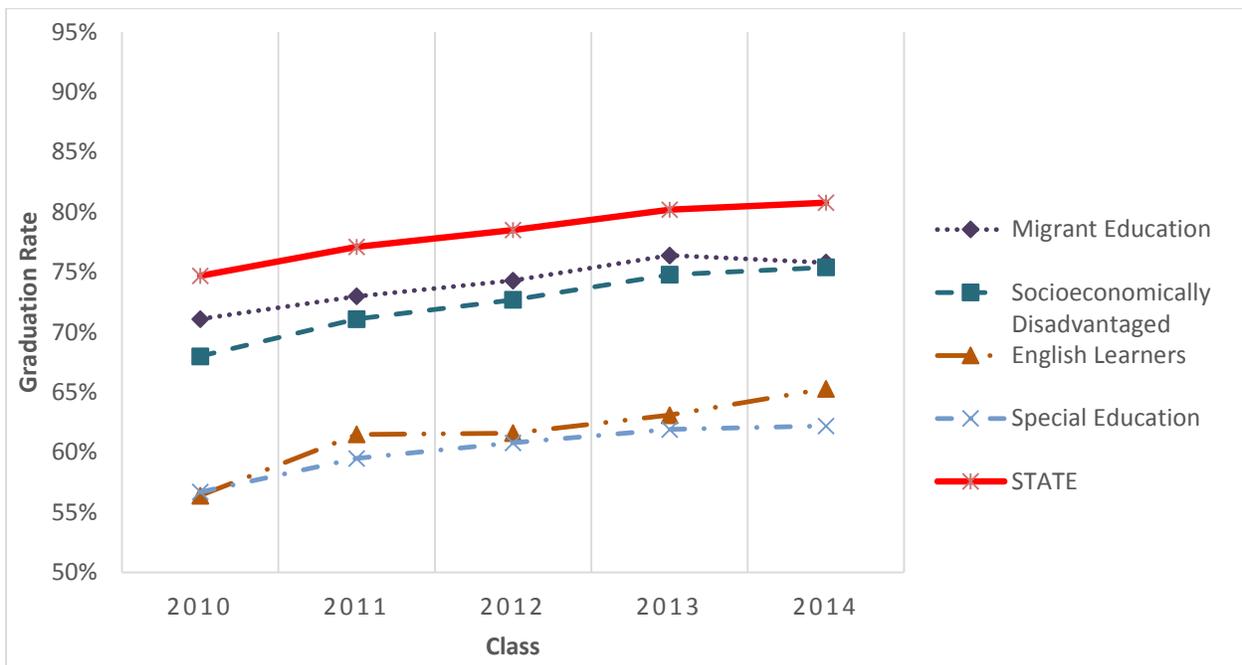
We examined graduation rates overall and separately for various demographic groups. Figures 5.1 and 5.2 display the four-year adjusted cohort graduation rates by race/ethnicity and background characteristics. These are presented in order of declining graduation rate for the Class of 2014. The thick red line shows the overall state graduation rate. The overall graduation rate and the rate for each individual group increased from 2010 to 2014. Additionally, with the exception of American Indian/Alaska Natives and migrant students, all groups had a steady incline over the past four years. Graduation rates for American Indian/Alaska Native students decreased from 2013 (72.8%) to 2014 (70.1%).

The graduation rates for three groups of students—Pacific Islander, Not Hispanic; Hispanic or Latino of Any Race; and African American, Not Hispanic students—are lower than the overall graduation rates, but their rates increased at a greater pace than the state average, reflecting a reduction in gaps between groups. The graduation rate for American Indian/Alaska Native students was lower than the overall rate, and the rate increase lagged behind the state rate of 5.5 percent. Additional demographic groups are presented at the bottom of the table. Migrant education students, ELs, socioeconomically disadvantaged students, and special education students are graduating at rates lower than the state average. Rates are increasing more rapidly for socioeconomically disadvantaged students and ELs than the average.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Figure 5.1. Four-year adjusted cohort graduation rates by race/ethnicity.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Figure 5.2. Four-year adjusted cohort graduation rates by background characteristics.

Graduation Rates: Summary

We examined the four-year adjusted cohort graduation rate, which was required by the federal government to be reported beginning with the 2010–11 school year. We found that graduation rates for most demographic groups increased in 2014 from their 2010 levels and gaps between some groups grew smaller. These graduation rates vary widely among ethnic/racial groups, from 68.1 percent among African American students to 92.3 percent for Asian students.

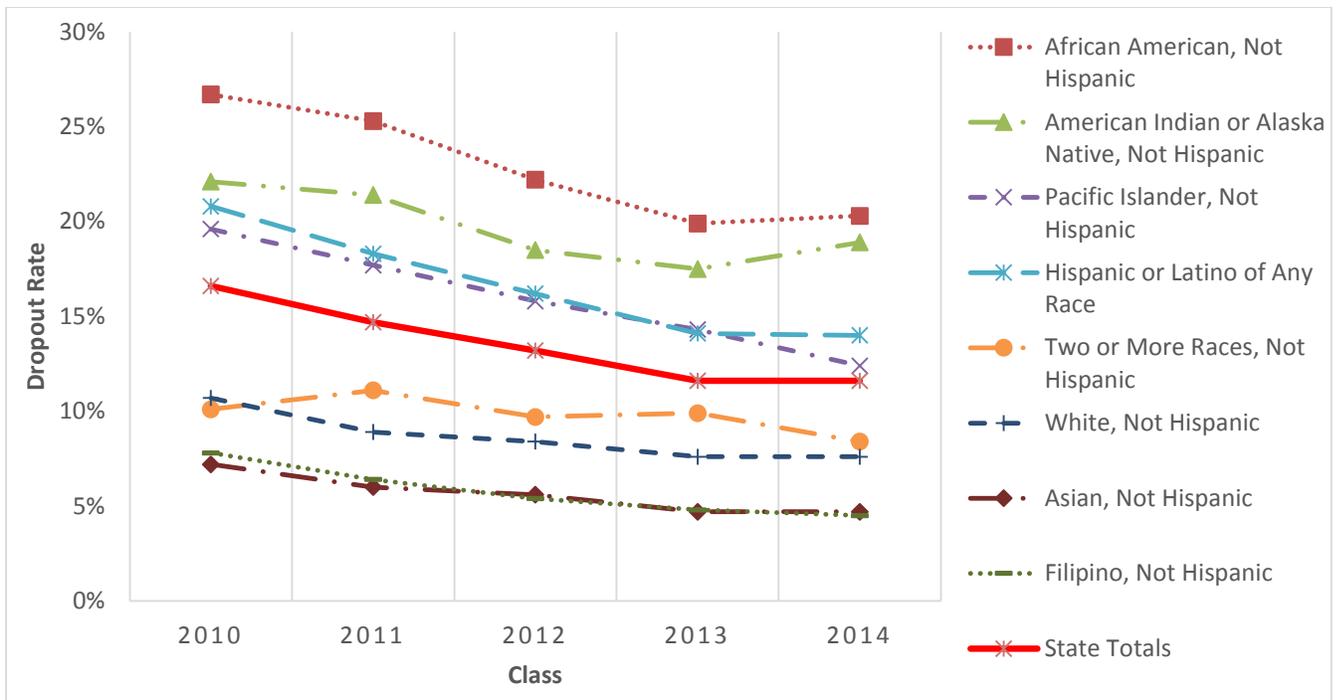
Dropout Rates

A second indicator that could conceivably be affected by the CAHSEE requirement is the high school dropout rate. An early and persistent concern regarding the implementation of the CAHSEE requirement was that struggling students would become frustrated and drop out at higher rates.

The veracity of CDE dropout statistics has improved markedly over the span of this evaluation. The introduction of statewide student identifier numbers in 2006–07 made possible more accurate identification of student outcomes once students left a school. New procedures were implemented to identify more accurately the status of students who left a school, and dropout rates are now derived from those student-level data. Beginning with the Class of 2010, the CDE began reporting a new “four-year adjusted cohort dropout rate.”

Appendix A (definition 1.3) provides the CDE definition of the four-year Adjusted Cohort Dropout Rate. Figures 5.3 and 5.4 reports the new cohort dropout calculations for the Classes of 2010, 2011, 2012, and 2013. Racial/ethnic groups are ordered by descending dropout rate in the Class of 2014. The reader is reminded that Table 5.1 contains this information along with actual numbers of students in each group, for reference.

Inspection of Figures 5.3 and 5.4 reveals that dropout rates have declined overall and for every demographic group reported. Overall dropout rates declined from 16.6 percent for the Class of 2010 to 11.6 percent for the Class of 2014. Although some gaps are shrinking, disparities persist; African American students, American Indian/Alaska Native, special education, and migrant education students had slight increases in dropout rates from 2013 to 2014 (0.4%, 1.5%, 0.5%, and 1.5% points respectively).



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Figure 5.3. Four-year adjusted cohort dropout rates by race/ethnicity



Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

‡Special education students in the Classes of 2010 through 2014 were exempt from the CAHSEE requirement.

Figure 5.4. Four-year adjusted cohort dropout rates by background characteristics.

Dropouts by Grade Level

Table 5.3 reports the number of students who dropped out at each grade as well as the percentage of total grade nine enrollment that is represented by each number. For example, the 34,209 grade twelve dropouts in the Class of 2010 represent 6.3 percent of the grade nine enrollment for that class. This rate grew to 8.1 percent for the Class of 2012 and declined to 7.4 percent for the Class of 2014.

Table 5.3. CDE Dropout Counts by Grade Level for Classes of 2010 Through 2014

Class of	Enrollment Grade 9	Number and Percentage of Grade 9 Enrollment			
		Grade 9 Dropouts	Grade 10 Dropouts	Grade 11 Dropouts	Grade 12 Dropouts
2010	545,040	12,426 2.3%	10,995 2.0%	16,251 3.0%	34,209 6.3%
2011	541,650	9,737 1.8%	13,242 2.4%	14,163 2.6%	42,753 7.9%
2012	539,167	12,245 2.3%	10,103 1.9%	16,799 3.1%	44,589 8.3%
2013	524,527	8,883 1.7%	12,516 2.4%	10,874 2.1%	42,373 8.1%
2014	514,491	5,917 1.2%	6,485 1.3%	10,710 2.1%	38,292 7.4%

Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 22, 2015).

Figure 5.5 is a graphical representation of the same information presented in Table 5.3. The majority of students who drop out of high school persist until their senior year, as evidenced by the dropout rate in grade twelve being much larger than all other grades for every graduating class depicted.

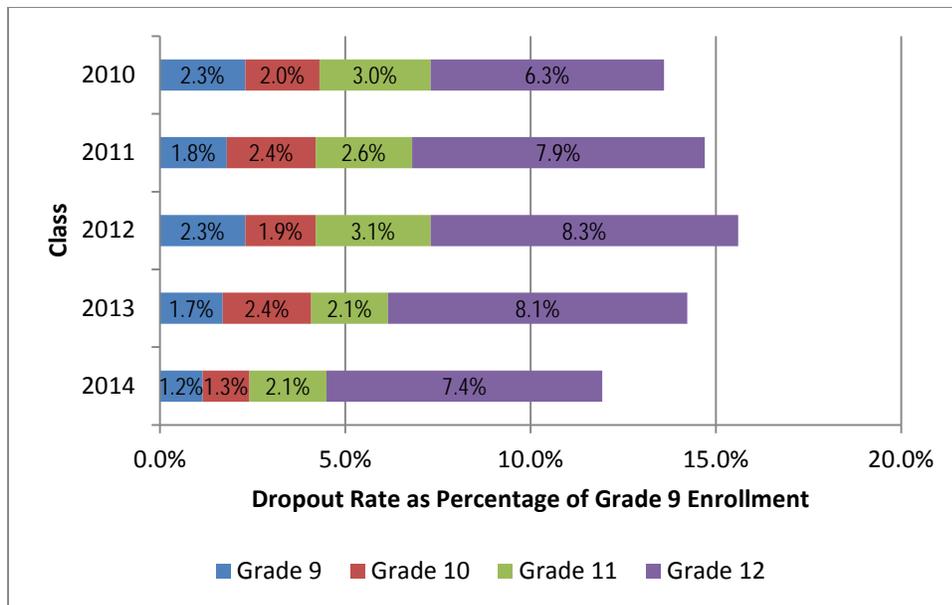


Figure 5.5. Dropout rates by grade level for classes of 2010 through 2014, based on percentage of grade nine enrollment.

Other Indications of Students Who Leave High School Prematurely: Enrollment Trends

The definition of “dropout” and the requisite data underpinnings to clearly identify dropouts have evolved over time. As described earlier, dropout tracking has improved markedly over the past few years, but because these systems are new we continue to look at the dropout phenomenon from multiple perspectives. We present here an analysis of enrollment trends.

Enrollment counts are documented at the schoolhouse level in the fall of each school year. The CDE maintains statewide aggregations of these figures. Since the beginning of this evaluation process, we have tracked enrollment figures by graduation class cohort. Comparing enrollment trend patterns over time serves as an independent indicator of trends in retention or dropout rates, independent of changes in dropout calculations. Overall enrollment figures provide an indication of the extent to which students in each grade do not proceed to the next grade with the rest of their classmates.

Before investigating California enrollment trends, we offer a description of two typical enrollment patterns that are commonly seen both within and outside California. One persistent enrollment pattern is a grade nine “bubble.” That is, in any given year more students are enrolled in grade nine than in either grade eight or ten. One oft-theorized explanation is that some first-time grade nine students fail to earn sufficient credits to achieve grade ten status on time. Therefore in the fall of each year the grade nine population comprises the prior year’s grade eight graduates plus some number of students who would have been grade ten students if they were on pace with their classmates. (These students may earn extra credits in the coming year and “catch up” with their classmates, or may drop back to a later graduating class.) At the same time,

the grade ten enrollment counts would be suppressed by exclusion of those same students. A second persistent enrollment pattern is a decrease in enrollment (drop-off) each year after grade nine. This decrease is generally considered to include high school dropouts.

The CDE Web site (<http://dq.cde.ca.gov/dataquest/>) provides fall enrollment counts by grade level each year. To present enrollment trends in a manner that is comparable across years despite population growth or declines, we have converted these enrollment counts to percentages. Tables 5.4 and 5.5 show the decrease in enrollment between grades nine and ten, ten and eleven, and eleven and twelve for multiple cohorts going back far enough to precede the introduction of the CAHSEE. The Classes of 2004 and 2005 are demarcated as classes subject to “partial implementation” of the CAHSEE because the requirement was delayed before any diplomas were withheld. Classes from 2006 on are demarcated as classes for which the CAHSEE requirement was “fully in effect.”

Table 5.4 shows the decrease in enrollment from grade nine to ten for several recent years. As noted in the 2004 evaluation report (Wise, et al., 2004), the grade ten drop-off rate increased by 0.1 percent (from 5.6% to 5.7%) for the Class of 2006. It was hypothesized that the increased drop-off rate was primarily due to a larger than usual increase in the number of students classified as grade nine students for more than a year. In the 2004–05 school year the drop-off rate declined back to 5.6 percent. This was followed by a substantial increase to 6.1 percent in 2005–06, an even more substantial decrease to 5.3 percent in 2006–07, then increases to 5.7, 6.0, and 6.1 percent in subsequent years. This upward trend reversed in the 2010–11 school year when the grade ten class was only 4.2 percent smaller than the previous year’s grade nine class, and has continued to decline in subsequent years, to its lowest point of 2.2 percent in 2014–15.

Table 5.4. Enrollment Declines Between Grades Nine and Ten by High School Class

School Year	High School Class	Grade 10 Enrollment	Prior Year's Grade 9 Enrollment	Decrease	
				Number	Percent
1997-98	2000	423,865	450,820	26,955	6.0%
1998-99	2001	433,528	458,650	25,122	5.5%
1999-2000	2002	444,064	468,162	24,098	5.1%
2000-01	2003	455,134	482,270	27,136	5.6%
2001-02*	2004	459,588	485,910	26,322	5.4%
2002-03	2005	471,726	499,505	27,779	5.6%
2003-04**	2006	490,465	520,287	29,822	5.7%
2004-05	2007	497,203	526,442	29,239	5.6%
2005-06	2008	515,761	549,486	33,725	6.1%
2006-07	2009	517,873	547,014	29,141	5.3%
2007-08	2010	513,707	545,040	31,333	5.7%
2008-09	2011	509,157	541,650	32,622	6.0%
2009-10	2012	506,042	539,167	33,112	6.1%
2010-11	2013	502,486	524,527	22,041	4.2%
2011-12	2014	495,009	514,491	19,482	3.8%
2012-13	2015	486,498	501,258	14,760	2.9%
2013-14	2016	484,993	497,455	12,462	2.5%
2014-15	2017	480,753	491,493	10,740	2.2%

Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 22, 2015).

Dashed horizontal blue line (and asterisk, *) indicates the demarcation between classes prior to and initially subject to the CAHSEE graduation requirement; the heavy blue line (and double asterisk, **) indicates the transition to the CAHSEE requirement being fully in effect.

Table 5.5 shows similar information for the drop-off between grade ten and eleven enrollments. Results show that the drop-off rate for enrollment between grades ten and eleven declined beginning with the Class of 2004. The rate declined fairly steadily from 6.4 percent for the Class of 2005 down to its lowest point of 1.6 percent for the Class of 2015.

Table 5.5. Enrollment Declines from Grade Ten to Grade Eleven

School Year	High School Class	Grade 11 Enrollment	Prior Year's Grade 10 Enrollment	Decrease	
				Number	Percent
1998–99	2000	390,742	423,865	33,123	7.8%
1999–2000	2001	401,246	433,528	32,282	7.4%
2000–01	2002	409,119	444,064	34,945	7.9%
2001–02	2003	420,295	455,134	34,839	7.7%
2002–03*	2004	428,991	459,588	30,597	6.7%
2003–04	2005	441,316	471,726	30,410	6.4%
2004–05**	2006	459,114	490,465	31,351	6.4%
2005–06	2007	467,304	497,203	29,899	6.0%
2006–07	2008	487,493	515,761	28,268	5.5%
2007–08	2009	488,227	517,873	28,646	5.5%
2008–09	2010	489,207	513,707	24,675	4.8%
2009–10	2011	487,505	509,157	21,652	4.2%
2010–11	2012	488,348	506,042	17,694	3.5%
2011–12	2013	487,466	502,486	15,020	3.1%
2012–13	2014	481,531	495,009	13,478	2.7%
2013–14	2015	477,425	486,498	9,073	1.9%
2014–15	2016	477,097	484,993	7,896	1.6%

Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Dashed horizontal blue line (and asterisk, *) indicates the demarcation between classes prior to and initially subject to the CAHSEE graduation requirement; the heavy blue line (and double asterisk, **) indicates the transition to the CAHSEE requirement being fully in effect.

Table 5.6 shows similar information for the enrollment drop-off between grades eleven and twelve. This rate decreased substantially (2.5 percentage points) with the Class of 2003. The reduced drop-off rate continued for subsequent cohorts, with the exception of the Class of 2006. The drop-off rate from grade eleven to grade twelve for the Class of 2011 actually reversed—that is, more students were enrolled in the Class of 2011's senior class than had been enrolled at the start of the junior year. This pattern continued to grow for the subsequent classes, reaching a 4.1 percent enrollment increase for the Class of 2015. The new trend may in part be due to the continued enrollment of grade twelve repeat students who fail to graduate with their original graduating class.

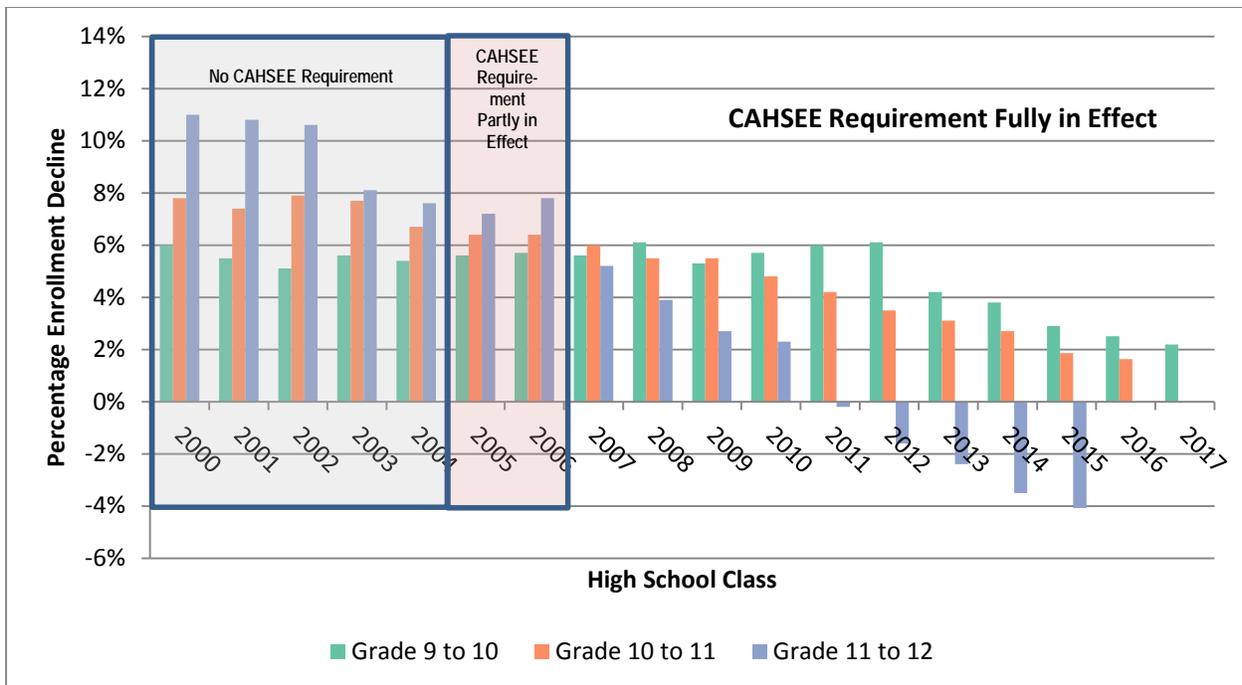
Table 5.6. Enrollment Patterns Between Grades Eleven and Twelve

School Year	High School Class	Grade 12 Enrollment	Prior Year's Grade 11 Enrollment	Decrease	
				Number	Percent
1999-00	2000	347,813	390,742	42,929	11.00%
1999-2000	2001	357,789	401,246	43,457	10.80%
2001-02	2002	365,907	409,119	43,212	10.60%
2002-03	2003	386,379	420,295	33,916	8.10%
2003-04*	2004	396,272	428,991	32,719	7.60%
2004-05	2005	409,568	441,316	31,748	7.20%
2005-06**	2006	423,241	459,114	35,873	7.80%
2006-07	2007	443,154	467,304	24,150	5.20%
2007-08	2008	468,281	487,493	19,212	3.90%
2008-09	2009	476,156	489,227	13,071	2.70%
2009-10	2010	477,885	489,032	11,147	2.30%
2010-11	2011	488,388	487,505	-883	-0.20%
2011-12	2012	495,945	488,348	-7,597	-1.60%
2012-13	2013	499,275	487,466	-11,809	-2.40%
2013-14	2014	498,403	481,531	-16,872	-3.50%
2014-15	2015	496,901	477,425	-19,476	-4.08%

Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Dashed horizontal blue line (and asterisk, *) indicates the demarcation between classes prior to and initially subject to the CAHSEE graduation requirement; the heavy blue line (and double asterisk, **) indicates the transition to the CAHSEE requirement being fully in effect.

Figure 5.6 shows a clear pattern (from the data in Tables 5.4 through 5.6) of (a) a decreasing drop-off rate from the Class of 2000 to the Class of 2017, and (b) a pattern of the drop-off rate between grades 11 and 12 that was substantially higher than that between grades nine and ten prior to CAHSEE. As the CAHSEE era persisted, the drop-off rate between grades eleven and twelve reversed itself.



Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Figure 5.6. Enrollment patterns from grade nine to grade twelve by high school class.

Dropout Rates: Summary

We examined four-year adjusted cohort dropout rates among high school students in the classes of 2010 through 2014. We found that the dropout rates, while substantial, declined overall and for every demographic group. Dropout rate gaps between demographic groups also declined.

We analyzed enrollment trends by graduation class cohort from the Class of 2000 through the fall enrollment count of the Class of 2015. The fall enrollment numbers for the 2014–15 school year reflect the lowest grade-by-grade reductions during the period reported here, and in fact show increasing gains in the numbers of grade twelve students in the classes of 2011 through 2015.

General Education Development (GED®) Rates

One of the factors that impacts graduation rates is the availability of a high school equivalency examination. The GED® test was designed for adults who do not have a high school diploma and includes five subjects: reading, writing, mathematics, science, and social studies. By passing the GED® test, a student can earn a California High School Equivalency Certificate, considered for some purposes to be equivalent to a high school diploma. Appendix A contains the CDE Web site description of who is eligible to take the GED® test. Appendix A (Definition 1.4) presents the CDE definition of the four-year adjusted GED® passer rate.

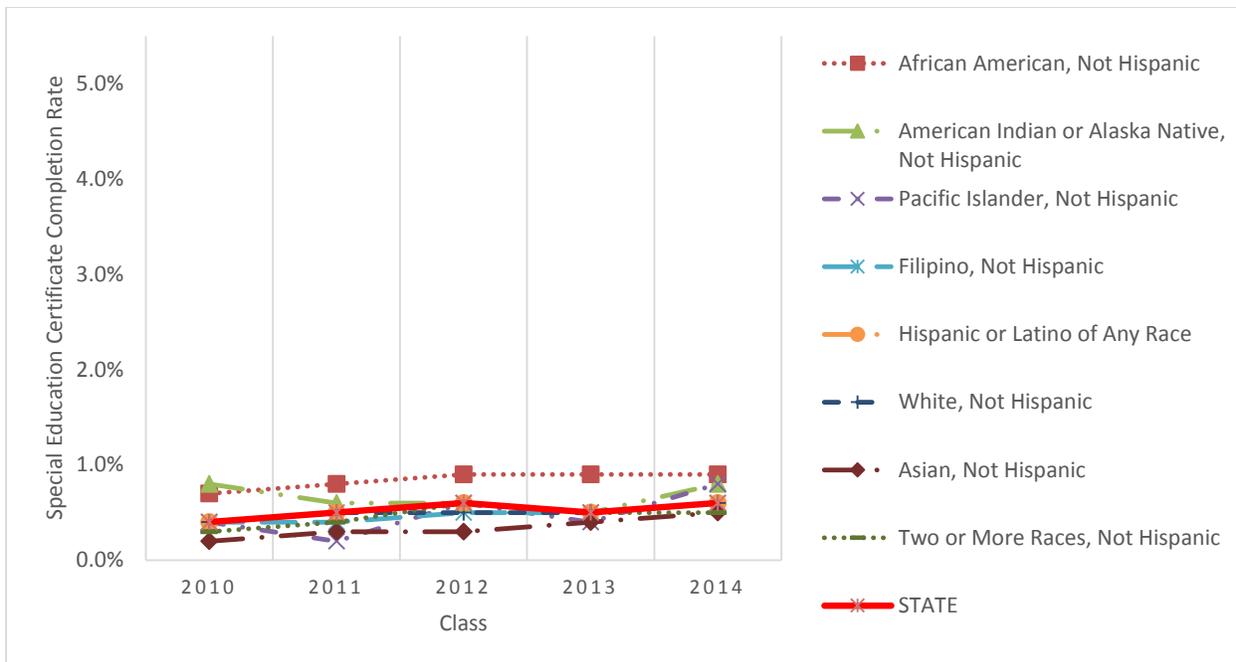
Between 2010 and 2014, the numbers of students obtaining a GED® test credential remain steady at a very low rate. With the exception of Filipino students who have

consistently remained below the state average, no clear patterns of GED® completion rates emerge for various demographic groups. In 2014 completion rates ranged from 0% to 0.4%; only one fifth of one percent of the Class of 2014 (0.2%) earned a GED® test credential. Filipino and Asian students (both at 0.1%) were below the statewide average and American Indian students were above the statewide average (0.4%). Among the other demographic groups presented, no group earned GED® test credentials at a rate higher than the state average, with only socioeconomically disadvantaged students earning GED® test credentials at equal rates to the state. Although beginning in March 2014, passing either of two alternative State-approved and nationally-recognized examinations, the High School Equivalency Test (HiSET®) or the Test Assessing Secondary Completion (TASC™), was considered equivalent to a high school diploma, DataQuest does not provide completion status codes for students passing these tests.

Special Education Certificate of Completion Rates

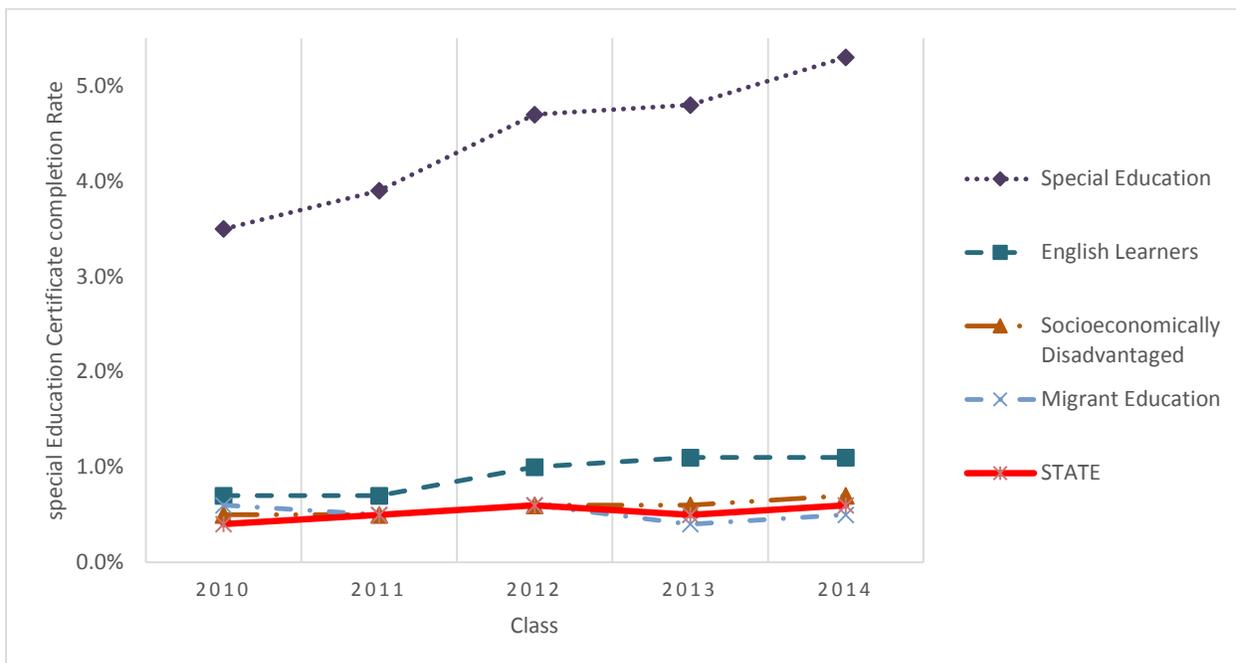
Special education students can earn a high school diploma by passing the CAHSEE and meeting all other graduation requirements, and there are steps in place to allow students to take the CAHSEE with modification(s) and obtain a waiver, thereby earning a diploma. Additionally, eligible students with disabilities (SWDs) continue to be exempt from the CAHSEE requirement per California *Education Code (EC)* Section 60852.3, and may earn a diploma by meeting all other graduation requirements. Some special education students instead earn a certificate of completion and are not considered high school graduates. Appendix A (Definition 1.5) presents the CDE definition of the four-year adjusted Special Education Certificate of Completion rate.

Figures 5.7 and 5.8 presents the rates at which special education students obtain a certificate of completion. Figure 5.8 indicates that 5.3 percent of special education students in the Class of 2014 earned a certificate and 0.6 percent of the total statewide student population did so that year. Inspection of the figure reveals slight increases from 2013 to 2014 for African American, American Indian/Alaska Native, and Pacific Islander students, putting their special education certificates of completion rates higher than the state average.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Figure 5.7. Four-year adjusted cohort special education certificate of completion rates by race/ethnicity.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

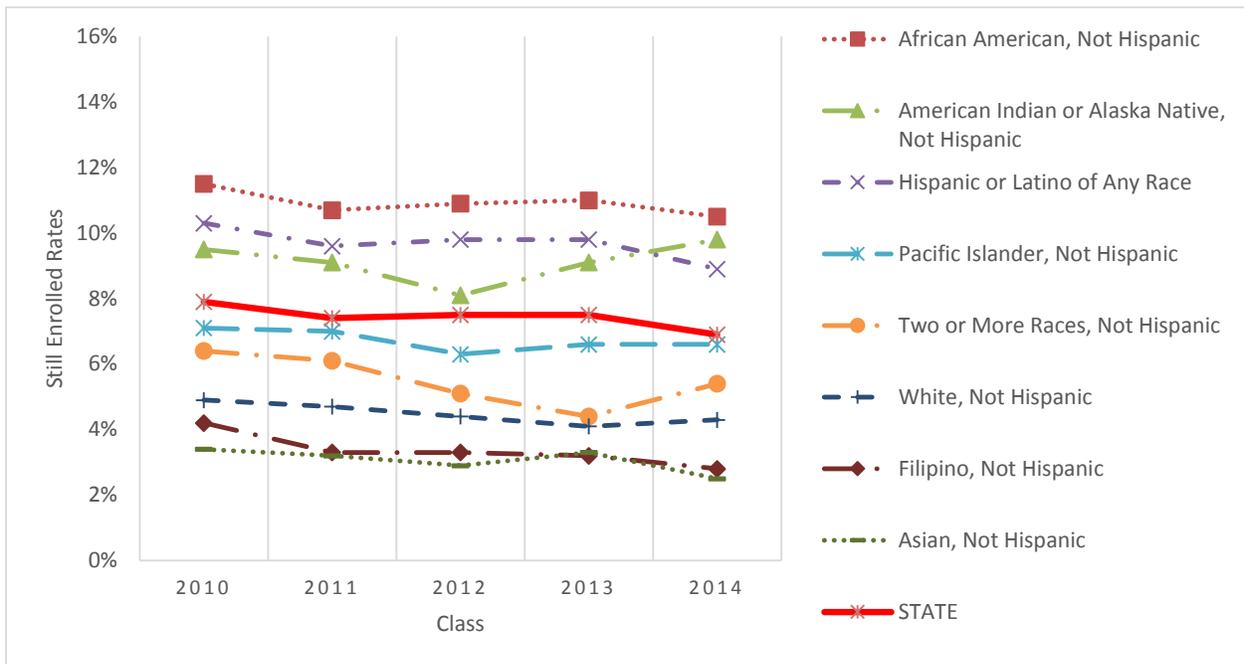
‡Special education students in the Classes of 2010 through 2014 were exempt from the CAHSEE requirement.

Figure 5.8. Four-year adjusted cohort special education certificate of completion rates by background characteristics.

Cohort Still Enrolled Rates

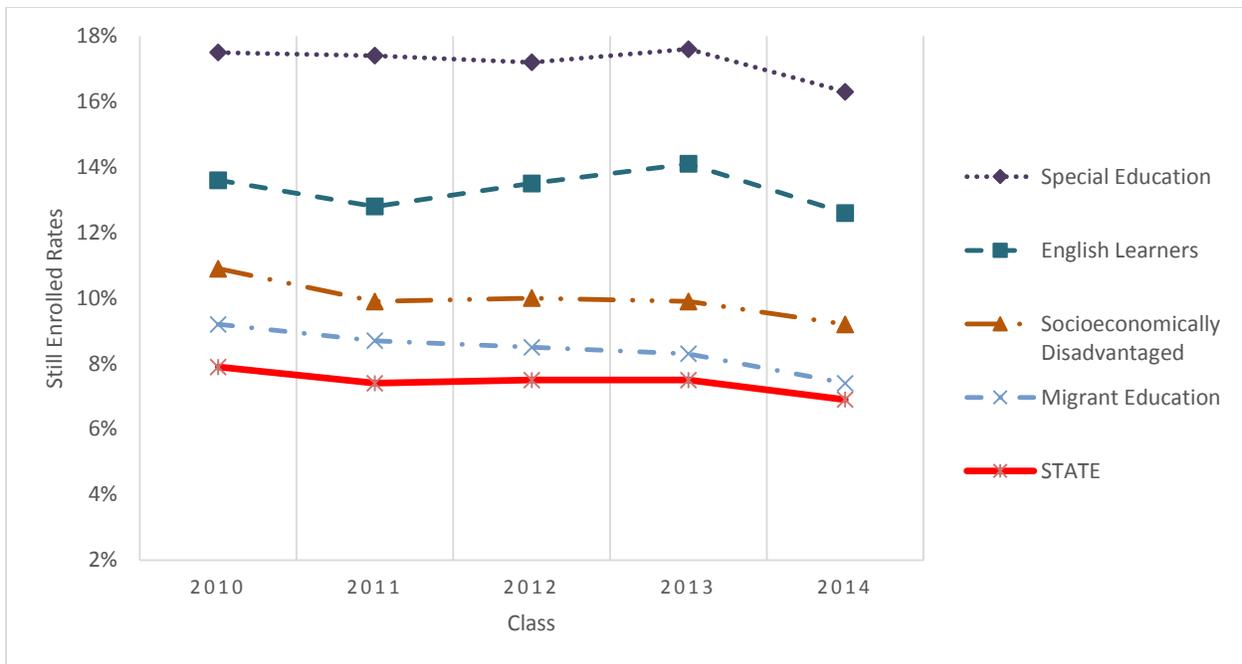
As the CAHSEE requirement matured, an increasing number of students continued their high school studies beyond grade twelve when most of their classmates graduated. Appendix A (Definition 1.6) presents the CDE definition of the Four-Year Adjusted Cohort Still Enrolled Rate.

Figures 5.9 and 5.10 show the rates of students enrolled past their grade twelve year. Overall, the rate has held quite steady for the past three years. In the Class of 2013, across the state, 7.4 percent of students continued high school. Comparison with the state average line indicates that African American, American Indian, and Hispanic or Latino students continued enrollment at a higher rate than the state average, with American Indian/Alaska Native students seeing an increase in continued enrollment in recent years. Continuation rates of EL, socioeconomically disadvantaged, special education, and migrant education students also exceeded the overall state rate; however, they showed slight decreases from 2013 to 2014.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

Figure 5.9. Four-year adjusted cohort still enrolled rates by background characteristics.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 20, 2015).

‡Special education students in the Classes of 2010 through 2014 were exempt from the CAHSEE requirement.

Figure 5.10. Four-year adjusted cohort still enrolled rates by background characteristics.

College Preparation

Indicators of educational quality include the rigor of coursework undertaken in high school as well as the proportion of students intending and prepared to engage in postsecondary education. We turn now to two sets of indicators (other than the CAHSEE) of student preparedness for college.

Percentage of Students Taking College Preparation Courses

One indicator of educational quality is the caliber of coursework completed. Two of California’s statewide university systems, the University of California (UC) and the California State University (CSU), have developed a list of courses known as “a–g courses” that are required for incoming freshmen. This list includes 16 units of high school courses, of which at least 7 must be taken in the last two years of high school. In this system, a unit represents a full year (two semesters) of study.

Table 5.7 indicates the percentage of public high school graduates who completed a–g courses over several years. Note that this calculation excludes students who did not graduate; if this were based, for example, on grade nine enrollment to indicate the percentage of students who entered high school and completed these courses, the rates would be considerably lower. Among graduates, the rate of completing a–g courses varies widely, from 26.9 percent among American Indian/Alaska Native students to 70.9 percent among Asian students. The rate of course completion overall and for every group increased between the 2004–05 and the 2013–14 school years.

Just over two-fifths (41.9 %) of the graduates of the Class of 2014 completed the course requirements to enter a UC or CSU school.

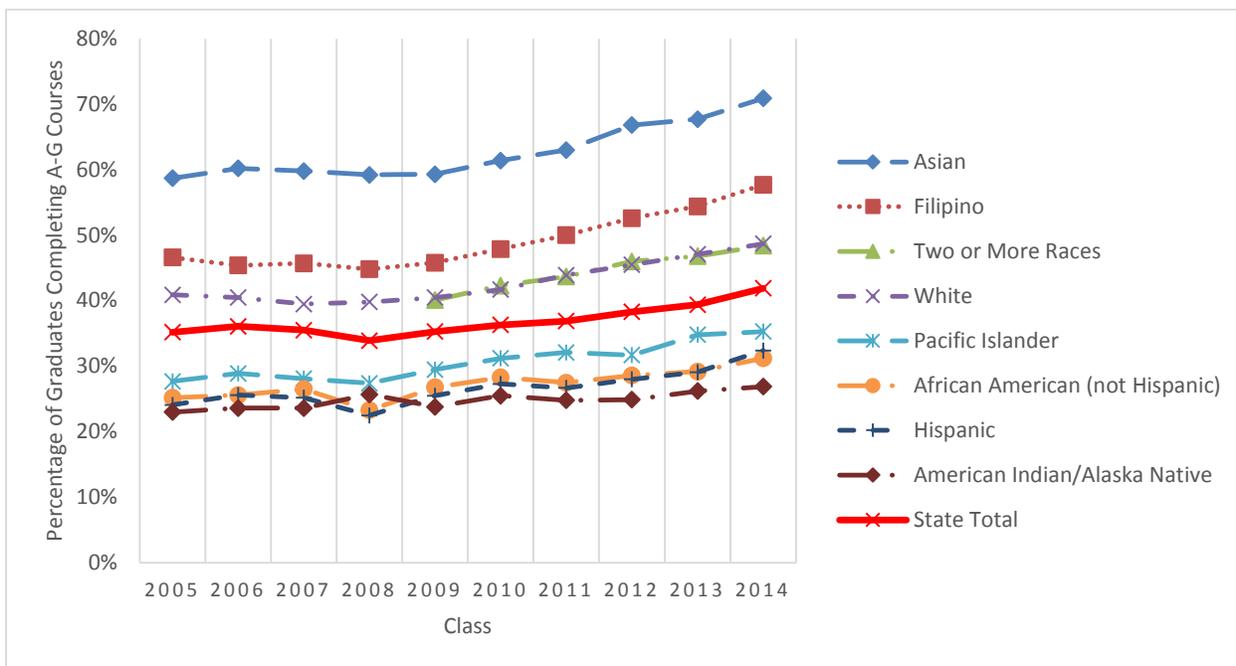
Figures 5.11 and 5.12 show that gaps continue to exist for some groups, specifically, Pacific Islander, Hispanic or Latino, African American, American Indian/Alaska Native, ELs, migrant, and socioeconomically disadvantaged students. In recent years, ELs and migrant students have had decreases in a–g course completion.

Table 5.7. Trends in Percentages of Graduates Completing Minimum Coursework (A–G Courses) for Entry into UC or CSU systems

	Class									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Racial/Ethnic Groups										
Asian	58.7%	60.2%	59.8%	59.2%	59.3%	61.4%	63.0%	66.8%	67.7%	70.9%
Filipino	46.6%	45.4%	45.7%	44.8%	45.8%	47.9%	50.0%	52.6%	54.4%	57.7%
Two or More Races	N/A	N/A	N/A	N/A	40.1%	42.3%	43.7%	46.0%	46.8%	48.4%
White	40.9%	40.5%	39.5%	39.8%	40.5%	41.7%	43.9%	45.5%	47.1%	48.7%
Pacific Islander	27.7%	28.9%	28.1%	27.4%	29.5%	31.2%	32.1%	31.7%	34.8%	35.3%
African American (not Hispanic)	25.2%	25.6%	26.5%	23.3%	26.8%	28.3%	27.5%	28.6%	29.2%	31.2%
Hispanic or Latino	24.1%	25.6%	25.2%	22.5%	25.5%	27.3%	26.7%	28.0%	29.1%	32.4%
American Indian/Alaska Native	23.0%	23.6%	23.6%	25.7%	23.8%	25.5%	24.8%	24.9%	26.2%	26.9%
Other Demographic Groups										
English Learners	N/A	N/A	26.0%	21.3%	23.6%	23.5%	21.4%	22.7%	8.9%^	9.9%
Socioeconomically Disadvantaged	N/A	N/A	26.5%	21.0%	19.6%	20.6%	22.1%	24.7%	30.0%	32.7%
Special Education	N/A	N/A	6.4%	7.2%	9.0%	8.1%	6.0%	8.3%	N/A	N/A
Migrant Education	N/A	N/A	28.5%	23.6%	29.1%	25.7%	27.4%	29.6%	25.0%	23.1%
State Total	35.2%	36.1%	35.5%	33.9%	35.3%	36.3%	36.9%	38.3%	39.4%	41.9%

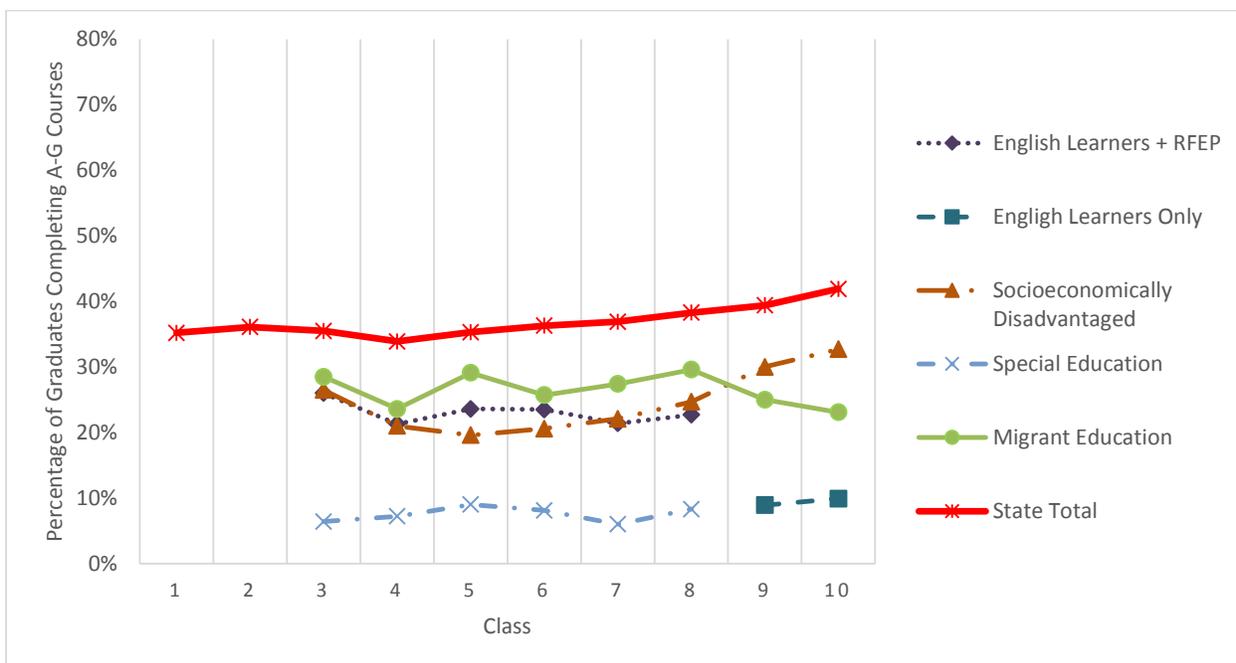
Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 22, 2015).

^A Per personal correspondence with California Basic Education Data System (CBEDS) staff, this calculation changed in 2012-13 from EL + RFEP to EL only.



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 22, 2015)

Figure 5.11. Trends in percentages of graduates completing minimum coursework (a-g courses) for entry into UC or CSU systems by race/ethnicity,



Source: Derived from CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 22, 2015)

*Per personal correspondence with CBEDS staff, this calculation changed in 2012-13 from EL + RFEF to EL only.

**RFEF indicates reclassified fluent-English-proficient

Figure 5.12. Trends in percentages of graduates completing minimum coursework (a-g courses) for entry into UC or CSU systems by background characteristics.

College Entrance Examination Participation and Performance

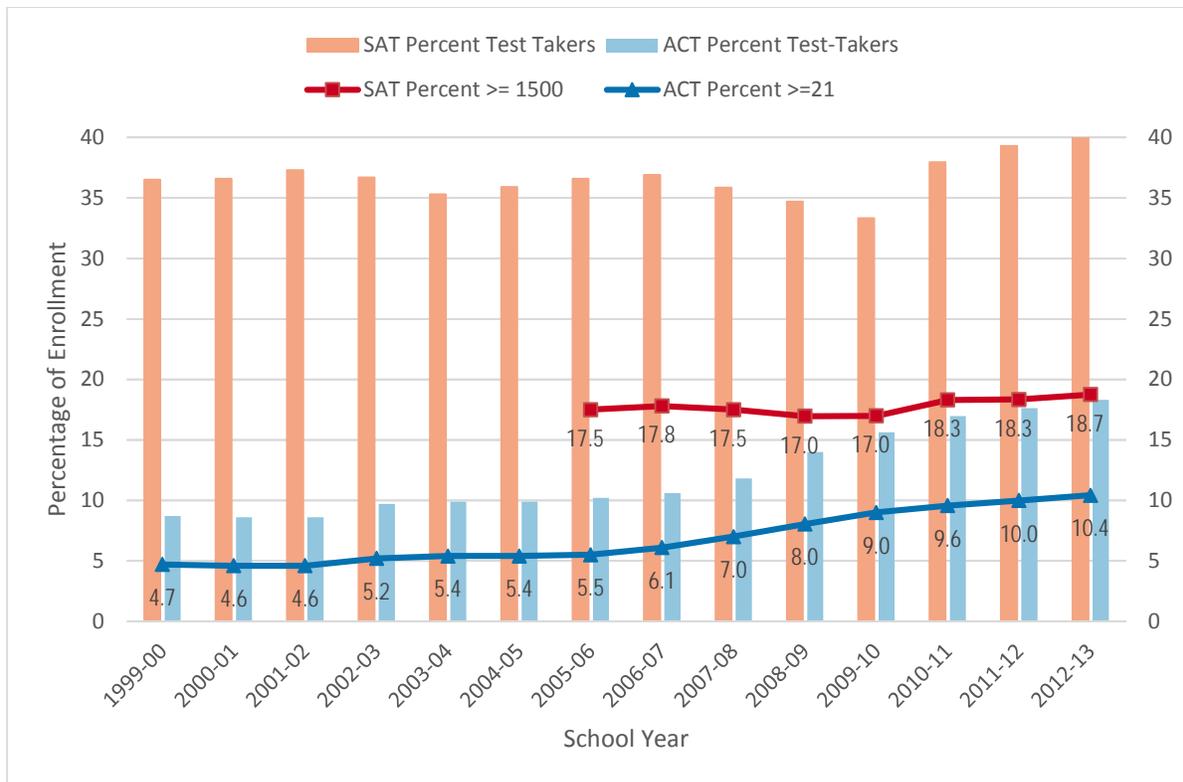
The level of student aspirations for education beyond high school is reflected in the proportion of students who sit for college entrance examinations. College readiness can also be examined by looking at the performance of students who take such tests. These two factors are confounded, in that higher participation may be related to lower scores overall. For example, if only a small, high performing proportion of a class takes an examination, scores will be high but participation will be low. If a larger proportion of students, who may be lower performing, are encouraged to take the test, the average scores will drop but participation rates will increase. Interpretation of patterns requires care because of this confounding effect.

Two college-entrance examination programs are most prevalent in the United States: the SAT and the ACT. We provide data from the CDE Web site as well as the College Board and ACT Web sites. The two outside sources include private school students in addition to public school students. The additional information we provide based on data from the College Board and ACT Web sites needs to be interpreted with caution and evaluated in terms of the student test taking populations they represent.

Figure 5.13 indicates the percentage of California public school students participating in the SAT and ACT examination programs. The bars represent the proportion of each grade twelve class that took either the SAT or the ACT. In 2012–13 approximately 40 percent of the students in the grade twelve class took the SAT and nearly 19 percent took the ACT. Note that CDE changed its reporting of SAT and ACT test-takers for the 2013–14 school year to include all students enrolled in grades nine through twelve, not just students enrolled in grade twelve. These data are incompatible with prior years and thus are not reported in this trend chart.

Figure 5.13 also shows the percentage of California public school students who achieved a particular score on these two examinations, over time. The graph uses the same cut points used for reporting on the CDE Web site. The upper line reflects the percentage of students enrolled in grade twelve achieving a minimum combined score of 1500 (out of a possible maximum of 2400) on the SAT or 21 (out of a possible 36) on the ACT (lower line), respectively.²³

²³ The average national SAT scores for Reading, Mathematics, and Writing at the 50th percentile level are approximately 500 each. The national rank for an ACT composite score of 21 is the 57th percentile.



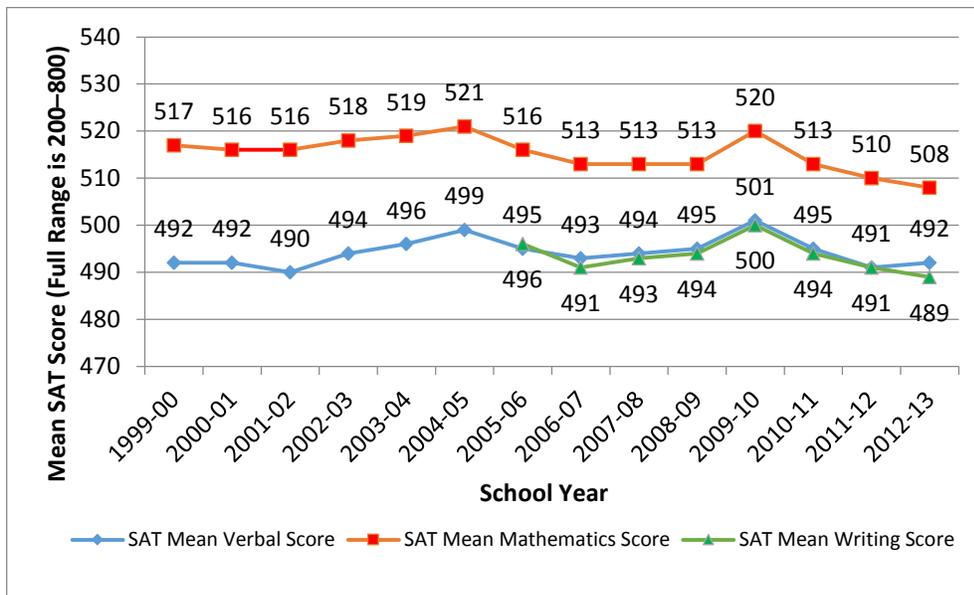
Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 23, 2015).

Note. CDE changed from reporting grade twelve enrollment to grades nine through twelve enrollment for reporting SAT and ACT scores. Thus, 2013–14 results are incompatible and excluded.

Prior to 2005–06 CDE reported the percentage of students achieving a combined SAT Verbal and mathematics score of 1,000. SAT Writing was introduced in 2006; in 2005–06 CDE changed its reporting to a combined verbal, Mathematics, and writing score. The latter metric is reported here.

Figure 5.13. SAT and ACT participation rates and success rates over time.

Another metric to assess success on tests such as the SAT and ACT is to look at mean scores. SAT mathematics, verbal, and writing examinations are each scored on a range of 200–800. Figure 5.14 indicates that mean SAT mathematics and verbal scores generally increased each year between 2001 and 2005, but both verbal and mathematics mean scores dropped in 2006 and 2007 (the CAHSEE went into effect in 2006). Verbal and writing scores increased in 2008 and 2009 while mathematics scores remained flat. In 2010, all three mean scores rose, then dropped in 2011 and again in 2012. The CDE altered its reporting metric from reporting enrollment only in grade twelve to reporting enrollment in grades nine through twelve for reporting SAT and ACT scores. Thus, 2013–14 data are incompatible with previous years and are not reported here.

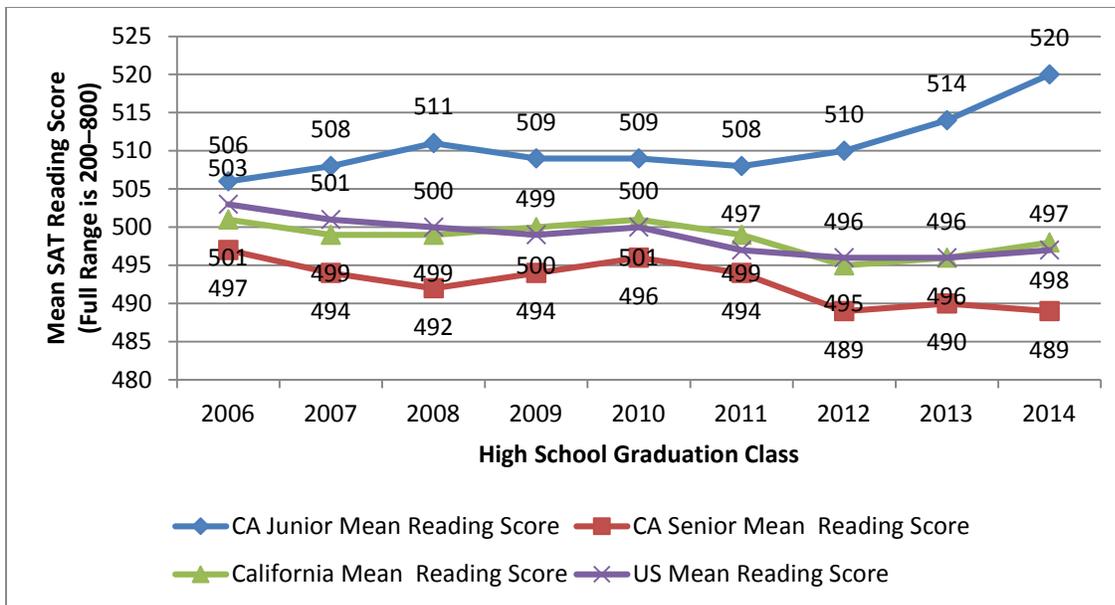


Source: CDE DataQuest. <http://data1.cde.ca.gov/dataquest> (accessed July 23, 2015).
 Note. CDE changed from reporting enrollment only in grade twelve to reporting enrollment in grades nine through twelve for reporting SAT and ACT scores. Thus, 2013–14 results are incompatible and excluded.

Figure 5.14. SAT mean mathematics, verbal, and writing scores over time.

Figures 5.15 and 5.16 represent high school graduates from across the United States and within all schools in California who took the SAT at any time from freshman year through March of their senior year. As a reminder, these data from the College Board are not entirely comparable to data from CDE’s reports because they include students from private high schools. According to the CDE Web site, private schools enrolled approximately 7.2 percent of the statewide Class of 2014.

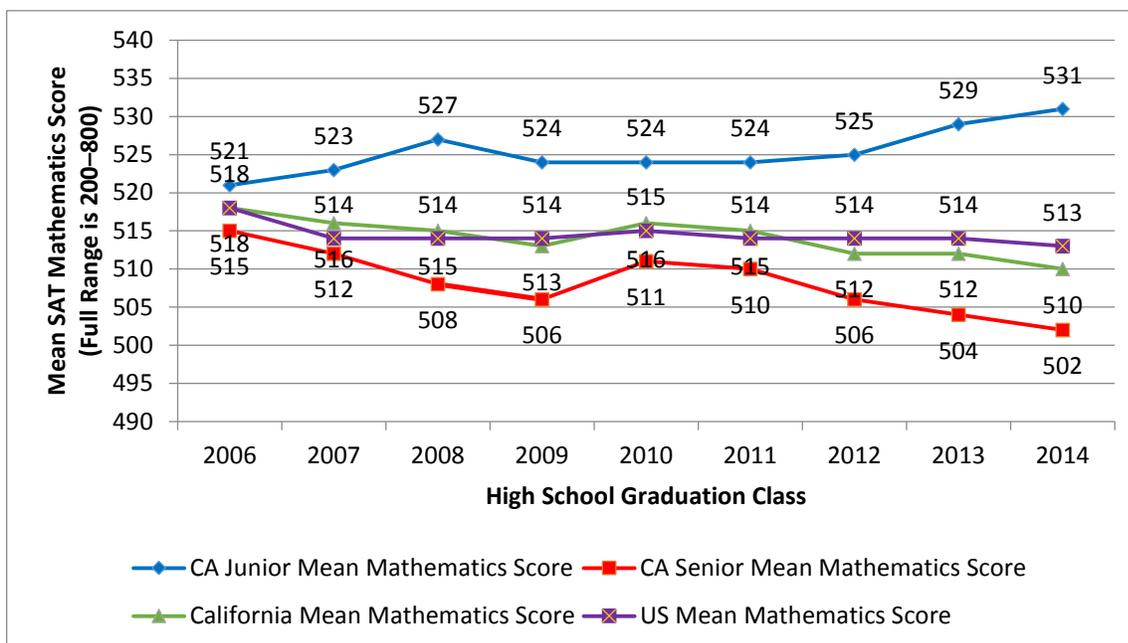
Figure 5.15 illustrates differences between the mean SAT critical reading scores for all California junior-year test takers (upper diamonds) compared to all California senior-year test takers (lower squares) over time, with juniors maintaining a higher mean performance on the test for all the years shown (classes of 2006 through 2014). The greatest difference between mean SAT critical reading scores occurred in the Class of 2014, with junior test takers outscoring senior test takers by 31 points (520 vs 489, respectively). The gap between junior and senior test takers has grown for the past two years. Since 2006, juniors have scored higher than the California and national averages, whereas seniors have scored consistently below these two averages.



Source: CDE Source: <https://www.collegeboard.org/program-results/2014/california> (accessed July 23, 2015).

Figure 5.15. SAT mean critical reading scores over time, by grade taken.

Figure 5.16 illustrates a similar comparison for mean SAT mathematics scores, with juniors (upper diamonds) scoring higher on the test than senior test takers (lower squares) for all classes shown. The overall California mean SAT mathematics score is within three points of the national mean score for all classes shown.

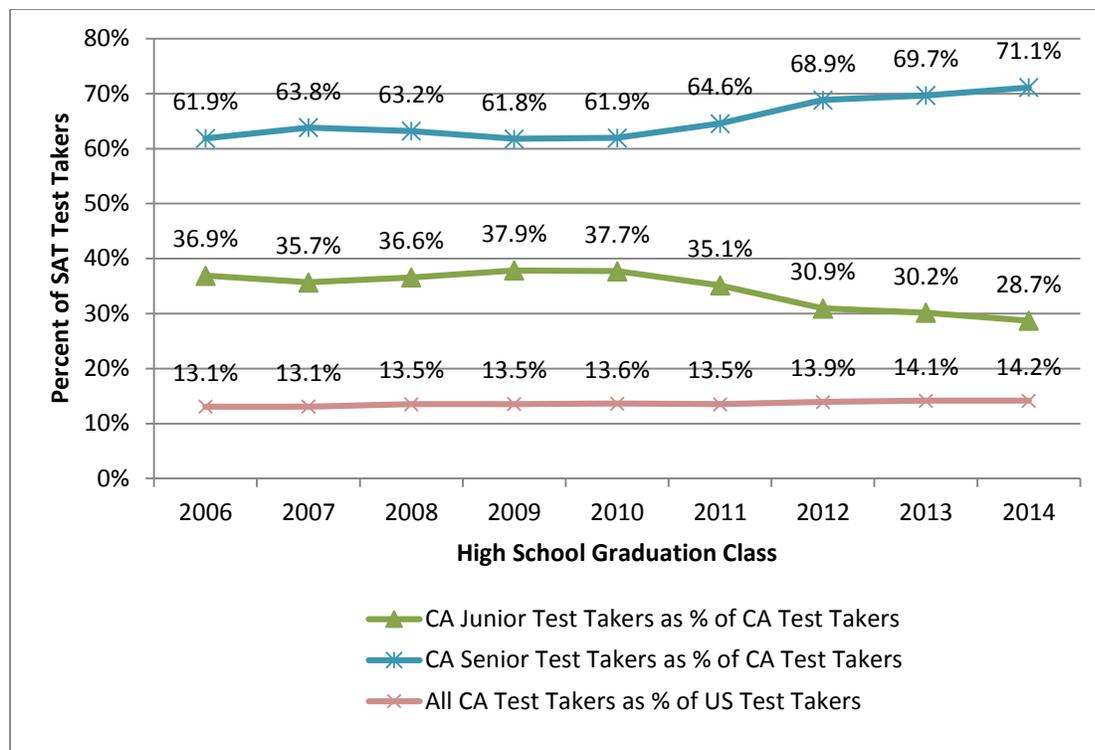


Source: College Board Source: <https://www.collegeboard.org/program-results/2014/california> (accessed July 23, 2015).

Figure 5.16. SAT mean mathematics scores over time, by grade taken.

Figure 5.17 presents the percentage of California students that took the SAT for the last time in their junior year or their senior year. The percentage of senior test takers

accounts for 71.1% in 2014 and junior test takers account for 28.7% in 2014. The total California population of SAT test takers has consistently accounted for about 13–14 percent of the national SAT test-taking population in the high school classes shown.

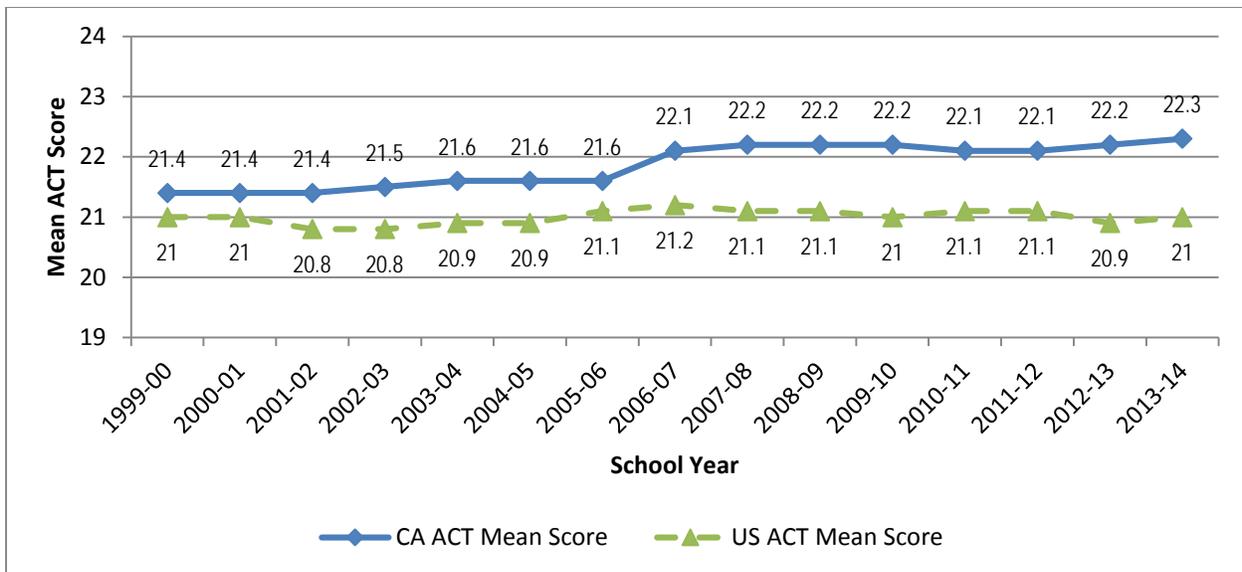


Source: College Board Source: <https://www.collegeboard.org/program-results/2014/california> (accessed July 23, 2015).

Figure 5.17. Percentage of SAT test takers over time, by grade taken.

California is one of 15 states classified by ACT as an “SAT” state, meaning the ratio of students taking the SAT to those taking the ACT is greater than 1.5 to 1, but less than 4 to 1. Turning to ACT scores, Figure 5.18 shows mean California public school students’ scores on the ACT examination compared to national means over the period from 1999 through 2014.²⁴ Scores were highly consistent until 2006–07, when they increased from 21.6 to 22.1, while the nation remained relatively flat. Since that time the scores stayed comparatively flat near this higher level of performance. ACT examinations are scored on a range of 1–36; a smaller range is depicted to make the trends more visible.

²⁴ We report data from the ACT Web site rather than the CDE Web site in order to include the national comparison.



Source: ACT: <http://www.act.org/newsroom/data/2014/states.html> (accessed August 7, 2015).

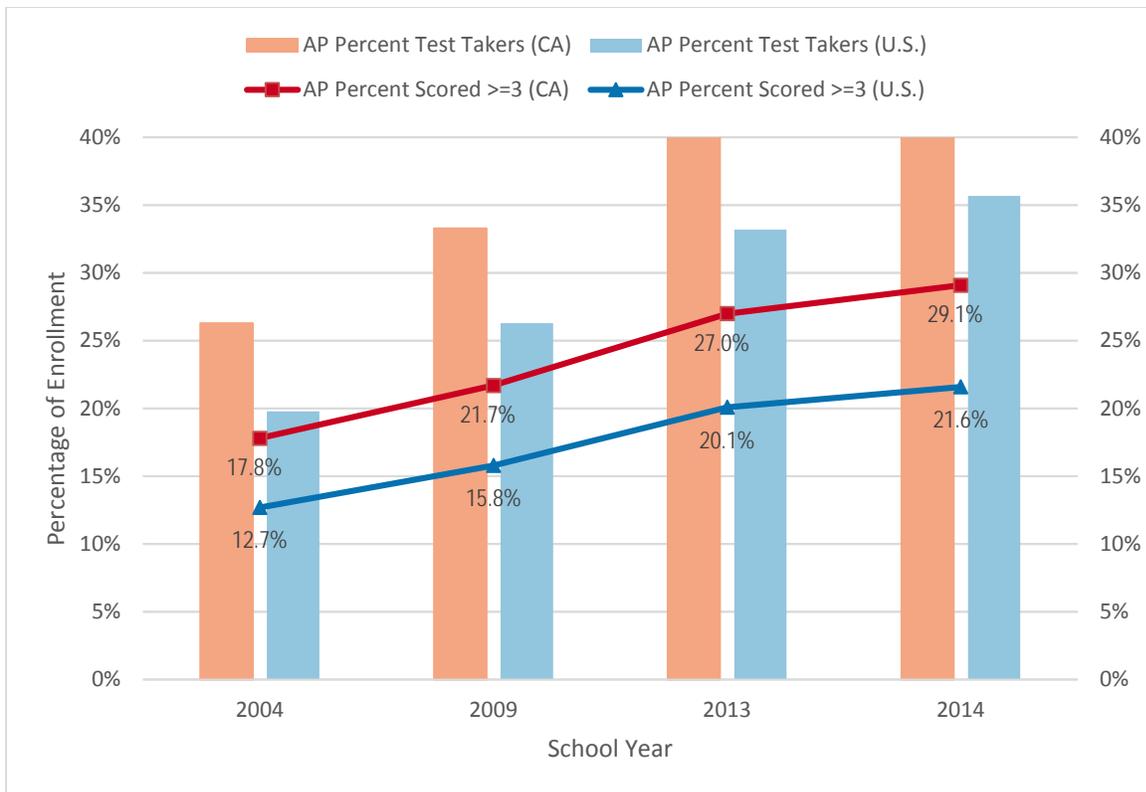
Figure 5.18. California students’ mean ACT scores over time.

AP Test Achievement

The College Board’s Advanced Placement (AP) program comprises a set of college-level courses offered in high school. Students have the option of taking a standardized AP examination after completing the course to earn college credit and/or gain placement in advanced college courses. AP examination participation rates and scores are indicators of the rigor of high school courses as well as of the intentions of students to attend postsecondary education. The College Board currently offers more than 30 AP courses and examinations, but not all courses are offered at all high schools.

The data presented here were retrieved from the *AP Cohort Data: Graduating Class of 2014 Report*²⁵ and represent the number of seniors in a given cohort leaving high school having taken an AP exam at any point in high school. Figure 5.19 displays AP examination participation rates among California public school students compared to the nation over time. The bars represent the percentage of California and national graduates who took an AP exam during high school and the lines represent the percentage of graduates who scored a three or higher on an exam. Since 2004, there has been a steady increase in both AP participation and in the percentage of students who pass an AP exam. California consistently outperforms the national average in both participation and performance.

²⁵ The Annual Report, *AP Report to the Nation*, was discontinued in 2014. The AP Cohort Data Report included statistics that differed from our previous years’ reports so we could not continue the previous presentation of data. Trends here reflect those in the 2014 AP Cohort Data Report.



Source: The AP Cohort Data Report: Graduating Class of 2014 (accessed August 5, 2015).

Figure 5.19. AP participation rates over time, by race/ethnicity and overall.

College Preparation: Summary

Among graduates, the rate of completing a–g courses for every racial/ethnic group increased from 2004–05 to 2013–14. Just over two-fifths (41.9 %) of the graduates of the Class of 2014 completed the course requirements to enter a UC or CSU school. While rates for every demographic group increased, the rates continue to vary widely. In 2013–14, over two-thirds of Asian students (70.9%) completed a–g courses, but only a quarter of American Indian/Alaska Native students (26.9%) did so.

The percentage of California public high school seniors taking the SAT examination increased over time to 40.4 percent in 2012–13. Over the same time period the percentage of students achieving a score of 1500 or better increased to 18.7 percent. Participation on the ACT rose to an all-time high of 18.3 percent in 2012–13 and the percentage of students achieving a score of 21 or better peaked at 10.4 percent. On the SAT, however, the trend in mean scores declined from a peak in 2009–10 while the ACT recovered from a similar dip to again reach its 2009–10 level. A given student may take the SAT, the ACT, or both. We cannot determine the overlap between the SAT and ACT examinee groups. Comparable data were not available for 2013–14 in time for this report; we have asked CDE for data.

Another indicator of the rigor of high school coursework is participation in, and success on, AP examinations. The 2013–14 school year brought increased participation and increased achievement on these examinations by students from California schools (public). California ranked 6th overall in percentage of the Class of 2014 scoring a 3 or higher on an AP exam during high school. Nearly forty-five percent of the graduating class (43.9%) took at least one AP exam and nearly thirty percent (29.1%) achieved a score of 3 or better on at least one AP exam.

Summary of Findings

Data sources outside the CAHSEE Program provide indications of the state of education in California. The Class of 2006 was the first cohort required to pass both parts of the CAHSEE to receive a high school diploma, so trends from 2006 onward are of particular import.

High school graduation rates form an important indicator of the health of the educational system. More than four-fifths of students in the Class of 2014 (80.8%) graduated with a diploma, an increase from 74.7% four years earlier. We found that graduation rates for all demographic groups (except American Indian/Alaska Native and migrant students) increased in 2014 from their 2010 levels and gaps between most groups grew smaller. Despite the reductions in gaps, substantial differences in graduation rates remain, from 68.1 percent among African American students to 92.3 percent for Asian students, with special education students having the lowest graduation rate of 62.2 percent.

The statewide four-year adjusted cohort dropout rate decreased from 16.6 percent for the Class of 2010 to 11.6 percent for the Class of 2014. From 2010 to 2014, dropout rates steadily declined for every demographic group studied, with the exception of African American, special education, American Indian/Alaska Native, and migrant education students. Particularly, relative to 2013, in 2014 fewer American Indian/Alaska Native and migrant students graduated and more students dropped out. The percentage point decrease in dropout rates from 2010 to 2014 for some traditionally disadvantaged groups (e.g., African American, Hispanic or Latino, and ELs) exceed the statewide average, indicating that gaps are shrinking. Pacific Islander students have made steady declines in dropout rates since 2010 and in 2014 are only 0.8 percentage points above the state mean. However, disparities persist. Over a fifth of ELs (20.9%) and African American students (20.3%) in the Class of 2014 dropped out. As noted in previous annual evaluation reports, more high school dropouts leave school in the senior year than in the freshman through junior years combined.

As a second look at students leaving high school prematurely, we investigated enrollment trends by grade and over time. While this measure does not directly account for mobility in and out of the state, substantial changes in enrollment declines can be interpreted as an indirect indicator of dropout rates. Enrollment patterns indicate that the drop-off rates of sophomores, juniors, and seniors continued to decline in fall 2014; in fact the number of grade twelve students in the Classes of 2011 through 2015 exceeded the number of juniors in those same classes. This grade twelve phenomenon may be partly attributed to the continuation of students in a second senior year. In short,

we found a trend toward more students persisting to the fall of their senior year and beyond.

Regarding SAT achievement, although the percentage of California seniors taking the SAT has increased since 2010 (61.9% to 71.1%) and decreased for juniors (37.7% to 28.7%), juniors steadily continue to improve their performance on the test, while seniors' performance is declining. The trend in mean scores of students in public schools declined from a peak in 2009–10 but when students in private schools are included, scores of juniors increased in both reading and mathematics, while scores of seniors were mixed. A given student may take the SAT, the ACT, or both. We cannot determine the overlap between the SAT and ACT examinee groups.

More than two-fifths (41.9%) of the graduates in the Class of 2014 successfully completed the a–g courses required by the UC and CSU systems, continuing a steady five-year climb. Rates varied widely among racial/ethnic groups. Participation for public school students in AP examinations continued to increase in 2014, as did measures of success on the AP. More than two-fifths of the 2014 graduating class (43.9%) took at least one AP examination and nearly thirty percent of the graduating class (29.1%) achieved a score of 3 or better on at least one AP examination. California students continue to outperform the national average and ranked 6th overall on percentage of graduating students who achieved a three or higher on an AP examination in high school.

Chapter 6: Findings and Recommendations

D. E. (Sunny) Becker, Michele M. Hardoin, and Laress L. Wise

Background

As described in Chapter 1, an independent evaluation of the California High School Exit Examination (CAHSEE) was launched in January 2000 and has continued every year since. Under California *Education Code* (EC) Section 60855(a), the evaluation is required to assess both the quality of the CAHSEE tests and the impact of the CAHSEE requirement.

California has reached a critical juncture with respect to its testing environment. On August 2, 2010 the California State Board of Education (SBE) adopted the Common Core State Standards (CCSS), a set of educational standards that describe what students should know and be able to do in each subject and each grade. The SBE and the California Department of Education (CDE) acknowledged at the outset that full implementation of CCSS would occur over multiple years and would include three phases: awareness, transition, and implementation. Each local educational agency (LEA) is responsible for its own implementation plan.²⁶ In the 2014–15 school year, a new battery of Smarter Balanced English language arts/literacy (ELA) and mathematics assessments, aligned with the CCSS, was administered to students in grades three through eight and eleven.

The CAHSEE, first administered in 2001, was aligned to content specified in the California State Standards adopted in 1997. It was designed, in part, to encourage implementation of effective curriculum aligned to those standards, which preceded California's adoption of the CCSS. As districts align their curriculum to the CCSS, the alignment between instructional content in California schools and the CAHSEE is diminishing. During the 2014–15 school year, California high school students took both the Smarter Balanced ELA and mathematics assessments (in grade eleven) and the CAHSEE examinations (in grade ten and, as needed, grades eleven and twelve) in ELA and mathematics.

Key independent evaluation activities conducted during 2014–15 included:

- Analyses of 2014–15 test results, including review and analysis of indicators of the quality of CAHSEE test forms and test administration and consistency of scoring (Chapter 2),
- Analyses of student questionnaire responses (Chapter 3),
- Comparisons of student performance on the CAHSEE and the Smarter Balanced high school Field Test (Chapter 4),
- Examination of other indicators of student achievement and success (Chapter 5).

²⁶ CDE's CCSS Systems Implementation Guide is at <http://www.cde.ca.gov/re/cc/ccssguide.asp>.

In this final chapter, we summarize key findings from each of these activities and the conclusions we derived from these findings about the CAHSEE and its impact. We also offer recommendations and options for possible post-CAHSEE era statewide graduation requirements.

Key Findings

Analyses of CAHSEE 2014–15 Test Results (Chapter 2)

This year we examined two main aspects of CAHSEE test quality: (a) school site adherence to established standardized test administration policies and procedures, and (b) consistency in essay scoring and test form scoring decision points. We did not identify any significant concerns about the validity of the resulting scores.

Key Finding 2.1: In general, test administrations are conducted in accordance with standard procedures.

With regard to test administration observations, the two sites we observed complied with most standard procedures.

Key Finding 2.2: HumRRO found no significant problems with test scoring. The reuse of test forms did not result in problems, and the test forms had equivalent difficulty.

HumRRO evaluation efforts found no significant problems with the processes used to score the CAHSEE essay items. The reuse in 2014–15 of five test forms that had originally been administered during corresponding months in 2011–12 did not result in significant differences in mean essay scores, signaling the appropriate use of the original raw-to-scale score conversion tables. In particular, there was no evidence that the essay prompts had been compromised. Scoring consistency increased slightly, and Educational Testing Service (ETS) continues to assemble test forms of comparable difficulty.

Key Finding 2.3: Performance on the CAHSEE continues to improve, but remains low for English learners (ELs) and students with disabilities (SWDs). Gaps persist, as passing rates for economically disadvantaged, Hispanic or Latino, and Black or African American students also continue to be significantly lower than passing rates for White and Asian students at all grade levels.

CAHSEE test results show significant increases in students' competency in targeted skills since the implementation of the CAHSEE requirement. As shown in Table 2.24, overall grade twelve passing rates for seniors have increased steadily from 93.6 percent for the Class of 2008 to 95.8 percent for this year's Class of 2015. Similarly, as shown in Table 2.35, overall passing rates for grade ten students taking the CAHSEE have increased steadily from 65.1 percent for the Class of 2008, tested in 2006, to 76.4

percent for the Class of 2017, tested in 2015. As shown in Table 2.35 and illustrated in Figure 2.5, initial (grade ten) passing rates have increased significantly for all demographic groups. That said, it should also be noted that passing rates for SWDs are still unacceptably low and that passing rates for ELs are also low and have not increased consistently since the CAHSEE requirement went into effect. Passing rates for economically disadvantaged (ED), Hispanic or Latino, and Black or African American students also continue to be significantly lower than passing rates for White and Asian students at all grade levels.

Key Finding 2.4: A significant number of students who do not meet the CAHSEE requirement in four years continue to try to pass the CAHSEE in their fifth year.

An encouraging finding is the large number of students who continue to try to pass the CAHSEE after their originally scheduled graduation date. Of the approximately 20,000 general education students in the Class of 2014 who did not complete the CAHSEE requirement by the end of grade twelve, more than 9,000 took the CAHSEE one or more times in 2014–15. More than 2,700 completed the CAHSEE requirement, as shown in Table 2.45. Also more than 2,500 general education students in the Class of 2013 who had not yet passed the CAHSEE continued to try to pass it last year and more than 750 did pass (Table 2.42) two years after their original graduation date. Finally, more than 1,200 general education students from the Class of 2012 took the CAHSEE last year, more than two years after their original graduation date, and more than 350 of them completed the CAHSEE requirement (Table 2.39). Perseverance and success in a fifth year of high school is summarized in Table 2.48.

Key Finding 2.5: More high school students are taking mathematics courses beyond Algebra I, although gaps among student demographic groups persist.

A significant trend since the implementation of the CAHSEE requirement has been the proportion of students taking more advanced mathematics courses in high school. As shown in Table 2.37, the percentage of students taking mathematics courses beyond Algebra I by grade ten has increased from 64.0 percent for the Class of 2008 to 77.3 percent for this year's grade ten students in the Class of 2017. All demographic groups showed significant increases in the percentage of students taking more advanced courses over this period, including very significant gains—from 33.3 percent to 49.2 percent—for SWDs. Here too, however, significant gaps persist. Analyses show that fewer SWDs (49 percent), ELs (55 percent), ED students (72 percent), Native American (67 percent), Black or African American (71 percent), and Hispanic or Latino (73 percent) students are taking advanced mathematics courses by grade ten than White (81 percent) and Asian (92 percent) grade ten students.

Key Finding 2.6: The effectiveness of English language development programs appears to be improving.

The effectiveness of English language development programs appears to be improving. More students have been reclassified as fluent in the English language and fewer are still classified as EL in grade ten when they first take the CAHSEE.

Key Finding 2.7: CAHSEE gains for SWDs have been mixed.

Finally, the CAHSEE gains for SWDs have been mixed. Passing rates for grade ten SWDs have increased from the Class of 2006 to the Class of 2017 as shown in Figure 2.5. However, as shown in Figure 2.1, cumulative grade twelve passing rates for SWDs increased very significantly, from 49 percent to 55 percent when the exemption for SWDs was lifted for the Class of 2008, but decreased somewhat in 2010 when the CAHSEE exemption was reinstated for these students. This year, the cumulative grade twelve passing rate for SWDs is back up to 58 percent.

Student Questionnaire Responses (Chapter 3)

Key Finding 3.1: Student responses to questionnaire items were generally positive and became more positive over time. Most students reported having exposure to CAHSEE content and were confident they would pass the CAHSEE and earn a diploma. Most grade ten students had plans to attend a community college or 4-year college or university after graduation.

In general, the grade ten student perspectives on the CAHSEE are positive and are either staying consistent or improving over time. Most students report adequate exposure to CAHSEE content (Table 3.18) and question types (Table 3.20), and felt they did as well as they could on the test (Table 3.17). More than half of students felt they learned study and test-taking skills in middle school that helped them do well on the CAHSEE (Table 3.7). Most students expect to attend a four-year or two-year college after graduating high school (Table 3.14) and most expect to graduate high school with the rest of their class or earlier (Table 3.9). The results were very similar to previous years, with SWDs and ELs most likely to say they were unfamiliar with CAHSEE content and item types, particularly students who were designated both as ELs and SWDs (Tables 3.32 and 3.33). Results suggest there are also differences in reported content exposure depending on gender, or whether one is classified as ED. Particularly, males and those who are classified as ED report less exposure to CAHSEE content than females or those who are not classified as ED, respectively (Tables 3.32 and 3.33).

Key Finding 3.2: Traditionally disadvantaged student subgroups reported less familiarity than other students with CAHSEE content and question types.

Each year of the evaluation we consistently found that a higher percentage of SWDs and ELs were not as familiar with the CAHSEE content as the general population. We also found that ED students, who account for more than half of respondents in 2015, may not have had the same level of exposure to CAHSEE content and question types as those who were not disadvantaged. Hispanic or Latino, Black or African American, and American Indian or Alaska Native students more frequently reported unfamiliarity with at least some of the topics compared to White and Asian students in 2015, particularly in mathematics. Looking back to previous CAHSEE years, all groups show increased familiarity over time but this gap between racial/ethnic groups is fairly consistent.

Similar differences between racial/ethnic groups were found for exposure to CAHSEE question types. While most students reported exposure to at least some of the question types, Asian students most frequently reported that all question types were similar to what they had seen.

Key Finding 3.3: Many students who are still attempting to meet the CAHSEE requirement in grade twelve are increasingly concerned with the possibility that the CAHSEE will be a barrier to graduating, compared to their concerns in grade ten. Also, most grade twelve students still attempting to pass the CAHSEE no longer plan to attend a four-year college compared to the proportion who planned to do so in grade ten, but many now expect to attend community college.

As students were unable to pass the CAHSEE over their high school years, their expectations changed. In 2015, grade twelve students who were still taking the CAHSEE were more likely to believe that the CAHSEE would prevent them from earning a high school diploma than they did as grade ten students in 2013 (see Table 3.35).

A higher percentage of grade twelve students who were still taking the CAHSEE in 2015 responded that they would attend a community college after high school in 2015 than those same students did as grade ten students in 2013. Students still taking the CAHSEE as twelfth graders were less likely to report plans to attend a four-year college or university than they did as tenth graders (see Table 3.36).

Comparing Student Performance on CAHSEE and Smarter Balanced (Chapter 4)

Key Finding 4.1: While student performance on the Smarter Balanced field test and the CAHSEE were highly correlated, the Smarter Balanced performance levels are more rigorous than the CAHSEE performance levels.

Student performance on the Smarter Balanced high school Field Test was highly correlated with performance on the CAHSEE. Correlations in the concurrent sample—students who took the CAHSEE and Smarter Balanced high school tests in grade eleven in 2014–15—were .60 for ELA and .53 for mathematics; correlations for the longitudinal sample—students who took the CAHSEE in grade ten in 2013–14 and the Smarter Balanced high school tests in grade eleven in 2014–15—were .67 for both ELA and mathematics. The findings suggest that the Smarter Balanced performance levels appear to be more rigorous than the current CAHSEE performance levels, particularly for mathematics. As one of the goals of the Smarter Balanced assessment is to measure the effectiveness of instruction in the CCSS, we expected the rigor of the Smarter Balanced assessment to be higher than that of the CAHSEE, and that appears to be true. The Smarter Balanced high school test appears to have floor effects that are higher than the current CAHSEE score range, and the CAHSEE tests appear to have ceiling effects that are lower than the Smarter Balanced score range. The Smarter Balanced cut points projected onto the CAHSEE scale were higher than the current CAHSEE cut points, particularly for mathematics.

Key Finding 4.2: Preliminary investigations provide some evidence that variations among districts and schools in technology preparedness were unrelated to student performance on the computer-based Smarter Balanced examination.

With the Smarter Balanced examination administered on a computer, we explored the impact of technological preparedness at the district level on student performance. Examining the impact of technology on predicted CAHSEE performance, using the regression coefficients identified through linear regression and equipercentile linking, we found unexpected results. Particularly, districts and charter schools labeled as having “low” technology fared better than those labeled “high.” While there were many limitations to this study—including low response rates, lack of school-level data, and sometimes conflicting responses within districts—the results may provide evidence that technology preparedness may not be much of a factor in student performance on a technology-based test. The technology study showed the relationship between the tests did not differ based on high and low technology districts. Similarly, it would be useful to study whether the tests are differentially related for districts that differ in degree of implementation of CCSS-aligned curriculum.

Key Finding 4.3: California might consider using the Smarter Balanced high school examination or a test comprised of Smarter Balanced high school items as the new graduation requirement. New cut points would have to be established and could be more rigorous than the CAHSEE requirement, if desired.

Finally, while the Smarter Balanced high school ELA assessment was found to be somewhat similar to the CAHSEE as far as Basic (Level 2) and Proficient (Level 3) cut points, the Smarter Balanced high school mathematics assessment required significantly higher achievement at each of the performance levels. The Smarter Balanced high school assessments, particularly the mathematics tests, had significant floor effects relative to the CAHSEE and may not provide accurate scores at current CAHSEE passing levels. If California decided to increase the rigor of the graduation requirement, Smarter Balanced high school assessments or assessments comprised of Smarter Balanced high school items, although they were not designed for this purpose, might be considered.

Trends in Educational Achievement and Persistence (Chapter 5)

Key Finding 5.1: Graduation rates have continued to improve while the decline in dropout rates slowed in the Class of 2014. Over time, more students persisted into grade twelve and beyond. While gaps between demographic groups on all these measures are shrinking, substantial differences remain.

High school graduation rates form an important indicator of the health of the educational system. More than four-fifths of students in the Class of 2014 (80.8%) graduated with a diploma, an increase from 74.7 percent four years earlier. We found that graduation rates for all demographic groups increased in 2014 from their 2010 levels and gaps between groups grew smaller. Despite the reductions in gaps, substantial differences in graduation rates remain, from 68.1 percent among African American students to 92.3 percent for Asian students (Table 5.2 and Figure 5.3).

The statewide four-year adjusted cohort dropout rate decreased from 16.6 percent for the Class of 2010 to 11.6 percent for the Class of 2014 (Table 5.2 and Figure 5.6). While the dropout rates declined over that four year period for every demographic group reported (i.e., racial/ethnic groups, ELs, special education students, migrant education students, socioeconomically disadvantaged students), rates of most groups flattened or increased for the Class of 2014, relative to 2013 (Figure 5.6). While there is some evidence since 2010 that gaps between groups are shrinking, disparities persist. Approximately a fifth of ELs (20.9%) and African American students (20.3%) in the Class of 2014 dropped out. As noted in previous annual evaluation reports, more high school dropouts leave school in the senior year than in the freshman through junior years combined.

As a second look at students leaving high school prematurely, we investigated enrollment trends by grade and over time. While this measure does not directly account

for mobility in and out of the state, substantial changes in enrollment declines can be interpreted as an indirect indicator of dropout rates. Enrollment patterns indicate that the drop-off rates of sophomores, juniors, and seniors continued to decline in fall 2014; in fact the number of grade twelve students in the classes of 2011 through 2015 exceeded the number of juniors in those same classes. This grade twelve phenomenon may be partly attributed to the continuation of students in a second senior year. In short, we found a trend toward more students persisting to the fall of their senior year and beyond.

Key Finding 5.2: The percentage of students completing a college preparation curriculum continued to increase.

Two-fifths of the graduates in the Class of 2014 successfully completed the a–g courses required by the UC and CSU systems, continuing a steady six-year climb. Rates varied widely among racial/ethnic groups but increased for every group over time. Rates dropped for ELs and migrant education students in the Classes of 2013 and 2014.

Recommendations

Since 2006, students who receive a California high school diploma have had to demonstrate competency in the specific California content standards assessed by the CAHSEE, though exemptions or waivers were in place in many of those years for SWDs. The large, complex, and comprehensive CAHSEE assessment program was constructed with enormous amounts of energy and resources from California policy makers, CDE staff, and local educators. During the past several years the CAHSEE Program has operated in a maintenance phase, without new item development, within the context of a statewide shift of student assessment to align to the CCSS.

With the passage of Assembly Bill (AB) 484, signed into law on October 2, 2013, the state embarked on a transition to a system of assessments and assessment tools that will take several years to complete. Effective on January 1, 2014, the California Assessment of Student Performance and Progress (CAASPP) System replaced the Standardized Testing and Reporting (STAR) Program. The CAHSEE was not specifically addressed in AB 484, although the Superintendent recommended alternatives for consideration (including using Smarter Balanced ELA and mathematics high school assessments; using voluntary exams such as the Preliminary SAT (PSAT), SAT, ACT, or AP as proxies; considering successful course completion without examination; considering end-of-course assessments; and considering matriculation examinations).

The CAHSEE covered former content standards that, prior to the adoption of the CCSS, were targeted for instruction in grades eight to ten for ELA and six to seven with some grade eight Algebra I for mathematics. It has been fifteen years since the content requirements for the CAHSEE were first adopted by the SBE. Preliminary screening of the CAHSEE item bank indicated limited alignment to the CCSS and, for mathematics, alignment of some items to the CCSS at a lower grade level.

Subsequent to the initial drafting of this report, Senate Bill (SB) 172 (Liu) was signed by the Governor to suspend the administration of the CAHSEE and the requirement that students pass the CAHSEE to receive a high school diploma for the 2015–16, 2016–17, and 2017–18 school years. The law requires that schools grant a diploma to any student who completed grade twelve in the 2003–04 school year or a subsequent school year and met all applicable graduation requirements other than the passage of the high school exit examination. The law further requires the State Superintendent of Public Instruction (SSPI) to convene an advisory panel to provide recommendations to the SSPI on the continuation of the high school exit examination and on alternative pathways to satisfy the high school graduation requirements pursuant to *EC* sections 51224.5 and 51225.3. The law will become effective on January 1, 2016. In response to this law, HumRRO reviewed and slightly modified our recommendations.

Prior to 2013, our evaluation reports included a variety of detailed recommendations. Given the current shift in California to instruction and assessment aligned to the CCSS in elementary and middle school grades, accompanied by the suspension of the CAHSEE requirement, it seems appropriate to focus again this year, as we did in 2013 and 2014, on the broader need to revise the graduation requirement in response to these changes.

Long Term Considerations

California should first decide whether and how to continue a statewide requirement that students demonstrate essential skills to receive a high school diploma. Based on our evaluation of the academic improvements associated with the CAHSEE requirement and the CAHSEE assessments over the past 15 years, we believe there is reason to continue with at least a basic competency requirement.

Recommendation 1. California should continue to require students to demonstrate basic competency in ELA and mathematics as a requirement for graduation.

When the CAHSEE was first administered to grade nine students in 2001, 64 percent of the students who took the CAHSEE on a voluntary basis passed the ELA test and 43 percent passed the mathematics test. A year later, passing rates for grade ten students who had not previously taken the CAHSEE were 64.5 percent for ELA and 41.8 percent for mathematics (Wise, et al., June 2002, 42-43). It was estimated that by the end of grade ten, only 44.5 percent of students in the Class of 2004 had completed the CAHSEE requirement. This year 82.1 percent of grade ten students in the Class of 2017 passed the ELA test and 81.7 passed the mathematics test, with 76.4 percent passing both parts. Thus, since it was implemented, the proportion of grade ten students able to meet minimum requirements in ELA and mathematics has gone from less than half to more than three-quarters. This indicates the overriding goal for the CAHSEE requirement, that schools would teach and students would learn basic ELA and mathematics skills, has been realized. Also, many of the more significant concerns

about the CAHSEE requirement, most notably that dropout rates would increase dramatically, have not been realized. In fact dropout rates are down and graduation rates have increased compared to years before the requirement was implemented.

Given the recent suspension of a statewide requirement, there may be concerns with equity as LEAs may vary in their diploma requirements. Some LEAs could establish lower diploma requirements that would allow students without basic competencies to graduate, leaving such students unprepared for post high school endeavors. Additionally, in the absence of a standardized graduation requirement, students would be unaware of their deficits and would also lack the opportunity for remediation in these skill areas. Hence, there is every reason to consider some sort of statewide requirement. Policymakers must, however, choose among a number of different options if it is decided to continue a test-based graduation requirement.

Option 1. Reinstate the exit examination requirement with only minor content changes.

With minor to moderate revisions to former CAHSEE blueprints, California could resume administering a grade ten test that does not cover all of the CCSS high school standards but covers selected middle and high school standards from CCSS (i.e., covers material included in CCSS-aligned curriculum. Students who do not pass in grade ten could continue to have multiple opportunities to pass in grades eleven and twelve and also after their scheduled date of graduation. This option would require using an assessment that is not currently within the CAASPP System, and it would allow CAHSEE requirements to be expanded to cover some high school course content.

One argument for this option is that students who have not reached required skill levels by grade ten would be identified and provided with additional support for mastering these skills prior to receiving a diploma. In addition, the success of programs to help students reach required skill levels by grade ten would continue to be monitored.

With the implementation of the CAASPP System, many of the statewide assessments are transitioning to computer delivery. If the exit examination is reinstated, California should consider the feasibility of making it a computer-delivered test. During HumRRO test administration observations, one common issue for school site coordinators was the logistical and security burden associated with CAHSEE paper-and-pencil testing. In addition to simplifying test administration procedures, student testing time could be reduced by eliminating group testing, which requires students who finish early to wait for the entire testing session to conclude. A further benefit of computer testing would be that appropriate accommodations and modifications could more easily be offered to SWDs and EL students. Finally, the reinstated examination could be administered adaptively (tailoring test questions to student ability levels) as are the Smarter Balanced tests so that performance on targeted content standards could be assessed with considerably less testing time.

Option 2. Test for mastery of basic competencies at an earlier point.

The CAHSEE requirement covered skills that are now nearly all taught by the time students complete grade eight. If it is decided to keep the current levels of skill requirements, it should be possible to use Smarter Balanced grade eight tests that are aligned to new curriculum based on the CCSS to identify students who have not yet learned the required skills. Advantages of this approach are that: (a) most students would demonstrate the target level of mastery by grade eight and thus not have to participate in further testing and (b) those students who needed additional help would be identified early and have sufficient time to receive and benefit from remedial help during high school. It would be necessary to determine an appropriate passing level on the Smarter Balanced grade eight assessments for this purpose, and possibly identify a subset of the content that would contribute to a score, to be comparable to the historical CAHSEE graduation requirement. Using Smarter Balanced grade eight tests would eliminate the need for a separate exit examination.

Option 3. Increase the rigor of the high school exit examination requirement.

When CAHSEE passing levels were adopted by the SBE, it was suggested that the rigor of these requirements be increased over time, as the effectiveness of ELA and mathematics instruction improved. A much higher level has been identified for students to be considered college and career ready based on course content aligned to the CCSS and the content and cut points for the Smarter Balanced high school assessments. The Smarter Balanced high school assessments within the CAASPP System might be appropriate for measuring whether students have met these higher standards, and it might be desirable to establish a passing level for graduation that is different from the existing achievement levels used for school accountability. Using Smarter Balanced high school tests, or tests comprised of Smarter Balanced high school items, would eliminate the need for a separate exit examination. Alternatively, end-of-course tests (EOCs), particularly in mathematics, might be used. Because students would not typically have an opportunity to retest, it would be necessary to create different ways for students who do not pass the high school assessments in grade eleven to demonstrate adequate proficiency during grade twelve. For example, students might be required to take and pass a remediation course, with some verification of the rigor of course content to indicate that passing this course would demonstrate proficiency levels comparable to those required to satisfy the graduation requirement.

Option 4. Suspend the exit examination requirement permanently and consider diverting cost savings toward remediation for struggling students.

With the passage of SB 172, the exit examination requirement for a high school diploma is suspended for students through the Class of 2018. As stated above, if this option is chosen and the suspension is made permanent, questions of equity will be raised if LEAs differ significantly in their required levels of skills in ELA and mathematics. While the Smarter Balanced high school assessments would shed some light on possible

inequities, there would not be a complete measure of the extent to which each student has achieved at least minimum skill levels by the end of high school. However, the time and funds saved by no longer administering the CAHSEE could be used to target remediation of students who are shown to be behind based on their Smarter Balanced grade eight test performance.

Timeline Considerations

Option 1, reinstating the exit examination, will take time to implement. It would take at least three years to secure a testing vendor, begin test development, field test new test questions, construct forms that meet revised or altogether new blueprints, and establish passing standards.

For any of the first three options that include an examination requirement, it may take some time to demonstrate that students have adequate opportunity to learn the content covered by the new test before students are held individually accountable and subject to suffering high-stakes consequences for failing the test.

For Option 2, use of the Smarter Balanced grade eight tests might be implemented as early as spring 2017, after reviewing content requirements and setting appropriate minimum passing scores. The requirement could therefore apply to students in the high school classes of 2021 and beyond.

For Option 3, use of the Smarter Balanced high school tests or other tests such as EOCs as a graduation requirement would likely require two or more years to review content, set passing levels, and verify that students will have had adequate opportunity to learn the more rigorous material before students are held individually accountable and subject to high-stakes consequences. During this time, the CDE could also develop alternative pathways for students who do not pass the high school assessments in grade eleven to allow them to demonstrate adequate proficiency during grade twelve. At the earliest, the new requirement could be implemented during the 2017–18 school year and applied to the high school classes of 2019 and beyond.

Requirements for Students with Disabilities

Recommendation 2. The Legislature and the SBE should establish consistent expectations and requirements for SWDs, as part of long term changes to the graduation requirement.

The CAHSEE requirement was initially deferred for two years for SWDs (classes of 2006 and 2007) and it was deferred again for SWDs in 2010, until such time as alternative means to the CAHSEE for assessing SWDs could be implemented or deemed infeasible. While each exemption was in place, teachers, parents, and students were uncertain as to what was truly expected of them in high school. As shown in Figure 2.1, CAHSEE passing rates (through grade twelve) increased dramatically for SWDs when the initial exemption was removed. Since then passing rates have been

relatively flat as waivers and the exemption for SWDs have allowed SWDs to graduate without passing the CAHSEE.

Prior to 2015, all SWDs took the CAHSEE in grade ten for accountability purposes, but when exemptions were in place SWDs did need not pass the CAHSEE to graduate. The grade ten census testing provides some information on educational trends. Passing rates for grade ten SWDs have only modestly increased from 20.2 percent for the Class of 2010 to 28.1 percent for the Class of 2017, remaining far below the rates for all other subgroups. In addition, grade ten SWDs were more likely than any other subgroup besides ELs to report that they were unfamiliar with some CAHSEE content and item types. This finding could be a further sign that many SWDs are not being provided instruction in all of the content covered by the CAHSEE because they were exempt from the CAHSEE requirement.

Not holding SWDs to the CAHSEE requirement has been undermining the goal that schools would teach and *all* students would learn basic ELA and mathematics skills. Well over half of SWDs who did not pass the CAHSEE went on to receive a high school diploma anyway, due to exemptions or waivers.

Efforts to improve instruction for SWDs may indeed have taken place, as evidenced by the significantly increased percentage of grade ten SWDs who have taken mathematics courses beyond Algebra I (from 33.3 to 49.2 percent for the Classes of 2010 to 2017, respectively). However, because participation in CAHSEE testing for grade eleven and twelve SWDs was voluntary, accurate data about recent trends in subgroup achievement are not available.

Plans for revising the graduation requirement must take into account the needs and unique characteristics of SWDs. It is urgent that California develop and communicate a clear and consistent set of expectations for high school SWDs, ending years of unresolved debate over the appropriateness of the CAHSEE requirement for these students. The requirement for SWDs could provide for appropriate alternative ways to demonstrate required knowledge and skills, and might include identifying appropriate goals for students who are not able to participate in regular academic instruction.

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Glossary of Acronyms

Acronym	Meaning
AB	Assembly Bill
ACT	American College Testing (former name, now just acronym)
AP	Advanced Placement
AVID	Advancement Via Individual Determination
CAASPP	California Assessment of Student Performance and Progress
CAHSEE	California High School Exit Examination
CALPADS	California Longitudinal Pupil Achievement Data System
CAPA	California Alternate Performance Assessment
CAT	Computer Adaptive Test
CBEDS	California Basic Educational Data System
CCSS	Common Core State Standards
CCSSO	Council of Chief State School Officers
CDE	California Department of Education
CELDT	California English Language Development Test
CEP	Center on Education Policy
CHSPE	California High School Proficiency Examination
CST	California Standards Test
CSU	California State University
EAP	Early Assessment Program
<i>EC</i>	California <i>Education Code</i>
ECD	Evidence Centered Design
ED	Economically Disadvantaged
EL	English Learner
ELA	English Language Arts
ELD	English Language Development
ESEA	Elementary and Secondary Education Act

ETS	Educational Testing Service
GED®	General Educational Development (Test or Student)
HumRRO	Human Resources Research Organization
IEP	Individualized Education Program
IRT	Item Response Theory
LEA	Local Educational Agency
LTEs	Long Term English Learners
MEP	Migrant Education Program
MSIN	Migrant Student Information Network
NGA	National Governors Association
NSLP	National School Lunch Program
PARCC	Partnership for Assessment Readiness for Colleges & Careers
PASS	Portable Assisted Study Sequence
PSAT	Preliminary SAT (formerly Preliminary Scholastic Aptitude Test)
RFEP	Reclassified/Redesignated Fluent English Proficient
SAT	Scholastic Aptitude Test (former name, now just SAT)
SB	Senate Bill
SBE	State Board of Education
S.D.	Standard Deviation
SPAC	State Parent Advisory Council (for Migrant Students)
SSDP	State Service Delivery Plan
SSID	Statewide Student Identifiers
STAR	Standardized Testing and Reporting
SWDs	Students with Disabilities
UC	University of California

Appendix A: CDE Definitions

Cohort Outcomes CDE Definitions

This appendix replicates text from a California Department of Education (CDE) document (Source: http://data1.cde.ca.gov/dataquest/cohortrates/CohortOutcomeDefinitions2012_4_30.doc). Because the contents were not edited, discrepancies with the CDE Style Guide remain.

Definitions Used in Producing Cohort Outcome Data

The definitions and business rules used to develop the 4-year adjusted cohort and to calculate the graduation rate are sourced from the U.S. Department of Education's *High School Graduation Rate - Non-regulatory Guidance, December 22, 2008* (<http://www2.ed.gov/policy/elsec/guid/hsgrguidance.pdf>).

1.1. **Adjusted Cohort** - The 4-year Adjusted Cohort forms the basis for calculating graduation rates, dropout rates, and other related rates. The cohort is the group of students that could potentially graduate during a 4-year time period (grade 9 through grade 12). The 4-year Adjusted Cohort includes students who enter 9th grade for the first time in the initial year of the 4-years used for the cohort. This cohort is then adjusted by:

- Adding students who later transfer into the cohort during grade nine (year 1), grade 10 (year 2), grade 11 (year 3) , and grade 12 (year 4); and
- Subtracting students who transfer out, emigrate to another county, or die during the 4-year period.

Students who drop out during the four year period remain in the cohort, as well as students that complete 12th grade and exit the educational system without graduating. Students that take longer than four years to graduate or remain enrolled after four years are also included as part of the cohort.

Students are removed from the cohort when the last exit for that student includes any of the following student school exit category codes:

Exit Code	Description
E130	Died
T180	Transfer to a private school
T200	Transfer to a school outside of California
T240	Transfer out of the U.S
T260	Transfer to an adult education program
T280	Transfer to college

T310	Transfer to a health facility
T370	Transfer to an institution with a high school diploma program
T460	Transfer to home school program
N470	No show other (first time pre-register and did not show)

The following types of student school exit transfer category codes may be used to remove a student from a school- or district-level cohort: (T160) Transfer to CA school regular; (T165) Transfer to CA school, disciplinary; (T167) Transfer to CA school, referral, or (E230) (480 exit completion code) promoted/matriculated. When a subsequent enrollment is found for any of T160, T165, T167, E230-480 the student will be removed from the district- and school-level cohort. When a subsequent enrollment is not found and the last exit is any of T160, T165, T167, or E230-480, the student record remains in the cohort and is treated as a “lost transfer” dropout.

1.2. **4-year Adjusted Cohort Graduation Rate** - The four-year graduation rate is calculated by dividing the number of students in the 4-year adjusted cohort who graduate in four years or less with either a traditional high school diploma, an adult education high school diploma, or have passed the California High School Proficiency Exam (CHSPE) by the number of students who form the adjusted cohort for that graduating class. The following formula provides an example of the four-year graduation rate for the cohort entering grade 9 for the first time in the fall of the year 1 of the cohort and graduating by the end of year 4 of the cohort.

<p>Number of cohort members who earned a regular high school diploma by the end of year 4 in the cohort</p> <p>divided by</p> <p>Number of first-time grade 9 students in year 1 (starting cohort) plus students who transfer in, minus students who transfer out, emigrate, or die during school years 1, 2, 3, and 4.</p>

The following student school exit categories and student school completion status codes were used to identify high school graduates:

Exit/Completion Code	Description
E230/100	Graduated, standard high school diploma
E230/106	Graduated, CAHSEE mods & waiver for special education
E230/108	Graduated, CAHSEE special education exempt
E230/250	Adult education high school diploma

E230/330	Passed California High School Proficiency Exam
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1.3. **4-year Adjusted Cohort Dropout Rate** - This is the rate of students that leave the 9-12 instructional system without a high school diploma, GED, or special education certificate of completion and do not remain enrolled after the end of the 4th year. The formula is similar to the formula listed in 1.2, but the numerator is replaced with the number of students in the 4-year cohort that dropped out by the end of year 4 of the cohort.

Any “last” SSID record with an exit code other than those specified in 1.2 (Graduation Rate), 1.4 (GED Passer Rate), 1.5 (Special Education certificate of completion rate), or 1.6 (Still Enrolled Rate), is counted in the dropout category. Note special handling for transfer codes T160, T165, and T167 described in 1.1 (Adjusted Cohort.)

1.4. **4-year Adjusted Cohort General Education Development (GED) Passer Rate** – This is the rate of students that leave the 9-12 instructional system without a high school diploma, but have passed the GED test. The formula is similar to the formula listed in 1.2, but the numerator is replaced with the number of students in the 4-year cohort that passed the GED test by the end of year 4 of the cohort.

The following student school exit category and student school completion status code were used to identify a GED passer:

Exit/Completion Code	Description
E230/320	Completed GED (and no standard HS diploma).

1.5. **4-year Adjusted Cohort Special Education Certificate of Completion Rate** - This is the rate of special education students that leave the 9-12 instructional system without a high school diploma, but have completed requirements necessary to obtain a special education certificate of completion. The formula is similar to the formula listed in 1.2, but the numerator is replaced with the number of students in the cohort that received his/her special education certificate of completion by the end of year 4 of the cohort.

The following student school exit category and student school completion status codes were used to identify a special education student that received a special education certificate of completion:

Exit/Completion Code	Description
E230/120	Special Education certificate of completion

1.6. **4-year Adjusted Cohort Still Enrolled Rate** – This is the rate of students that remain enrolled in the 9-12 instructional system without a high school diploma after the end of

the 4th year of high school. The formula is similar to the formula listed in 1.2, but the numerator is replaced with the number of students that were enrolled after the end of the 4th year.

GED Eligibility CDE Definition

GED Eligibility

Source: <http://www.cde.ca.gov/ta/tg/gd/>

You are eligible to take the GED test if you are a resident of California and meet any one of the following criteria:

- The individual is 18 years of age or older, or within 60 days of his or her 18th birthday (regardless of school enrollment status).
- The individual must be within 60 days of when he or she would have graduated from high school had he or she remained in school and followed the usual course of study (please note that examinees testing under this criteria may **not** be enrolled in school).
- The individual is 17 years of age, has been out of school for at least 60 consecutive school days, and provides a letter of request for the test from the military, a post-secondary educational institution or a prospective employer.
- The individual is 17 years of age and is incarcerated in a California state or county correctional facility; persons testing under these conditions must meet all of the following criteria:
 - The examinee does not have a realistic chance of completing the requirements for a high school diploma.
 - The examinee has adequate academic skills to successfully complete the GED test battery.
 - The examinee understands the options available regarding acquisition of a high school diploma, the high school equivalency certificate or the high school proficiency certificate, and the requirements, expectations, benefits, and limitations of each option.
 - The examinee has sufficient commitment time left to complete the entire GED test battery; however, if released before the test is completed, the examinee may complete testing at an authorized testing center.

Persons who pass the GED test at age 17 will not receive the equivalency certificate until their 18th birthday; a letter of intent is issued which states that the certificate is being held pending the examinee's 18th birthday.