Educational Testing Service

# California High School Exit Examination Alternative Means Pilot Study

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# California High School Exit Examination Alternative Means Pilot Study

## 1 Executive Summary

The purpose of the California High School Exit Examination (CAHSEE) Alternative Means Pilot Study was to investigate and report on alternative means by which eligible students with disabilities (SWDs) may demonstrate that they have achieved the same level of academic achievement in the content standards in English-language arts (ELA) or mathematics, or both, required for passage of the CAHSEE. The study was focused on the operationalization of a collection of evidence concept, including an exploration of various student work sample types, methodologies for how such a collection could be compiled, and the development of efficient and accurate evaluation procedures. The intent was to inform California's possible next steps in fully implementing a complete alternative means process.

All California local educational agencies (LEAs) with high school students, including unified and high school districts and independent and dependent charter schools, were invited to participate in the alternative means pilot study. A research plan was implemented to ensure adequate coverage of CAHSEE content, and a detailed *Directions for Administration* was developed and distributed to potential participants. In order to evaluate submitted student work samples, a holistic rubric was designed, refined, and implemented during evaluation sessions with content experts from throughout the state.

In addition to the collection and evaluation of student work samples, survey and focus group activities were part of the pilot study design. An online survey was distributed via email with instructions to forward the link to all interested high school staff, particularly staff who worked with SWDs. Focus group discussions were conducted during the evaluation sessions and in follow-up interviews with teachers and students who participated in the pilot. More detailed information on each of the activities described here is provided in the full report.

Results from the pilot study suggest that while the basic procedures of collecting and scoring of evidence are operable, many refinements will need to be made before fully implementing a CAHSEE alternative means process. Key findings include:

- The types of student work samples as defined in the pilot study seem practical for compiling a collection of evidence that demonstrates students' competency in the content standards assessed on CAHSEE. Of the five

work sample types included, the majority of submitted work came from classroom prepared tasks (i.e.; an assignment, unit quiz, or chapter test completed in the classroom) and on-demand classroom performance (i.e.; a performance task provided by ETS and completed in the classroom).

- High school ELA teachers affirmed that their regular classroom work was generally aligned with CAHSEE standards and would be amenable for collection, but high school mathematics teachers expressed concern about the alignment of their regular classroom work with CAHSEE content. With the exception of CAHSEE remediation classes, the content taught in junior or senior year mathematics classes does not align with the middle school mathematics content assessed by CAHSEE.
- The data show a split in opinion on whether a collection of evidence would place an undue burden on teachers of eligible students. Strong consensus was reached that teachers and other staff responsible for collecting evidence needed early notification of students' eligibility, specific guidelines for compiling evidence, and clear examples of appropriate work in order to ensure an effective and reasonably efficient collection process.
- The four-point holistic rubric used during the evaluation session functioned well. The score points used were as follows: 0 = no evidence, 1 = little evidence, 2 = some evidence, and 3 = adequate evidence. Evaluators decided that the use of a holistic approach to evaluating Tier II screening was appropriate given the range of materials and work sample types represented in the pilot.
- Estimated correlations between alternative means and CAHSEE strand scores were generally low-to-moderate, possibly indicating related, but differentiated performance. These findings, while not definitive, hint at the possibility of increased performance and passing rates for eligible students provided an alternative means to CAHSEE.

The following recommendations are not presented in order of importance or priority, but rather in terms of the research team's logical flow of thought upon contemplation of the available evidence from the pilot study.

***Recommendation 1: A full-scale census field test should take place prior to operational implementation of Tier II.***

A much more representative sample of student work than that collected for the pilot study is needed in order to fully understand how teachers will respond to the complete collection of evidence process. A field test will allow for further improvements in the directions for administration, training materials, support services, performance level descriptors, and scoring procedures.

***Recommendation 2: CDE should consider earlier identification of Tier II eligible students, prior to the commencement of a student's senior year.***

This would allow adequate time for collecting evidence and possibly a second submission, if needed, to get evaluative feedback with regard to missing evidence and the adequacy of the overall performance prior to graduation. This would also encourage collection of materials over a longer period of time, which may be necessary for many eligible students in this population.

***Recommendation 3: Evaluating the Tier II collection of evidence should be approached holistically and conducted at the state level.***

Evaluation of student work with a holistic rubric is especially appropriate for complex learning tasks or for types of tasks that integrate content from more than one area, such as those found in the current study. Concerns for potential bias and inconsistent reliability of scoring at the local level lead to the recommendation that the collections of evidence be submitted to the state for centralized scoring by highly trained and monitored evaluators.

***Recommendation 4: The focus of student work samples collected for CAHSEE alternative means should be at the strand level.***

It should not be a requirement that all CAHSEE standards be addressed individually in this alternative assessment, as this is more than is required for the passing of the regular CAHSEE. Work samples could be sophisticated enough to cover multiple standards within a strand or even across strands.

***Recommendation 5: The state should consider providing a bank of prescribed on-demand performance tasks for each CAHSEE strand, and allow other work sample types as supplements*.**

Submission of a performance task for each strand would ensure adequate and equitable coverage of the CAHSEE content standards, provide for clear exemplars of performance to the field, and make the scoring and evaluation process much more efficient and accurate. Selection of the particular performance task to be submitted and the selection of additional work as supplements allows for balanced flexibility in adapting submissions for a particular student.

***Recommendation 6: Make guidance to the field as simple and specific as possible.***

Practitioners are more likely to embrace this style of assessment if they have a very clear understanding of what is expected of them and why. In addition to reducing the frustration level of teachers and setting clear expectations for

students, increasing standardization of submission will also simplify receiving, scoring, and reporting on this assessment.

***Recommendation 7: Provide for a robust professional development program focused on the required CAHSEE content and guidance toward appropriate student work samples for submission.***

Ongoing professional development for the content assessed by the CAHSEE alternative means, particularly targeting educators who work with eligible students, will be necessary. This could also be helpful to teachers working with any student having trouble with the CAHSEE, ultimately reducing the number of students, who need to participate in an alternative means.

# 2 Introduction

The California Department of Education (CDE) contracted with Educational Testing Service (ETS), a non-profit assessment development and educational research organization, to conduct a pilot study on a proposed alternative means to the California High School Exit Examination (CAHSEE) for eligible students with disabilities (SWDs). ETS is the current state contractor for the CAHSEE. The purpose of the pilot study was to investigate and report on alternative means by which eligible SWDs may demonstrate that they have achieved the same level of academic achievement in the content standards in English-language arts (ELA) or mathematics, or both, required for passage of the CAHSEE. This report describes the process and findings of the study and concludes with recommendations to the CDE and the State Board of Education (SBE). Results from this study may be used to inform the process for the development and implementation of a statewide alternative means for eligible SWDs.

## *2.a CAHSEE Overview*

This section of the report provides a general overview of the CAHSEE, including its content, procedures, results, and purpose within the state's educational system.

According to the CDE (California Department of Education, 2011), the primary purpose of the CAHSEE is to improve student achievement in public high schools and to ensure that students who graduate from public high schools can demonstrate competency in reading, writing, and mathematics. The CAHSEE helps identify students who are not developing skills that are essential for life after high school and encourages local educational agencies (LEAs) to give these students the attention and resources needed to help them achieve these skills during their high school years. With the current exception of eligible SWDs, all California public school students must satisfy the CAHSEE requirement, as well as all other state and local requirements, in order to receive a high school diploma.

Students take the CAHSEE for the first time in the second semester of grade ten. Students who do not pass one or both parts of the CAHSEE in grade ten have up to two opportunities in grade eleven to retake the part or parts of the examination not yet passed. Grade twelve students may have at least three, and up to five opportunities, to retake the part or parts of the examination not yet passed. Adult

students may have up to three times per year to retake the part or parts of the examination not yet passed.

The examination consists of two parts: ELA and mathematics. The ELA portion addresses content standards adopted by the SBE through grade ten. In reading, this includes vocabulary, decoding, comprehension, and analysis of information and literary texts. The writing section comprises writing strategies, writing applications, and conventions of Standard English (e.g., grammar, spelling, and punctuation). The ELA portion of the CAHSEE includes 79 multiple-choice questions (seven of which are field-test questions and are not scored) and one writing task (essay). The writing task score accounts for 20 percent of the total ELA score.

The mathematics portion of the CAHSEE addresses mathematics content standards adopted by the SBE for grades six and seven and Algebra I. The examination includes statistics, data analysis and probability, number sense, measurement and geometry, mathematical reasoning, and Algebra I. Students are also asked to demonstrate a strong foundation in computation and arithmetic, including working with decimals, fractions, and percents. The CAHSEE mathematics portion includes 92 multiple-choice questions (12 of which are field-test questions and are not scored).

The test blueprints, which outline the strands and standards assessed by CAHSEE, as well as the number of items assessed per strand and standard, are included in Appendix A of this report.

### *2.a.1 Longitudinal Data*

In a recent program update (Hernandez, 2010), CDE reported that approximately 95 percent of students in the Class of 2010 met the CAHSEE requirement by May of their senior year. This represents a one percentage point increase over the Class of 2009, and a four percentage point increase over the Class of 2006. These data are presented in Figure 2.a.1.1.

### *2.a.2 Results for Students with Disabilities*

While overall pass rates are relatively high and increasing annually, disaggregated results by student subgroups produce considerable disparity. Of particular relevance to the current study, results for the Class of 2010 show that only 53 percent of students receiving special education services in the Class of 2010 met the CAHSEE requirement by the end of their senior year. These results are exhibited graphically in Figure 2.a.2.1.

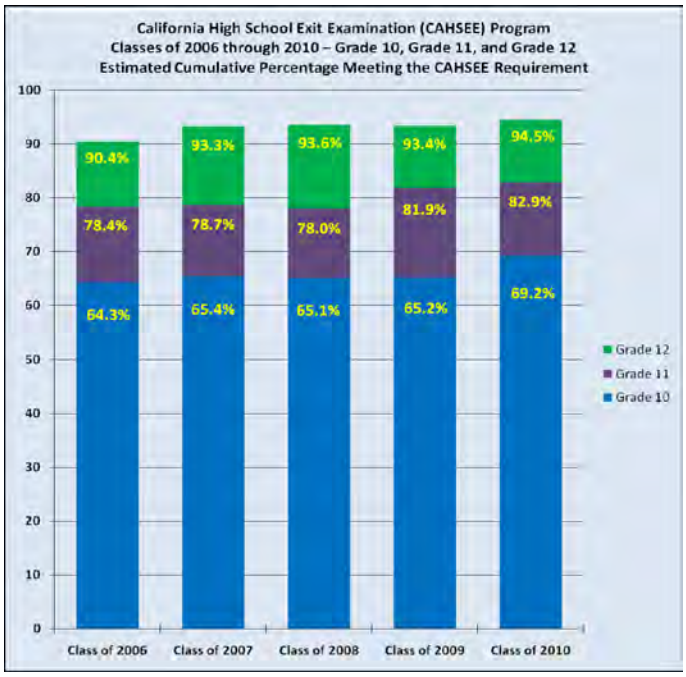



Figure 2.a.1.1: The estimated cumulative percentage of California students meeting the CAHSEE requirement for the classes of 2006 through 2010, by grade level. (Source: California Department of Education)

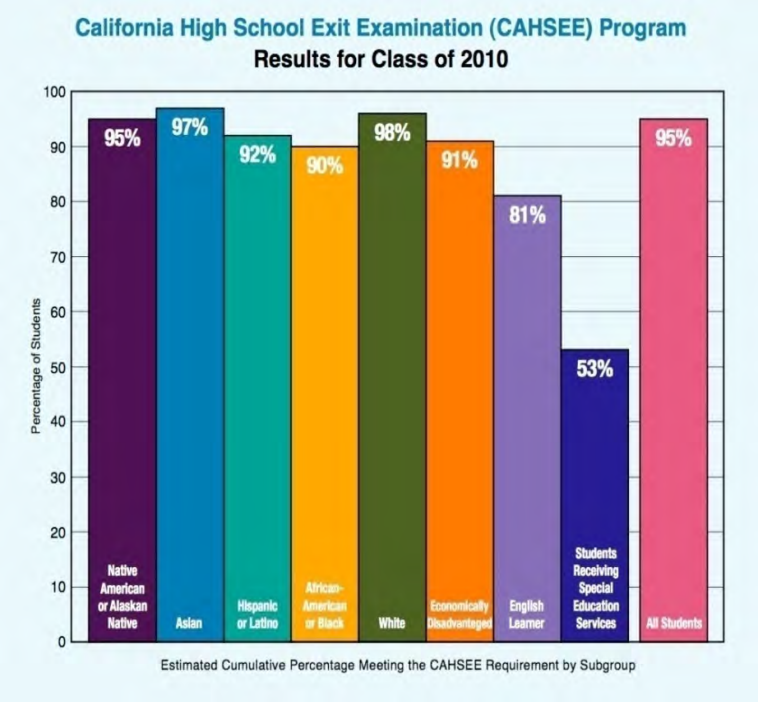



Figure 2.a.2.1: The estimated cumulative percentage of California students meeting the CAHSEE requirement for the classes of 2010, by student subgroup. (Source: California Department of Education)

### *2.a.3 Considerations for Students with Disabilities*

If a student receives special education services and has a valid disability code on a CAHSEE student answer document, the student is included in the SWDs subgroup.

Table 2.a.3.1 shows the 2010 California high school enrollment statistics for the SWD subgroup by disability code. Students with specific learning disabilities represent the largest proportion of this subgroup, with just over 60 percent of grades nine through twelve SWDs enrollment. As described in the next section of this report, a previous study estimated that approximately 19,000 SWDs may be eligible to participate in alternative means annually (HumRRO, 2010). Thus the implementation of CAHSEE alternative means could potentially impact a significant number of SWDs in the future.

Table 2.a.3.1: California 2010 grades 9 through 12 enrollment of SWDs, by disability code. (Source: California Department of Education)

| | Intellectual Disability (ID) | Hard of Hearing (HH) | Deaf (DEAF) | Speech or Language Impairment (SLI) | Visual Impairment (VI) | Emotional Disturbance (ED) | Orthopedic Impairment (OI) |
|---|---|---|---|---|---|---|---|
| 2010 Grade 9-12 Enrollment | 13,535 | 2,294 | 1,334 | 8,463 | 1,246 | 15,239 | 4,255 |
| | **Other Health Impairment (OHI)** | **Specific Learning Disability (SLD)** | **Deaf-Blindness (DB)** | **Multiple Disability (MD)** | **Autism (AUT)** | **Traumatic Brain Injury (TBI)** | **Total** |
| 2010 Grade 9-12 Enrollment | 18,694 | 117,585 | 43 | 1,290 | 10,932 | 811 | **195,721** |

The CAHSEE regulations specify accommodations and modifications that SWDs must be permitted to use if specified in the student's individualized education program (IEP) or Section 504 plan. More details about available accommodations and modifications can be found on the CDE Accommodations and Modifications Web page at: http://www.cde.ca.gov/ta/tg/hs/accmod.asp.

An accommodation is any variation in the assessment environment or process that does not fundamentally alter what the test measures or affect the comparability of test scores. Examples of accommodations for the CAHSEE

include using a Braille transcription; having the mathematics section of the test read to the student or via audio presentation on a CD; or having extra time beyond the school day to complete the test. Students who use an accommodation and earn a score of 350 or higher pass that part of the CAHSEE.

A modification is any variation in the assessment environment or process that fundamentally alters what the test measures or affects the comparability of test scores. Examples of modifications for the CAHSEE include using a calculator on the mathematics portion of the test; having the multiple-choice portion of the ELA section of the test read to the student via audio or oral presentation on a CD; or using Manually Coded English or American Sign Language to present the multiple-choice test questions of the ELA section to the student. Students who use a modification and earn the equivalent of a passing score on one or both parts of the CAHSEE are considered as not having passed these parts. Eligible SWDs, who have earned the equivalent of a passing score while taking the CAHSEE with a modification, may choose to apply for a local waiver of the CAHSEE requirement from their local school board.

In addition to the local waiver option, California Assembly Bill (AB) X4 enacted *Education Code* (*EC*) Section 60852.3 in July 2009, which provides an exemption to the CAHSEE requirement for SWDs. Although the local waiver option is still in effect, the exemption under *EC* Section 60852.3 eliminates the need for the local waiver for students who are eligible. The current exemption for eligible SWDs will expire in July 2012, or upon implementation of an alternative means.

## *2.b CAHSEE Alternative Means Background*

This section provides a background on the development of CAHSEE alternative means, outlines its current conception, and explores previous studies as well as lessons from other states.

### *2.b.1 Assembly Bill 2040*

In May 2009, Assembly Bill (AB) 2040 enacted a statute that established California *EC* sections 60852.1 and 60852.2, requiring a panel of educators and others with experience working with SWDs and/or assessment to make recommendations regarding alternative means to the CAHSEE. These alternative means would provide eligible SWDs an opportunity to demonstrate the same level of academic achievement in the ELA and mathematics content standards required for passage of the CAHSEE. In November 2009, the AB 2040 Panel's findings and recommendations for alternative means to the CAHSEE

were presented to the State Superintendent of Public Instruction (SSPI) and the SBE.

Based on research, data analysis, and panel discussions, the AB 2040 Panel recommended a two-tiered CAHSEE Performance Validation Process (PVP) in lieu of a new assessment. The CAHSEE PVP would demonstrate that students have achieved the same level of academic achievement in the content standards in ELA and/or mathematics.

The CAHSEE PVP Tier I would require validation of student performance through scores on other assessments. If a student is unable to earn the required points in Tier I, the student would move on to Tier II. Tier II would require validation of student performance through work samples and collection of other evidence.

If it is determined that the student has demonstrated the same level of academic achievement in the content standards required for passage of the CAHSEE, then the student would be awarded a standard diploma, if all other state and local graduation requirements have been met.

### *2.b.2 Tier I and Tier II*

The recommended two-tiered alternative means process is represented by a flowchart in Figure 2.b.2.1. The process begins with the identification of eligible SWDs. According to statute (*EC* Section 60852.2(a)), in order to be eligible for alternative means the student has to have:

- an operative individualized education program (IEP) or Section 504 plan
- not passed the high school exit examination, even with accommodations and/or modifications
- satisfied or will satisfy all other state and local graduation requirements
- attempted to pass those sections not yet passed of the high school exit examination at least twice after grade ten, including at least once in grade twelve

Students who meet these requirements will initially participate in the Tier I process. Tier I consists of a state-level screening of eligible SWDs who have achieved a scale score of 300 on the Standardized Testing and Reporting (STAR) Program's California Standards Test (CST) for ELA grade ten, or a scale score of 269 on the CST for Algebra I. In addition, analyses have been

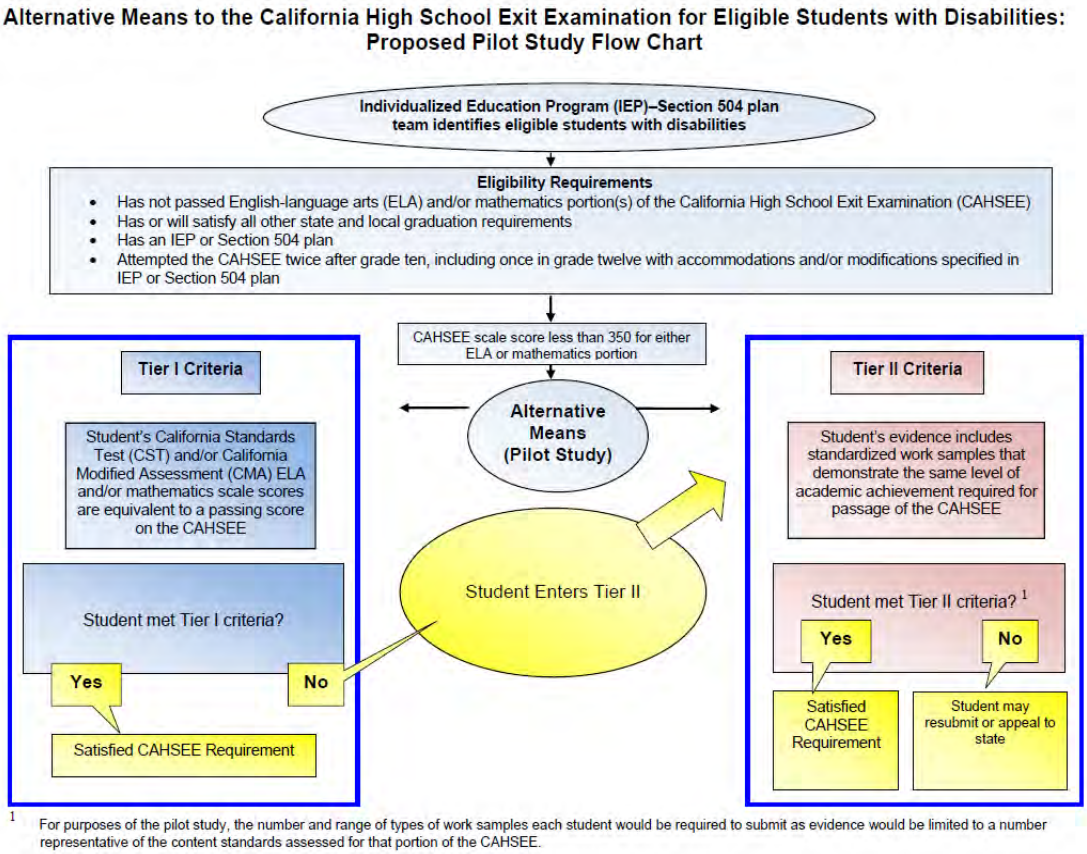



Figure 2.b.2.1: A flowchart representing California's proposed two-tiered CAHSEE alternative means process. (Source: California Department of Education)

performed on the California Modified Assessment (CMA) for ELA, grade ten and Algebra I, and will be presented to the SBE in November 2011.

Eligible SWDs who do not achieve a minimum score in the Tier I screening would then participate in the Tier II process. Tier II requires that eligible SWDs submit a collection of evidence (COE) that would demonstrate the same level of achievement in the ELA and mathematics content standards that are required for passage of the CAHSEE. The current pilot study focused on the operationalization of the COE concept for Tier II. The SBE approved the pilot study in March 2011.

### *2.b.3 Previous Studies Related to Alternative Means*

At the request of the CDE, two studies were previously conducted on CAHSEE alternative means that are directly relevant to the current investigation.

The first study was conducted by the American Institutes for Research (AIR) and submitted in April 2010 (American Institutes for Research, 2010). Copies of the

AIR report can be found on the CDE Independent Evaluations Web page at: http://www.cde.ca.gov/ta/tg/hs/evaluations.asp.

According to AIR, the purpose of the study was to "investigate and report on a subgroup of high school students who had taken the CAHSEE with modifications and/or accommodations specified in their respective IEPs or 504 plans, and who had not passed the CAHSEE, but who had satisfied, or would satisfy, all other requirements for graduating high school."

AIR designed and conducted in-depth individual assessments based on adaptations of released CAHSEE multiple-choice items and employed one-on-one probes for each item built on cognitive interviewing techniques, with a sample of students who met the above criteria. The adapted assessments used in the study included item or form revisions to enhance accessibility. The students' responses to the scripted probes provided additional evidence about their mastery of CAHSEE[1] content and were used to adjudicate responses that were not clearly accurate. Responses could also receive a partial score if they indicated partial mastery.

Among the conclusions of the AIR study was the finding that alternative means based on item and form adaptations is feasible for CAHSEE since current items and proficiency standards can be used. Item and form adaptations would need to be developed and field-tested. However, they also found "no overall effects for these adaptations in ELA and modest effects in mathematics" (American Institutes for Research, 2010).

A summary of approaches taken by states other than California that provide alternative means for students to satisfy their high school exit examination requirement and receive a fully equivalent diploma was incorporated into the study. These approaches included task-specific assessment, concordant scores, and the COE currently under consideration. The AIR study ultimately recommended the individual assessment strategy and urged caution in adopting alternative means that include a COE, primarily due to concerns over verifying the independence of student work.

AIR also noted that many students in their study simply did not have mastery of the content assessed by CAHSEE, stating that "curriculum and instruction for these students need to be reviewed, and greater attention should be focused on content mastery."

[1] While the AIR report used the term "mastery," all that is required of students is that they demonstrate competency.

The second study of relevance was conducted by the Human Resources Research Organization (HumRRO) and submitted as part of a larger independent evaluation of the CAHSEE program in October 2010 (Human Resources Research Organization, 2010). Copies of the HumRRO report can be found on the CDE Independent Evaluations Web page at: http://www.cde.ca.gov/ta/tg/hs/evaluations.asp.

In chapter five of the evaluation, HumRRO describes an analysis of the AB 2040 Panel's recommended CAHSEE two-tiered PVP. The goal of the analysis was to collect information about (a) the feasibility of the proposed alternative means, and (b) how the level of academic achievement demonstrated by those alternative means compares to the level of academic achievement required for passage of the CAHSEE.

HumRRO used available test score data on SWDs to analyze Tier I options. Among the findings of this analysis was an estimation that approximately 19,000 students may be eligible for Tier I screening annually. Compared to all SWDs, Tier I eligible students were somewhat more likely to be Hispanic or African American and considerably more likely to be English learners or students from socio-economically disadvantaged households. Nearly 70 percent of the eligible students were classified as having a specific learning disability. Their approach to Tier I screening examined an average of scores from several CSTs across grade levels and subject areas which, taken together, covered the content included in the CAHSEE. The overall Tier I passing rate using this approach was found to be 0.2 percent, or less than 100 students per year. Although impacting a relatively small number of students, HumRRO concluded that the Tier I screen would be a feasible process and recommended that the process be automated and performed by the CDE rather than requiring school or district personnel to submit test data.

For Tier II, HumRRO collected feedback from LEA personnel on options for eligibility, administration, type and amount of evidence, and scoring.

> **Eligibility** - When asked about eligibility requirements, over 75 percent of respondents agreed that it was feasible to identify students eligible for the CAHSEE PVP by the start of the second semester of their senior year.
> **Administration** - When asked about administering Tier II and responsibility for collecting and reviewing evidence, about 49 percent disagreed or strongly disagreed that these responsibilities could be implemented "fairly easily," expressing concern about the amount of time required for PVP training and evidence collection.

**Type and Amount of Evidence** - Regarding evidence, more than half of the respondents agreed or strongly agreed that work samples should be focused on individual standards rather than at the strand level and about two-thirds agreed or strongly agreed that work samples would allow students to demonstrate the same level of academic achievement that the CAHSEE requires. More than three-fourths of the respondents chose a "streamlined option" that would include 50–75 percent as many work samples as CAHSEE multiple-choice items (58 samples for mathematics, 37 for ELA).

**Scoring** - Respondents were asked to consider a scoring rubric with a zero-to-four-point scale ranging from no evidence to ample evidence as recommended by the AB 2040 panel. About three-fourths of the respondents agreed or strongly agreed that this model rubric could provide consistent evaluation of any type of student evidence. Estimated median time to score work samples for the streamlined option, following initial training, was two hours for mathematics and four hours for ELA.

HumRRO concluded that while a Tier II COE "might" be feasible, additional research would be needed to develop specific requirements. They recommended that a pilot study be conducted before a system such as the proposed CAHSEE PVP becomes operational. According to HumRRO, this pilot would help to fine-tune Tier II criteria for the number and types of work samples, identify timelines for screening, collecting evidence, and scoring, establish passing criteria, and estimate costs and times for implementation.

## *2.c Lessons from Other States*

In developing recommendations for an alternate means to CAHSEE, the high school exit examination graduation requirement policies of many other states were reviewed. The Center on Education Policy last reviewed alternatives available in 2009. At that time, 22 of 26 states with exit examinations offered alternate pathways to graduation for SWDs and 19 offered alternatives for all students. In the next section, the graduation requirements for the states of Massachusetts, Virginia, and Florida are described. Each section contains current information on alternative graduation requirement pathways for students with (and sometimes without) disabilities, as well as the perceived strengths of each state's approach.

### *2.c.1 Massachusetts*

The strength of the Massachusetts model comes from the consistent message of high standards for all students, an appeals process with multiple avenues for success, and an extremely flexible, though no less rigorous, portfolio option.

In addition to local requirements, students in Massachusetts must earn a Competency Determination to receive a High School diploma. According to the Massachusetts Department of Elementary and Secondary Education publication, Guide to the MCAS Performance Appeals Process 2010 (Massachusetts Department of Elementary and Secondary Education, 2010):

> "To earn a Competency Determination (CD), students in the class of 2010 and beyond must achieve a scaled score of at least 240 on the grade 10 Massachusetts Comprehensive Assessment System (MCAS) English Language Arts (ELA) and Mathematics tests, and earn a scaled score of at least 220 on a high school MCAS Science and Technology/Engineering test in one of four subjects (biology, chemistry, introductory physics, or technology/ engineering).
>
> Students who do not receive a score of 240 or higher on the grade 10 ELA and Mathematics tests must successfully complete an Educational Proficiency Plan (EPP) developed for them in order to earn a CD. EPPs are administered, implemented, and scored locally."

A student who does not meet the CD through the MCAS test or the MCAS test and an EPP has three pathways to obtaining a CD: they may file a Cohort Appeal, a Transcript Appeal, or a Portfolio Appeal. The cohort, transcript, and portfolio appeal are all designed to show that a student has achieved an equivalent level of mastery of the MCAS tests. Students who fulfill all local requirements, but do not meet the CD graduation requirement receive a certificate of completion and not a regular high school diploma. There are no waivers for students (IEP/504 or otherwise) who do not meet the CD requirement.

<u>Cohort Appeal</u>

The vast majority of MCAS appeals are Cohort Appeals. The Cohort appeal is filed by filling out the cohort worksheet. According to the Massachusetts Department of Elementary and Secondary Education publication, Guide to the MCAS Performance Appeals Process 2010 (Massachusetts Department of Elementary and Secondary Education, 2010):

"A cohort appeal is based on a comparison between the grade point average (GPA) and MCAS score of the student under appeal and the GPAs and MCAS scores of other students in the school who were enrolled in the same courses at the same time as the appellant in the subject of the appeal.

To submit a cohort appeal, superintendents must include the following information:

- GPAs of the student for whom the appeal is being filed and for the students in the cohort
- Evidence that the students in the comparison group (cohort) were enrolled in the same sequence of academic courses as the student for whom the appeal is being filed and scored between 220 and 228 on an MCAS test in the subject area of the appeal. All students who meet these criteria must be included in the cohort. At least six students must be included in the cohort in order for the appeal to be reviewed.

The cohort worksheet must include:

- State-Assigned Student Identifiers (SASIDs) for appellant and students in the cohort
- Course titles and grade levels for each course included in the worksheet
- End-of-course grade point averages for the student filing the appeal and for each student in the cohort for each course listed
- The highest MCAS test score received in the subject of the appeal by the student filing the appeal, as well as for each student in the cohort in the subject of the appeal."

<u>Transcript and Portfolio Appeal</u>

According to the Massachusetts Department of Elementary and Secondary Education publication, Guide to the MCAS Performance Appeals Process 2010 (Massachusetts Department of Elementary and Secondary Education, 2010):

"Students who transfer to a publicly funded Massachusetts high school in mid-March of their senior year or later, are not required to submit the cohort evidence listed above in order to file an MCAS Performance Appeal. Transcripts, GPAs, standardized test scores, college acceptance

letters, and any other relevant academic evidence should be included with the completed appeal application.

In some cases, it may not be possible to use a student's course grades for the purpose of filing a cohort appeal. For example, there may be fewer than six students in the school who have taken the same sequence of courses as the student for whom the performance appeal is being filed. In such cases, the superintendent (or director of a charter school, education collaborative, approved private special education school, or educational services in institutional settings) may submit a portfolio of the student's current and/or cumulative work in the content area of the appeal.

Panels of experts in English-language arts (ELA), mathematics, and the four disciplines in science and technology/engineering (biology, chemistry, introductory physics, and technology/engineering) review each portfolio and make individual determinations in each content area. In addition to meeting the portfolio submission requirements, a completed MCAS Performance Appeal Application must accompany each portfolio."

### *2.c.2 Virginia*

The State of Virginia's model includes a multi-tier diploma system, a wide range of substitute assessments, and a clear direction on a portfolio assessment targeted at a small number of students.

For SWDs who are unable to show what they know on the Standard of Learning (SOL) tests, or any of the acceptable substitutes, Virginia has provided a very clear and simple portfolio-based assessment to show an equivalent approach. The strength of the portfolio is in the simplicity of design, the paperwork required for submission, and the local approval of the plan prior to submission; all of which help to ensure that a uniform and qualified portfolio is easily scored by the state's contractor.

According to the Virginia Department of Education website (Virginia Department of Education, 2011):

> "To graduate with a Standard Diploma, a student must earn at least 22 standard units of credit by passing required courses and electives, and earn at least six verified credits by passing end-of-course SOL tests or other assessments approved by the Board of Education."

SWDs, as documented through an IEP or Section 504 plan, who do not earn at least six verified credits by passing end-of-course SOL tests, have three options. They may:

- Pursue a non-standard diploma
- Show competency through a substitute test
- Show competency through a portfolio assessment

Non-Standard Diplomas

To allow for different experiences, certifications, and abilities, the State of Virginia offers the following diplomas and diploma modifications:

- Advanced Studies Diploma
- Modified Standard Diploma
- Technical Diplomas (Standard and Advanced)
- Special Diploma
- General Education Development Certificates
- General Achievement Diploma
- Certificate of Program Completion
- Graduation (Diploma) Seals of Achievement

Substitute Tests

Students may earn verified credits toward graduation by earning certain scores on substitute assessments approved by the Board of Education. These assessments include AP tests, SAT II tests, IB tests and other examinations. For example, a student may satisfy the graduation requirement on the SOL geometry test by earning designated proficient or advanced scores on several substitute tests, including Cambridge International Examinations: Mathematics (IGCSE), ACT: Mathematics Subtest, IB Mathematics (Higher level), IB Mathematics Studies (Standard Level), IB Mathematics Methods (Standard Level), SAT II Mathematics IC, SAT II Mathematics IIC, or AP Calculus).

Portfolio Assessment

According to the Virginia Department of Education Publication Virginia Substitute Evaluation Program (Virginia Department of Education, 2011):

> "The Virginia Substitute Evaluation Program (VSEP) is an alternative method of assessing students who, by the nature of their disability, are unable to participate in the SOL assessments even with testing accommodations. The VSEP provides eligible students with the opportunity to earn the requisite verified credits for a standard or advanced studies diploma or to meet the requirements of a modified standard diploma through non-traditional means.

> With special permission from the Virginia Department of Education - Division of Student Assessment and School Improvement, SWDs in grades 3-8 Mathematics may submit a Course Work Compilation (CWC) to demonstrate their knowledge and skill. Typically students eligible to submit CWC have experienced a new disability, rapid deterioration in skills, or a unique disability that prevents the student from accessing the SOL assessment even with allowed testing accommodations.
>
> A student's CWC represents his or her performance and skills attained within a specific subject area addressed in the SOL test blueprint. The VSEP provides eligible students with the opportunity to earn the requisite verified credits for a Standard or Advanced Studies Diploma or to meet the requirements of a Modified Standard Diploma through non-traditional means."

The CWC begins with the creation of a plan, using the Evaluation Plan/Worksheet. According to the Virginia Department of Education Publication Virginia Substitute Evaluation Program (Virginia Department of Education, 2011):

> "The Evaluation Plan/Worksheet explains how the student will demonstrate individual achievement of each SOL addressed in the test blueprint. It must address the products and the methods planned to collect them that are planned for the CWC over the duration of the course and must reflect a complete demonstration of the skills and knowledge related to the standards addressed in the test blueprint. Consideration must also be given to the depth of knowledge that is expected of the student for the SOL to be defended. An Evaluation Plan should be unique and individualized for the student. When completing the Evaluation Plan/Worksheet, teachers consider:
>
> - the student's disability
> - how the student accesses SOL content
> - how the student demonstrates skills and knowledge
> - specific assessment methods or products for each SOL stem and bullet"

The plan is then evaluated and approved at a local level. Reviewers are looking for completeness in addressing each SOL, confirming the absence of multiple-choice items in the CWC, and anticipating adherence to scoring rules.

According to the approved plan, students must submit a CWC containing representative samples of work that demonstrate individual knowledge and skills

in content based on the SOL. The actual evidence selected may include, but is not limited to:

- work samples
- audios
- videos
- interviews
- charts/graphs
- other student-generated work

Virginia's Course Work Compilation (CWC) Scoring Rubric:

| Score | Descriptors |
|---|---|
| **0** | There is *no evidence* of the specific Standard(s) of Learning being addressed. |
| **1** | There is *little evidence* that the student has demonstrated the skills and knowledge stated in the Standard(s) of Learning being addressed. |
| **2** | There is *some evidence* that the student has demonstrated the skills and knowledge stated in the Standard(s) of Learning being addressed. |
| **3** | There is *adequate evidence* that the student has demonstrated the skills and knowledge stated in the Standard(s) of Learning being addressed. |
| **4** | There is *ample evidence* that the student has demonstrated the skills and knowledge stated in the Standard(s) of Learning being addressed. |

Virginia's Course Work Compilation (CWC) Scoring Rubric Addendum:

| Descriptor | Detailed Explanation |
|---|---|
| **No Evidence** | A score point of "0" may be assigned if the evidence submitted does not show any level of individual achievement for the SOL being defended. |
| **Little Evidence** | The evidence provides a minimally sufficient demonstration of the student's knowledge and understanding of the SOL. The evidence is incomplete and mostly inaccurate, exhibiting only a very basic level of understanding. Overall, the quality of the evidence presented is weak and does not satisfy most of the requirements of the SOL. |
| **Some Evidence** | The evidence provides only a partially sufficient demonstration of the student's knowledge and understanding of the SOL. The evidence may be incomplete or may exhibit major lapses in accuracy. Overall, the quality of the evidence presented does not satisfy many of the requirements of the SOL. |
| **Adequate Evidence** | The evidence provides a reasonably sufficient demonstration of the student's knowledge and understanding of the SOL. Most of the student's work is accurate and correct, but the performance is not consistent and may be incomplete. Overall, the quality of the evidence presented is appropriate and satisfies many of the requirements of the SOL. |
| **Ample Evidence** | The evidence provides a fully sufficient demonstration of the student's knowledge and understanding of the SOL. Minor lapses in accuracy and completeness may occur, but overall the quality of the evidence presented consistently and appropriately satisfies most of the requirements of the SOL. |

Submitted CWCs are scored centrally by the state's assessment contractor. The body of work is scored using the rubric and rubric addendum below. Work may be collected over multiple years and CWCs may be resubmitted to address sections that were judged to be below adequate.

### *2.c.3 Florida*

The Florida model allows the ACT and/or SAT scores of a student to count in place of the Florida Comprehensive Assessment Test (FCAT) scores. There are not other pathways to a standard high school diploma; however, an IEP team may request a waiver for a student with a disability. The strength of the Florida model is that it is inexpensive and simple.

According to the Florida Department of Education's Publication Graduation Requirements for Florida's Statewide Assessments (Florida Department of Education, 2010):

> "According to Florida law, students must meet all academic requirements in order to receive a standard high school diploma from a public school. This means that students must take required courses, earn the correct number of credits, maintain a passing grade point average, and pass the Reading and Mathematics Sunshine State Standards (SSS) portion of the Grade 10 FCAT. Students who meet these requirements, but do not pass the Grade 10 FCAT, will receive a Certificate of Completion, which is not equivalent to a standard high school diploma.
>
> Florida students do have other options. A senior can graduate by receiving a score comparable to the FCAT passing score on the ACT or SAT. Students may satisfy the score requirements using various combinations of tests [as shown in Table 2.c.3.1.

Table 2.c.3.1 Concordant Scores by Graduation Year

| Concordant Scores by Graduation Year | | | | |
|---|---|---|---|---|
| | Reading | | Mathematics | |
| | 2009-10 | 2010-11 | 2009-10 | 2010-11 |
| FCAT | 1926 | 1926 | 1889 | 1889 |
| SAT | 410 | 420 | 370 | 340 |
| ACT | 15 | 18 | 15 | 15 |

Legislation provides for a waiver of the FCAT as a requirement for graduation with a standard high school diploma for SWDs whose abilities cannot be accurately measured by the statewide assessments. The IEP team may request a waiver of the FCAT requirement for a standard high school diploma for those

SWDs identified in the "Enhanced New Needed Opportunity for Better Life and Education for Students with Disabilities Act" (ENNOBLES) who also meet the requirements set forth in Sections 1003.43(11)(b) or 1003.428(8)(b), Florida Statutes.

Finally, if students have not received passing FCAT scores, they can enroll in a GED preparation course. Each school district can adopt different policies and rules regarding this option thereby, students should obtain a copy of the Student Progression Plan from their school district for a better understanding of the rules and policies adopted by their school board."

# 3 Conceptual Framework for the Pilot Study

The following section briefly describes the purpose and conceptual framework of the pilot study as a proof of concept, the concept being the utility of a collection of evidence as an alternative means for SWDs to meet the CAHSEE requirement.

## *3.a Proof of Concept*

The CAHSEE Alternative Means Pilot Study was intended to explore methodologies and challenges faced by gathering a variety of work samples from disparate LEAs, assigning consistent scores, and drawing conclusions that might better inform development of a full collection of evidence. As such, it represents a proof-of-concept activity focused on various work sample types to capture student work across the range of California academic standards measured on the CAHSEE. The pilot was specifically designed to avoid a large sample from any individual student so as to not imply that a valid alternative was in place or that the student's work might, at this time, meet the CAHSEE requirement.

## *3.b Collection of Evidence*

Tier II is envisioned to represent a broad, structured collection of student work sample evidence. While the pilot itself was focused on exploring possible task types, practitioners from the field were polled about the likely benefits and challenges of a full collection—beyond the task-level efforts of the pilot. The intent was to inform California's possible next steps in fully implementing a complete alternative means process.

# 4 Methods

This section describes the research methodology for the pilot study, including recruitment and sampling, directions for administration, evaluation procedures, survey methodology and focus group activities.

## *4.a Recruitment and Sampling*

All California LEAs with high school students, including unified and high school districts and independent and dependent charter organizations, were invited to participate in the alternative means pilot study.

### *4.a.1 LEA Participation*

A letter encouraging LEA and high school students participation in the pilot study was sent by the CDE to select district and county superintendents, charter school administrators, and high school principals in April 2011. The letter was followed by an email from ETS to all CAHSEE coordinators, also in April 2011. The following excerpt was included in the email:

> "The California Department of Education's (CDE) CAHSEE administration contractor, Educational Testing Service (ETS), is conducting the pilot study, and your assistance is requested with this important effort. Specifically, we are seeking to recruit local educational agencies (LEAs) with high school students to participate in the study. Students eligible to participate in the pilot study include:
>
> - **SWDs** currently enrolled in grades eleven or twelve who have taken the CAHSEE, whether passed or not, particularly SWDs who have not passed

- **Students without disabilities** enrolled in grades eleven or twelve who have taken the CAHSEE, whether passed or not, and achieved a CAHSEE scale score within the range of 325 to 375"[2]

Participating LEAs were asked to submit work samples that demonstrate competency in select content standards assessed by the CAHSEE, including both ELA and mathematics. Each participating student could complete up to three work samples using five possible types of evidence:

- On-demand writing samples or mathematics tasks
- On-demand classroom tasks (e.g. tests or quizzes)
- Classroom prepared tasks (e.g. reports or projects)
- Computer presentations (e.g. slideshow or graphics)
- Video or audio presentation

The on-demand writing and mathematics standardized tasks were created by ETS for the pilot study. All on-demand tasks were performance assessments. It was required that at least one of the three work samples from each student would be an "on-demand" task. Other samples could consist of regular classroom work completed as a grade eleven or twelve student or a media presentation. No student was required to submit work samples covering the complete set of content standards assessed by the CAHSEE. Participating LEAs were assigned one ELA strand and one mathematics strand and asked to supply the corresponding work samples, but were encouraged to submit any samples that aligned with CAHSEE content.

Work samples were collected during the month of May and submitted to ETS by June 10, 2011. LEAs were instructed to inform all students that participation in the pilot study did not constitute meeting the CAHSEE requirement. LEAs that did not respond to these communications were then actively recruited by phone. Initially, 76 LEAs expressed an interest in participating in the pilot. A total of 66 LEAs, roughly representative of the state in terms of demographic and geographic diversity, confirmed participation and were sent pilot study materials the first week of May 2011. Ultimately, only nine of these LEAs submitted student work samples for evaluation in June. This low return rate is likely due to the request for work samples coming so late in the school year. The number of

[2] For purposes of the pilot study only, general education students were included in the sample in order to provide a wider range of performance. In a statewide operational implementation of CAHSEE alternative means, eligibility would be restricted to SWDs as defined by statute.

participating students and the work samples represented in the pilot are further detailed in the results section of this report.

### *4.a.2 Matrix Sampling of Strands*

In order to assure adequate coverage of all the CAHSEE content while also minimizing the effort required by teachers and students in the pilot study, each participating LEA was assigned particular CAHSEE content strands according to a sampling matrix. Each of the six ELA strands (word analysis, reading comprehension, literary response, writing strategies, writing conventions, and writing applications) was matched with one of the five mathematics strands (probability and statistics, number sense, algebra and functions, measurement and geometry, and Algebra I), for a total of 30 different ELA and mathematics strand combinations. For example, the first participating LEA was assigned word analysis and probability and statistics, the second LEA was assigned reading comprehension and number sense, the third literary response and Algebra and functions, and so on. Strand assignments were included with the materials package sent to participants along with instructions that each student work sample submitted must measure at least one content standard within the strand.

## *4.b Directions for Administration*

This section describes the Directions for Administration (DFA) booklet that was delivered to LEAs participating in the pilot study. The DFA is included in Appendix B of this report.

### *4.b.1 Development of the DFA*

The CAHSEE Directions for Administration – Alternative Means Pilot Study was developed in conjunction with the CDE. The purpose of the DFA was to provide information to participating California teachers, Site Coordinators, and LEA CAHSEE Coordinators about identifying, administering, collecting, and submitting work samples for the study participants. The DFA was divided into the following sections for ease of use:

- Introduction to Participants
- Collection of Evidence (Work Samples)
- Identifying and Compiling a Collection of Evidence
- Student Work Sample Submission Form with example
- Completing the Student Information/Signature Form with example
- Submission of Documentation
- Appendices A-K

### *4.b.2 Instruction to Participants*

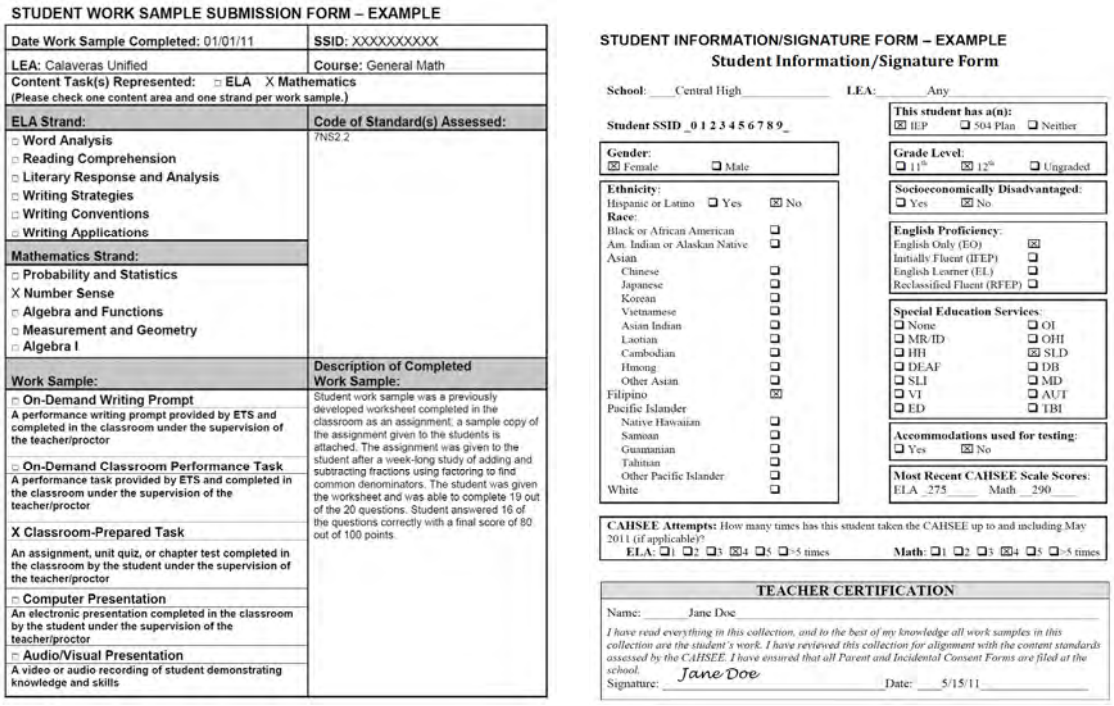
The Introduction provided teachers with information on the background of the CAHSEE examination; general information on the CAHSEE Alternate Means Pilot Study; student eligibility criteria; variations, accommodations, and modifications; student confidentiality; security; and the setting for testing. Many of the elements found in this section mirror the DFA for the CAHSEE.

The section on Collection of Evidence defined the five types of work samples eligible for submission. This section also described the options students and teachers have in submitting evidence that would align to one of the five work samples. The list of options was not intended to be exhaustive; rather, it was used as a guideline for work sample submissions.

In the section on Identifying and Compiling a Collection of Evidence teachers were given information about the number of work samples to submit, along with the groupings of work sample types that would be most appropriate for this pilot study. The section listed the steps necessary to assign the work samples to the content standards being addressed. Also included, was information about administration of both teacher-developed and ETS-developed on-demand tasks. The steps required for submission of work samples for scoring were described.

The Student Work Sample Submission Form and Example gave explicit information and directions for completing the Student Work Sample Submission Form. This form was created to collect information on each of the work samples created. The form required the following information: date the work sample was completed, student's SSID, LEA name, course in which the student completed the work, content area, strand and standard code in which the work sample is aligned, identification of work sample, and a description of the work sample. The DFA contained an example of a completed submission form as shown in Figure 4.b.2.1.

The next section of the DFA was directions for Completing the Student Information/Signature Form along with an example of the form as shown in Figure 4.b.2.1. It gave explicit instructions to teachers concerning how to fill out the Student Information/Signature Form that gathered demographic information about the population being sampled. In addition, teachers were required to sign the form to certify that each work sample submitted was the student's original work, that the work aligned with the CAHSEE content standards, and that the parent and incidental consent forms were collected, as required. The information collected included: *school the student attends, LEA name, student's SSID,*



STUDENT WORK SAMPLE SUBMISSION FORM – EXAMPLE

| | |
|---|---|
| Date Work Sample Completed: 01/01/11 | SSID: XXXXXXXXXX |
| LEA: Calaveras Unified | Course: General Math |
| Content Task(s) Represented: ☐ ELA X Mathematics (Please check one content area and one strand per work sample.) | |
| ELA Strand: | Code of Standard(s) Assessed: |
| ☐ Word Analysis<br>☐ Reading Comprehension<br>☐ Literary Response and Analysis<br>☐ Writing Strategies<br>☐ Writing Conventions<br>☐ Writing Applications | 7NS2.2 |
| Mathematics Strand: | |
| ☐ Probability and Statistics<br>X Number Sense<br>☐ Algebra and Functions<br>☐ Measurement and Geometry<br>☐ Algebra I | |
| Work Sample: | Description of Completed Work Sample: |
| ☐ On-Demand Writing Prompt<br>A performance writing prompt provided by ETS and completed in the classroom under the supervision of the teacher/proctor | Student work sample was a previously developed worksheet completed in the classroom as an assignment, a sample copy of the assignment given to the students is attached. The assignment was given to the student after a week-long study of adding and subtracting fractions using factoring to find common denominators. The student was given the worksheet and was able to complete 19 out of the 20 questions. Student answered 16 of the questions correctly with a final score of 80 out of 100 points. |
| ☐ On-Demand Classroom Performance Task<br>A performance task provided by ETS and completed in the classroom under the supervision of the teacher/proctor | |
| X Classroom-Prepared Task<br>An assignment, unit quiz, or chapter test completed in the classroom by the student under the supervision of the teacher/proctor | |
| ☐ Computer Presentation<br>An electronic presentation completed in the classroom by the student under the supervision of the teacher/proctor | |
| ☐ Audio/Visual Presentation<br>A video or audio recording of student demonstrating knowledge and skills | |

STUDENT INFORMATION/SIGNATURE FORM – EXAMPLE

Student Information/Signature Form

School: Central High LEA: Any

Student SSID _0 1 2 3 4 5 6 7 8 9_

This student has a(n): ☒ IEP ☐ 504 Plan ☐ Neither

Gender: ☒ Female ☐ Male

Grade Level: ☐ 11th ☒ 12th ☐ Ungraded

Ethnicity: Hispanic or Latino ☐ Yes ☒ No

Race:
Black or African American ☐
Am. Indian or Alaskan Native ☐
Asian
Chinese ☐
Japanese ☐
Korean ☐
Vietnamese ☐
Asian Indian ☐
Laotian ☐
Cambodian ☐
Hmong ☐
Other Asian ☐
Filipino ☒
Pacific Islander
Native Hawaiian ☐
Samoan ☐
Guamanian ☐
Tahitian ☐
Other Pacific Islander ☐
White ☐

Socioeconomically Disadvantaged: ☐ Yes ☒ No

English Proficiency:
English Only (EO) ☒
Initially Fluent (IFEP) ☐
English Learner (EL) ☐
Reclassified Fluent (RFEP) ☐

Special Education Services:
☐ None ☐ OI
☐ MR/ID ☐ OHI
☐ HH ☒ SLD
☐ DEAF ☐ DB
☐ SLI ☐ MD
☐ VI ☐ AUT
☐ ED ☐ TBI

Accommodations used for testing: ☐ Yes ☒ No

Most Recent CAHSEE Scale Scores: ELA 275 Math 290

CAHSEE Attempts: How many times has this student taken the CAHSEE up to and including May 2011 (if applicable)?
ELA: ☐1 ☐2 ☐3 ☒4 ☐5 ☐>5 times Math: ☐1 ☐2 ☐3 ☒4 ☐5 ☐>5 times

TEACHER CERTIFICATION

Name: Jane Doe

*I have read everything in this collection, and to the best of my knowledge all work samples in this collection are the student's work. I have reviewed this collection for alignment with the content standards assessed by the CAHSEE. I have ensured that all Parent and Incidental Consent Forms are filed at the school.*

Signature: Jane Doe Date: 5/15/11

Figure 4.b.2.1: Examples of the completed Student Work Sample Submission Form and the Student Information/Signature Form included in the Directions for Administration - Alternative Means Pilot Study.

*student's gender, student's ethnicity/race, IEP/Section 504 plan indication, student's grade level, socio-economically disadvantage indication, English proficiency, special education services indication, accommodations and/or modifications used for testing, most recent CAHSEE scale scores with number of attempts,* and the *Teacher's certification of the information submitted.*

The Submission of Documentation targeted Site Coordinators, Teachers/Proctors, and LEA Coordinators. This section gave specific steps for submission of a completed work sample from each student. It included a reminder checklist to ensure that teachers compile all forms and evidence necessary for a successful submission.

The Appendices in the DFA included all documents needed for a complete submission. Teachers were allowed to copy or reproduce forms, standards, and tasks as needed. The following is a list of the appendices that were included:

Appendix A- Student Information/Signature Form

Appendix B- Student Work Sample Submission Form

Appendix C- Specific Examples for Mathematics

Appendix D- Specific Examples for ELA

Appendix E- On-Demand Classroom Performance Tasks for Mathematics

Appendix F- On-Demand Classroom Performance Tasks for ELA.

## *4.c Evaluation Procedures*

This section describes the procedures developed and utilized to evaluate the student work samples submitted for the pilot study.

Upon completion of the training session, evaluators proceeded to score the student work samples. Although original expectations were to collect between 4400 and 6500 work samples of varying types covering all the CAHSEE standards, a total of only 508 work samples were submitted and included in the evaluation session.

ETS personnel facilitated this work, again allowing for teacher feedback. Content-related inquiries were answered and scoring conflicts were resolved as they arose, and the task was accomplished over the course of a day and a half.

### *4.c.1 Evaluator Recruitment*

After student work samples were collected, ETS staff conducted a meeting in order to fine-tune scoring rubrics and procedures and to select work samples to be used as anchor papers for training evaluators. Current high school teachers who had been screened and who had participated in previous CAHSEE item review sessions, and were thus very familiar with its content and format, were recruited for participation in the CAHSEE alternative means evaluation. Twenty ELA and 14 mathematics teachers participated in evaluating student work samples and focus group discussions during the last week of June 2011.

### *4.c.2 Rubric Development*

Rubrics were initially developed for both the ETS-developed tasks and the student/teacher-prepared submissions, based on a four-score point system. The four-score point system was based on a range from a zero-point minimum to a three-point maximum, where a score of zero reflects no evidence, a score of one reflects little evidence, a score of two reflects some evidence, and a score of three represents adequate evidence.

The ETS-developed task rubrics were based on assigning points depending on the number of tasks a student was expected to complete and also included keys to facilitate scoring. The participants concluded that a generic rubric should be used to cover all submitted material in order to facilitate scoring of not only the ETS developed tasks, but also all of the student/teacher prepared submissions. The generic rubric was perceived as being less cumbersome on the scorers since they would not have to use a different rubric for each piece of a student submission.

At the evaluation meeting, the evaluators used the generic rubrics for scoring the individual content areas. This rubric is shown in Figure 4.c.3.1 below. There was

CAHSEE Alternative Means Work Sample Evaluation Rubric

3. There is *adequate evidence* that the student has demonstrated skills and knowledge stated in the standard being addressed.
   - Completes most or all of the task or approximately 70% or more completed.
   - Demonstrates ability to master task; work attempted is displayed.
   - Correct answer or correct logic, equations and assumptions, but may display minor errors.
   - Displays consistent clarity and facility in the usage of language with minor grammatical errors

2. There is *some evidence* that the student has demonstrated the skills and knowledge stated in the standard being addressed.
   - Partially completes task or approximately 50% or more completed.
   - Demonstrates partial ability to master task; some attempt at work is displayed.
   - May have correct answer with incorrect logic, equations or assumptions, or incorrect answer with correct logic, equations or assumptions; will display errors.
   - Displays some facility in the usage of language and grammatical errors may or may not affect clarity or understanding

1. There is *little evidence* that the student has demonstrated the skills and knowledge stated in the standard being addressed.
   - Incomplete task or approximately 25% or more completed.
   - Demonstrates little ability to complete or master task and little or no attempt at work is displayed.
   - May display a correct or incorrect answer without displaying little or any attempt at logic or equations or may display an incorrect attempt at work.
   - Displays inadequate facility in the usage of language and grammatical errors affect clarity or understanding

0. *No evidence* that the student has the skills and knowledge stated in the standard being addressed.
   - N/S = non-scorable or not assessed
   - BLANK
   - NON RESPONSIVE
   - ILLEGIBLE
   - OTHER LANGUAGE
   - NOT ALIGNED TO STANDARD

Figure 4.c.3.1: The four-point ribric used to evaluate student work samples for the CAHSEE alternative means pilot study.

some difficulty at times in making some finer distinctions between score levels. Based on comments obtained from the raters, further enhancements of the scoring rubrics can be made prior to operational scoring.

#### *4.c.3 Evaluator Training*

In order to train the teachers, training materials were selected the week before the arrival of the teachers. The selected materials covered the spectrum of different student response types. Despite a relatively modest number of responses from which to choose, suitable training materials were obtained. Brief annotations were also composed to further explicate the sample responses selected. Each evaluator was given a set of these materials.

Evaluators were given an orientation and introduction to the task on the first day (see Appendix C), then ELA evaluators were separated from the mathematics evaluators to receive further instruction on the training materials specific to each subject area. This process allowed efficient scoring of student work samples, as well as for honest, reflective feedback and commentary from the teachers.

### *4.d Survey Methodology*

In addition to the collection of student work samples, survey data collection was part of the pilot study design. This section describes the procedures developed and utilized to evaluate the student work samples submitted for the pilot study.

#### *4.d.1 Sampling and Distribution*

An email was sent to all CAHSEE coordinators inviting them to participate in an online survey regarding alternative means. Instructions were included to forward the link to the online survey to all interested high school staff in their LEA, particularly staff who worked with SWDs.

#### *4.d.2 Survey Content*

The survey form consisted of four sections: *respondent profile, experience with CAHSEE*, *CAHSEE alternative means*, and *alternative means pilot study*. The profile section asked for current job responsibilities (e.g. classroom teacher, school administrator, etc.); the experience with CAHSEE section asked about familiarity with content standards and experience with SWDs; the alternative means section asked about the feasibility of implementation, and the pilot study section asked for study participants reactions. The majority of the survey items presented statements to which respondents could select the level to which they agreed or disagreed on a four-point scale. Respondents also were provided opportunities to add open-ended comments to the *CAHSEE alternative means*

and *alternative means pilot study* sections. A printed version of the online survey form is included in Appendix D of this report.

## *4.e Focus Groups*

Given the minimal work sample returns from LEAs and the relatively short time period available to evaluate the samples, ETS decided to utilize the additional time to employ the teacher evaluators as a focus group.

During the opening session participants were informed that, after scoring, they would have an opportunity to provide feedback on the CAHSEE Alternative Means Pilot Study. The intent of the focus groups was to elicit feedback with regard to:

- how the information was presented to the field
- their perception of the Alternative Means Assessment
- how the assessment could/should be structured in the future
- how the assessment could/should be scored

Although this group had not participated in the COE, they were all familiar with the CAHSEE, the state standards, the current structure of the pilot study, as well as the current scoring procedures. The groups were presented with these topics, prior to scoring, so that they would be able to keep notes and formulate opinions as they moved through the scoring process.

For the scoring of the pilot assessment, the groups were divided by content area, i.e. mathematics and ELA. For the focus groups, teachers were also divided by content area. This decision was made for two reasons: (a) it would have been ineffective to draw out verbal feedback from a large group of 34 total participants; (b) it was felt that the two content areas may have different experiences in scoring, and therefore may have different content-area specific advice for the project. Thus, each of the focus groups ran twice, once with the ELA group, and once with the mathematics group.

The topics for the focus groups were as follows:

- Rubrics and Evaluation Procedures
- Alternative Means Survey
- Directions for Administration and Submission Forms
- Operationalized Submission of Work Samples by Strand

### *4.e.1 Focus Group Protocols*

Each group was led by a facilitator who was familiar with the alternative means study. The facilitators sought to elicit honest feedback from each of the participants. Efforts were made to draw out silent members of the group and, at the end of each session, participants were encouraged to provide written anonymous feedback. The written feedback was intended to allow people who did not want to express their opinions verbally in the group, with a different avenue to communicate their ideas. It was also helpful in capturing edits of specific documents, such as the rubric and the DFA forms.

Each focus group facilitator followed the protocols as summarized below:

<u>Rubrics and Evaluation Procedures</u>

Each facilitator led participants through the following questions:

- General Feedback – *How did the scoring guide work overall?*
- Descriptors – *What do you think of the terms "no, little, some, adequate?" Are these the overall categories we should be using?*
- Dimensions – *What do you think about the dimensions of completeness, ability to master, use of logic, and accuracy?*
- Ability to distinguish between points – *It's easy to see what is a 3, and it's easy to see what is a 0, how easy is it to tell the difference reflecting partial credit between a 1 and a 2? What can we do to make categories more clear?*
- Missing Dimensions – *Right now we judge completeness of the response, ability to master, use of logic, and accuracy. Are additional elements missing?*
- Quantification – *Please give us some feedback on our percentiles. What did you think of the cut points of 25 percent, 50 percent, 70 percent?*
- Condition codes – *What about additional condition codes? Did you find yourself writing in condition codes for other types of responses? Were there ones you never used?*
- Showing the work – *Did you need to see the work? Is there anything wrong with sending in CAHSEE multi choice released items that clearly match the standards?*
- Content Area specific questions:
  - *ELA – do you want to see successive drafts of work? How do you give credit for something that has been rewritten based on teacher feedback?*
  - *Mathematics – What sort of credit do you assign to a student who displays correct logic, but an incorrect answer?*

Following the verbal feedback portion, participants were invited to edit a hard copy of the rubric and anonymously provide, in writing, any additional

observations, discoveries and comments which may not have been shared during the session.

Alternative Means Survey

Participants completed the CAHSEE Alternative Means survey and were presented with the aggregated results from the field (see section 5.b.1 for full survey results). The group then discussed the results and interpretations for each item.

Directions for Administration and Submission Forms

The Directions for Administration (DFA) discussion was focused on making the DFA clearer for the teacher/scorer. For this session, participants were asked to provide feedback on **how** the information was presented rather than **what** was presented. Teachers were guided to discuss topics in the DFA and on each of the sections below:

- Introduction
- Types of Work Samples
- Identifying and Compiling Work Samples
- On-demand classroom tests, classroom-prepared tasks, computer presentations, and visual/audio presentation
- On-demand prompts
- Work sample submission sheet
- Submission documentation

Operationalized Submission of Work Samples

Participants were led through the following questions for each group of assessed strands.

- *What type of work happens in your classroom that addresses CAHSEE strands?*
- *When are CAHSEE strands addressed during the school year?*
- *What are the different kinds of tasks that can be used for each strand?*
- *How can we label sophisticated work samples by standard?*
- *How much student work is enough - for you? for CAHSEE?*
- *How do we ensure that submitted work is independent student work?*
- *In addition to providing answers, should students be required to show their work?*
- *In what ways can we contextualize submissions so that evaluators can appropriately interpret student work?*
- *How can we assure that pre-scored work is accurate and what criteria were used?*

- *If a test/quiz is provided, should we also require that the scoring key is submitted?*
- *Should the numbers of items on the CAHSEE blueprint be used to weight items in the submission?*
- *How do modifications come into play?*

Following the verbal feedback portion, participants were invited to anonymously provide, in writing, any additional observations, discoveries and comments which may not have been shared during the session.

# 5 Results

This section describes the results found for the pilot study, including quantitative and qualitative data.

## *5.a Quantitative Data*

The quantitative data include a description of participating student characteristics and various analyses of the student work samples submitted, the scores for the work samples, correlations with CAHSEE scores, and calculations of rater agreement.

### *5.a.1 Student Characteristics*

In total, 179 students participated in the pilot study, many of whom provided evidence for both content areas. There were 149 participants for ELA and 133 for mathematics from nine LEAs and 13 high schools. The demographic information indicated by teachers on the Student Information/Signature Form is presented in Tables 5.a.1.1 to 5.a.1.8.

Tables 5.a.1.1 and 5.a.1.2 show the numbers of students by LEA and school for the ELA and mathematics participants, respectively. The number of students per school ranged from 1–35 for ELA and 2–34 for mathematics.

Table 5.a.1.3 shows the demographic characteristics of the students by content area. There were more male than female participants for both content areas. Approximately half of the students were identified as having Hispanic ethnicity. The most frequently reported race was white followed by African American. Note that a high number of responses were missing for the Hispanic and race characteristics, 20 and 50 percent respectively.

Approximately 44 percent of the ELA and mathematics participants were from socioeconomically disadvantaged backgrounds but three in five teachers did not provide a response for the student. About 84 percent of the ELA students and 86 percent of the mathematics students were in either grade eleven or twelve. Slightly more than 60 percent of students were English only speakers and slightly less than 20 percent were English learner students for each content area.

Table 5.a.1.1 Number of Students by Local Education Agency and School for ELA Participants

| Local Education Agency | School | Frequency | Percent |
|---|---|---|---|
| Antioch USD | Antioch HS | 4 | 2.68 |
| Antioch USD | Deer Valley | 7 | 4.70 |
| Caruthers USD | Caruthers High | 14 | 9.40 |
| Colton Joint USD | High School not identified | 14 | 9.40 |
| Colton Joint USD | Colton HS | 35 | 23.49 |
| Folsom Cordova USD | Folsom HS | 23 | 15.44 |
| Granada Hills Charter HS | Granada Hills Charter HS | 22 | 14.77 |
| SBCUSD | Sierra HS | 2 | 1.34 |
| Santa Clara Unified | Santa Clara HS | 7 | 4.70 |
| Santa Clara Unified | Wilcox HS | 5 | 3.36 |
| Simi Valley USD | Royal HS | 5 | 3.36 |
| Simi Valley USD | Santa Susana HS | 1 | 0.67 |
| Simi Valley USD | Simi Valley HS | 2 | 1.34 |
| Upland Unified | Upland HS | 8 | 5.37 |
| **Total** | | **149** | **100.00** |

Table 5.a.1.2 Number of Students by Local Education Agency and School for Mathematics Participants

| Local Education Agency | School | Frequency | Percent |
|---|---|---|---|
| Caruthers USD | Caruthers High | 14 | 10.53 |
| Colton Joint USD | High School not identified | 14 | 10.53 |
| Colton Joint USD | Colton HS | 34 | 25.56 |
| Folsom Cordova USD | Folsom HS | 23 | 17.29 |
| Granada Hills Charter HS | Granada Hills Charter HS | 29 | 21.8 |
| SBCUSD | Sierra HS | 2 | 1.5 |
| Santa Clara Unified | Santa Clara HS | 6 | 4.51 |
| Santa Clara Unified | Wilcox HS | 2 | 1.5 |
| Simi Valley USD | Royal HS | 2 | 1.5 |
| Upland Unified | Upland HS | 7 | 5.26 |
| **Total** | | **133** | **100** |

Table 5.a.1.3 Student Demographic Characteristics by Content Area

| Demographic Group | | ELA | | Mathematics | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Frequency | Percent |
| **Gender** | Female | 55 | 36.91 | 47 | 35.34 |
| | Male | 78 | 52.35 | 72 | 54.14 |
| | Missing | 16 | 10.74 | 14 | 10.53 |
| **Hispanic Ethnicity** | No | 46 | 30.87 | 35 | 26.32 |
| | Yes | 71 | 47.65 | 69 | 51.88 |
| | Missing | 32 | 21.48 | 29 | 21.80 |
| **Race** | African American | 21 | 14.09 | 13 | 9.77 |
| | Other Asian | 1 | 0.67 | 1 | 0.75 |
| | Filipino | 2 | 1.34 | 4 | 3.01 |
| | Samoan | 1 | 0.67 | 0 | 0.00 |
| | White | 37 | 24.83 | 28 | 21.05 |
| | White/Filipino | 1 | 0.67 | 1 | 0.75 |
| | Korean | 0 | 0.00 | 1 | 0.75 |
| | American Indian | 8 | 5.37 | 10 | 7.52 |
| | Chinese | 1 | 0.67 | 1 | 0.75 |
| | Asian Indian | 1 | 0.67 | 1 | 0.75 |
| | Missing | 76 | 51.01 | 73 | 54.89 |
| **Socioeconomic Disadvantage** | No | 40 | 26.85 | 35 | 26.32 |
| | Yes | 65 | 43.62 | 58 | 43.61 |
| | Missing | 44 | 29.53 | 40 | 30.08 |
| **Grade** | 10 | 10 | 6.71 | 10 | 7.52 |
| | 11 | 74 | 49.66 | 65 | 48.87 |
| | 12 | 51 | 34.23 | 49 | 36.84 |
| | Missing | 14 | 9.40 | 9 | 6.77 |
| **English Proficiency** | English Learner | 27 | 18.12 | 24 | 18.05 |
| | English Only | 93 | 62.42 | 83 | 62.41 |
| | Initially Fluent | 2 | 1.34 | 3 | 2.26 |
| | Reclassified Fluent | 9 | 6.04 | 9 | 6.77 |
| | Missing | 18 | 12.08 | 14 | 10.53 |
| **Total** | | **149** | | **133** | |

Table 5.a.1.4. Special Education Considerations by Content Area

| Special Education Considerations | | ELA | | Mathematics | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Frequency | Percent |
| **Education Plan** | IEP | 116 | 77.85 | 103 | 77.44 |
| | 504 Plan | 0 | 0.00 | 0 | 0.00 |
| | Neither IEP or 504 | 15 | 10.07 | 15 | 11.28 |
| | Missing | 18 | 12.08 | 15 | 11.28 |
| **Special Education Services** | None | 15 | 10.07 | 15 | 11.28 |
| | Autism | 2 | 1.34 | 3 | 2.26 |
| | Deaf | 4 | 2.68 | 4 | 3.01 |
| | Emotional Disturbance | 1 | 0.67 | 1 | 0.75 |
| | Hard of Hearing | 3 | 2.01 | 4 | 3.01 |
| | Intellectual Disabilities | 1 | 0.67 | 1 | 0.75 |
| | Other Health Impairment | 3 | 2.01 | 5 | 3.76 |
| | Specific Learning Disability | 100 | 67.11 | 84 | 63.16 |
| | Specific Learning Disability/Autism | 2 | 1.34 | 2 | 1.50 |
| | Speech or Language Impairment | 3 | 2.01 | 2 | 1.50 |
| | Missing | 15 | 10.07 | 12 | 9.02 |
| **Accommodations** | No | 51 | 34.23 | 39 | 29.32 |
| | Yes | 82 | 55.03 | 80 | 60.15 |
| | Missing | 16 | 10.74 | 14 | 10.53 |
| **Total** | | **149** | | **133** | |

Table 5.a.1.4 shows special educational considerations by content area. A high percent of participants, 78 for ELA and 77 for mathematics, had an IEP. None of the participating students were reported to have an active Section 504 plan. The most frequently reported disability was the specific learning disabilities category, which described 67 percent of the ELA and 63 percent of the mathematics participants. Approximately ten percent in each content area had no physical or learning disability. The majority of students in the sample used accommodations for testing.

Teachers were asked to report CAHSEE scale score information for the individual participants. The descriptive statistics for the most recent CAHSEE score and the corresponding percentile ranks of 10, 25, 50, 75 and 90 are summarized in Table 5.a.1.5. The mean ELA scale score was below the passing

Table 5.a.1.5 Teacher Reported "Most Recent" CAHSEE Test Results

| Content | N | Mean | Std Dev | Min | Max | P10 | P25 | P50 | P75 | P90 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELA | 134 | 341.64 | 26.66 | 275 | 412 | 309 | 323 | 343 | 359 | 374 |
| Math | 119 | 353.22 | 28.16 | 279 | 433 | 316 | 331 | 353 | 371 | 389 |

Note: There were 15 ELA and 14 mathematics students with missing teacher reported scale scores.

Table 5.a.1.6 Teacher Reported Number of CAHSEE Attempts by Content Area

| Number of Attempts | ELA | | Mathematics | |
|---|---|---|---|---|
| | Frequency | Percent | Frequency | Percent |
| 1 | 45 | 30.20 | 47 | 35.34 |
| 2 | 34 | 22.82 | 28 | 21.05 |
| 3 | 37 | 24.83 | 30 | 22.56 |
| 4 | 4 | 2.68 | 5 | 3.76 |
| 5 | 3 | 2.01 | 1 | 0.75 |
| More than 5 | 10 | 6.71 | 8 | 6.02 |
| Missing | 16 | 10.74 | 14 | 10.53 |
| **Total** | **149** | **100.00** | **133** | **100.00** |

performance level of 350, whereas the mean mathematics scale score was slightly above the passing score. The number of times the participants had taken the CAHSEE is shown in Table 5.a.1.6. Most of the students had taken the CAHSEE repeatedly; approximately 44 percent two to three times and eleven percent four or more times.

Tables 5.a.1.7 and 5.a.1.8 provide the CAHSEE passing classifications based on teacher reported CAHSEE scores and the performance level classification by disability status for ELA and mathematics, respectively. The CAHSEE performance level results are based on 92 cases that were matched with the most recent 2010 and 2011 administration results. Student cases were matched based on student ID and verified with demographic information. The teacher reported data was very accurate. The ELA results show that more than half of the SWD and general population students received a CAHSEE score lower than the passing level. The CAHSEE performance level information indicates that one student with a disability achieved the proficient level, one achieved the advanced level, and no general population students achieved the proficient or advanced level for ELA. The mathematics results show that more than half of the SWDs and general population students received a passing CAHSEE score. There were

nine SWD and one general population student that achieved the proficient level and one SWD that achieved the advanced level.

The total number of students with "teacher reported" CAHSEE scores is 134 for ELA and 119 for mathematics (as shown in Tables 5.a.1.5, 5.a.1.7 and 5.a.1.8). The missing cases in Tables 5.a.1.7 and 5.a.1.8 indicate that no information was

Table 5.a.1.7 CAHSEE ELA Test Results by Student Group

| Alternative Means Teacher Reported Scores | | | | | | | |
|---|---|---|---|---|---|---|---|
| Performance Level | SWD | | General Population | | Missing | | Total |
| | N | Percent | N | Percent | N | Percent | |
| **Fail** | 63 | 56.25 | 8 | 53.33 | 4 | 57.14 | 75 |
| **Pass** | 49 | 43.75 | 7 | 46.67 | 3 | 42.86 | 59 |
| **Total** | **112** | **100.00** | **15** | **100.00** | **7** | **100.00** | **134** |

| CAHSEE Performance Level Classifications (Matched Students) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Performance Level | SWD | | General Population | | Missing | | Total |
| | N | Percent | N | Percent | N | Percent | |
| **Below Pass** | 47 | 67.14 | 8 | 72.73 | 8 | 72.73 | 63 |
| **Pass** | 21 | 30.00 | 3 | 27.27 | 3 | 27.27 | 27 |
| **Proficient** | 1 | 1.43 | 0 | 0.00 | 0 | 0.00 | 1 |
| **Advanced** | 1 | 1.43 | 0 | 0.00 | 0 | 0.00 | 1 |
| **Total** | **70** | **100.00** | **11** | **100.00** | **11** | **100.00** | **92** |

Table 5.a.1.8 CAHSEE Mathematics Test Results by Student Group

| Alternative Means Teacher Reported Scores | | | | | | | |
|---|---|---|---|---|---|---|---|
| Performance Level | SWD | | General Population | | Missing | | Total |
| | N | Percent | N | Percent | N | Percent | |
| **Fail** | 38 | 38.78 | 7 | 46.67 | 2 | 33.33 | 47 |
| **Pass** | 60 | 61.22 | 8 | 53.33 | 4 | 66.67 | 72 |
| **Total** | **98** | **100.00** | **15** | **100.00** | **6** | **100.00** | **119** |

| CAHSEE Performance Level Classifications (Matched Students) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Performance Level | SWD | | General Population | | Missing | | Total |
| | N | Percent | N | Percent | N | Percent | |
| **Below Pass** | 32 | 48.48 | 8 | 57.14 | 4 | 33.33 | 44 |
| **Pass** | 24 | 36.36 | 5 | 35.71 | 6 | 50.00 | 35 |
| **Proficient** | 9 | 13.64 | 1 | 7.14 | 2 | 16.67 | 12 |
| **Advanced** | 1 | 1.52 | 0 | 0.00 | 0 | 0.00 | 1 |
| **Total** | **66** | **100.00** | **14** | **100.00** | **12** | **100.00** | **92** |

available to designate some students as SWD or general population.

### *5.a.2 Descriptive Results*

This section provides summary information about the work samples submitted, the scores assigned by the raters, and the correlations between the Alternative Means ratings and the CAHSEE strand scores. Tables 5.a.2.1 and 5.a.2.2 provide the number of student submissions by work sample and strand for ELA and mathematics, respectively. The rater scores are summarized by the p-value, which is standardized on a scale of 0 to 1 and calculated as the average rater score divided by the maximum score of three.

Evidence of student work was submitted for each work sample type for ELA and for three work sample types for mathematics. The vast majority of student work samples came from the Classroom Prepared Tasks and the On Demand Classroom Performance standardized tasks. Both the On Demand Classroom Performance and On Demand Writing Prompt tasks were ETS-developed tasks. Only Classroom Prepared Tasks had student work samples representing all strands for both content areas.

Due to the small sample size, the p-values presented here should be considered estimates. As shown in tables 5.a.2.1 and 5.a.2.2, these estimates demonstrate a range of difficulty across strand and work sample combinations. For ELA, the most difficult strand-task combination was Word Analysis submitted under the Classroom Prepared Task (p-value = 0.12). The least difficult strand-task combination was Writing Conventions submitted under the On Demand Classroom Performance Task (p-value = 0.77). For mathematics, the most difficult strand was Number Sense (p-value = 0.30) and the least difficult strand was Probability and Statistics (p-value = 0.82) both submitted under the On Demand Classroom Performance Task. Statistics were not provided for samples with less than ten observations.

The rater score distributions for each strand are illustrated in Figures 5.a.2.1 to 5.a.2.6 for ELA and Figures 5.a.2.7 to 5.a.2.11 for mathematics. The work sample acronyms are provided in Table 5.a.2.3. The figures show the variability of the rater scores across the work sample types and strands. Each student submission received three rater scores. The resulting frequency distributions of scores are displayed in Figures 5.a.2.1 to Figure 5.a.2.11. Figure 5.a.2.1 shows that the majority of rater scores for the On Demand Classroom Performance Tasks (blue bars) were “1” or “2” for ELA Word Analysis. The frequency of rater scores by work sample type for the figure is show in Table 5.a.2.4.

Table 5.a.2.1. Task Difficulty by Work Sample and Strand for ELA

| Work Sample | Strand | ELA | |
|---|---|---|---|
| | | N | p-value |
| **Audio-Visual Presentation** | **RL** | 8 | - |
| **Computer Presentation** | **RW** | 2 | - |
| | **WS** | 15 | 0.39 |
| **Classroom Prepared Task** | **RC** | 40 | 0.33 |
| | **RL** | 23 | 0.37 |
| | **RW** | 10 | 0.12 |
| | **WA** | 18 | 0.33 |
| | **WC** | 1 | - |
| | **WS** | 25 | 0.41 |
| **On Demand Classroom Performance** | **RC** | 100 | 0.61 |
| | **RL** | 94 | 0.53 |
| | **RW** | 14 | 0.47 |
| | **WC** | 58 | 0.77 |
| | **WS** | 49 | 0.58 |
| **On Demand Writing Prompt** | **WA** | 5 | - |
| | **WC** | 1 | - |
| | **WS** | 4 | - |

Note: RC = Reading Comprehension, RL = Literary Responses & Analysis, RW = Word Analysis, WA = Writing Application, WC = Writing Conventions, WS = Writing Strategies; Statistics were not reported for samples of less than 10 observations.

Table 5.a.2.2. Task Difficulty by Work Sample and Strand for Mathematics

| Work Sample | Strand | Mathematics | |
|---|---|---|---|
| | | N | p-value |
| **Computer Presentation** | **PS** | 3 | - |
| **Classroom Prepared Task** | **A1** | 78 | 0.49 |
| | **AF** | 36 | 0.67 |
| | **MG** | 4 | - |
| | **NS** | 16 | 0.48 |
| | **PS** | 28 | 0.65 |
| **On Demand Classroom Performance** | **A1** | 28 | 0.34 |
| | **AF** | 66 | 0.48 |
| | **MR** | 6 | - |
| | **NS** | 96 | 0.30 |
| | **PS** | 32 | 0.82 |

Notes: A1 = Algebra 1, AF = Algebra & Functions, MG = Measurement & Geometry, MR = Mathematical Reasoning, NS = Number Sense, PS = Probability & Statistics; Statistics were not reported for samples of less than 10 observations.

Table 5.a.2.3 Work Sample Acronyms for Figures

| Work Sample | Acronym |
|---|---|
| Audio/Visual Presentation | AVP |
| Classroom Prepared Task | CPT |
| Computer Presentation | COMP |
| On Demand Classroom Performance Task | ODCP |
| On Demand Writing Prompt | ODWP |

Specifically, there were three ratings of “0,” 20 ratings of “1,” 18 ratings of “2,” and one rating of “3.” In comparison, the majority of the Classroom Prepared Tasks scores were “0” (24 out of 30) as indicated by the green bar. Half of the Computer Presentations ratings (three of six) were scores of “3” as shown with the purple bars. An indication of difficulty is given in the graphs by the relative distribution of scores. For instance, using Writing Strategies and work sample ODCP in Figure 5.a.2.4, a majority of scores assigned were in the highest category.

Overall, the ELA figures indicate that the scores were somewhat higher for the On Demand Classroom Performance Tasks compared to the Classroom Prepared Tasks. There were too few observations for the other three work samples to generalize about the rater scores. In contrast, the mathematics figures indicate that the scores were slightly higher for Classroom Prepared Tasks compared to the On Demand Classroom Performance Tasks.

Table 5.a.2.4 Rater Scores by Work Sample for ELA Word Analysis

| Rater Score | Work Sample Type | | |
|---|---|---|---|
| | Computer Presentation | Classroom Prepared Task | On Demand Classroom Performance Task |
| **0** | 2 | 24 | 3 |
| **1** | 0 | 1 | 20 |
| **2** | 1 | 5 | 18 |
| **3** | 3 | 0 | 1 |
| **Total** | **6** | **30** | **42** |

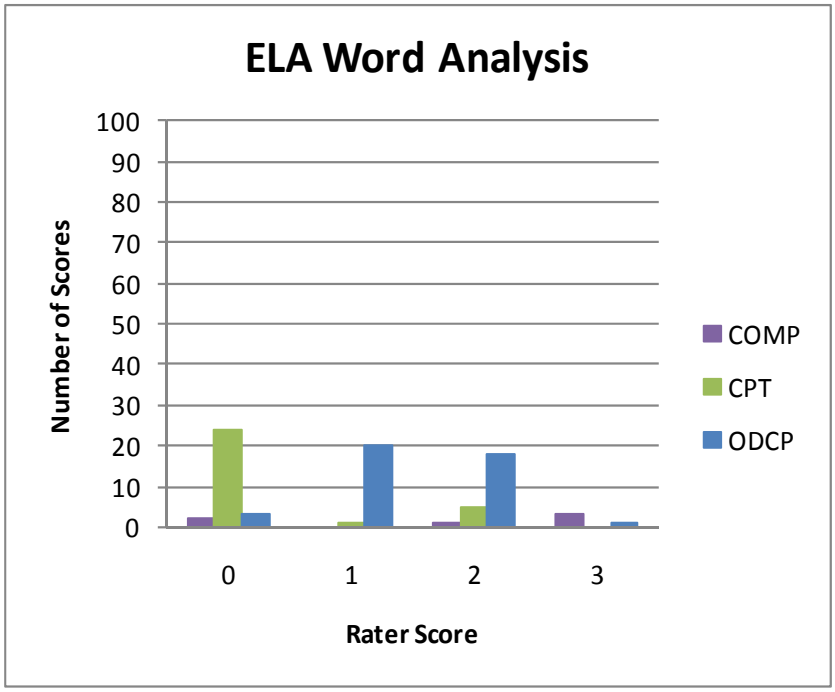



Figure 5.a.2.1 Distribution of rater scores for Word Analysis

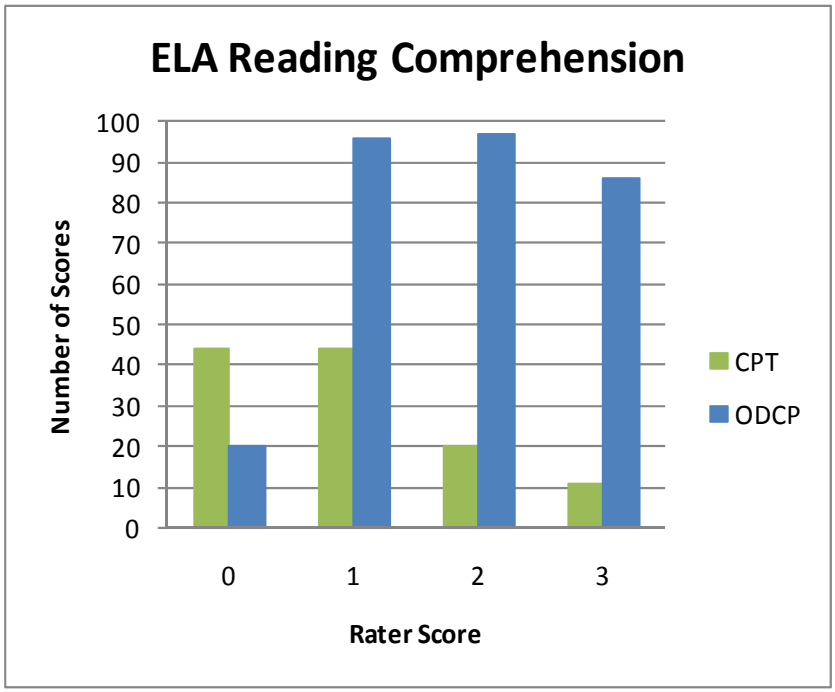



Figure 5.a.2.2 Distribution of rater scores for Reading Comprehension

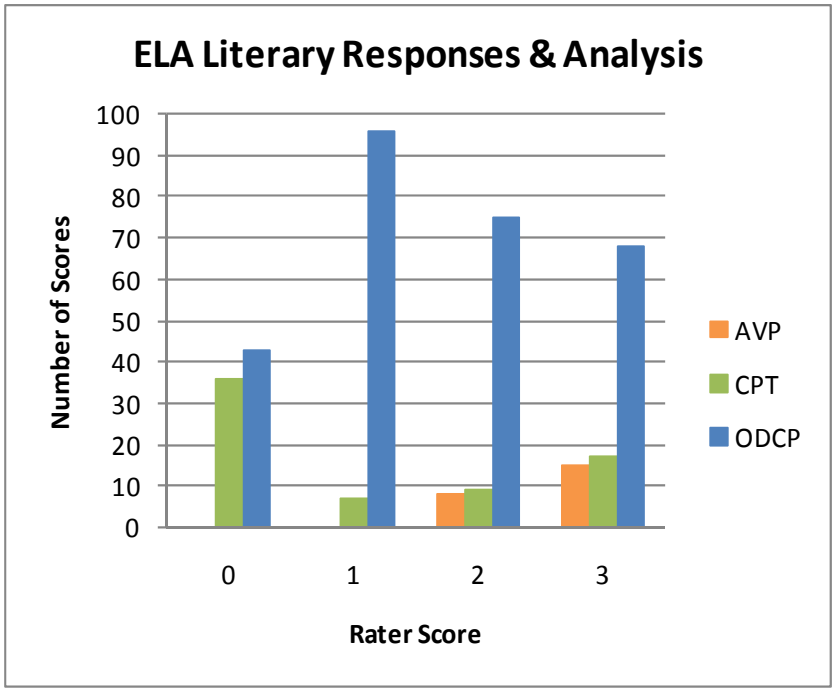



Figure 5.a.2.3 Distribution of rater scores for Literary Responses and Analysis

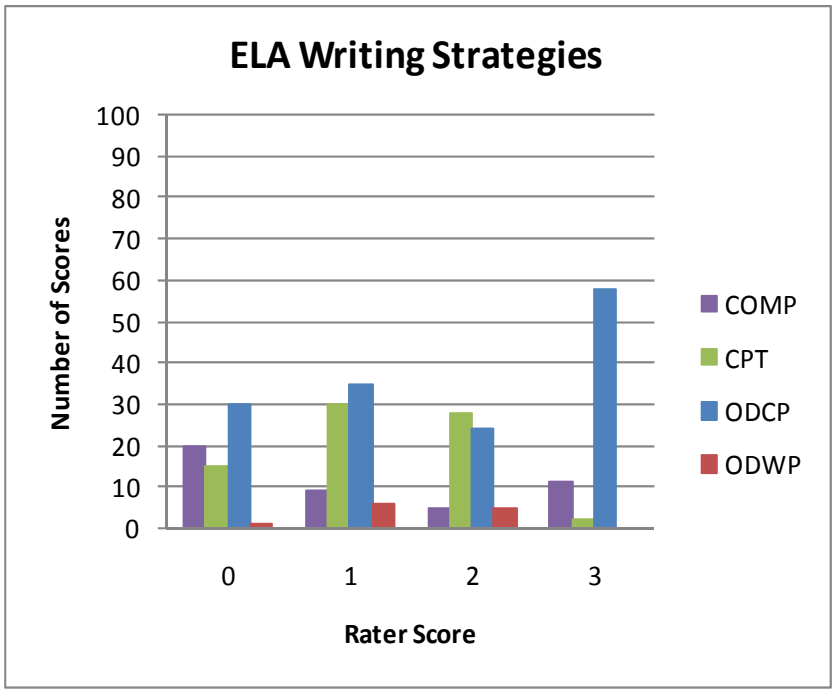



Figure 5.a.2.4 Distribution of rater scores for Writing Strategies

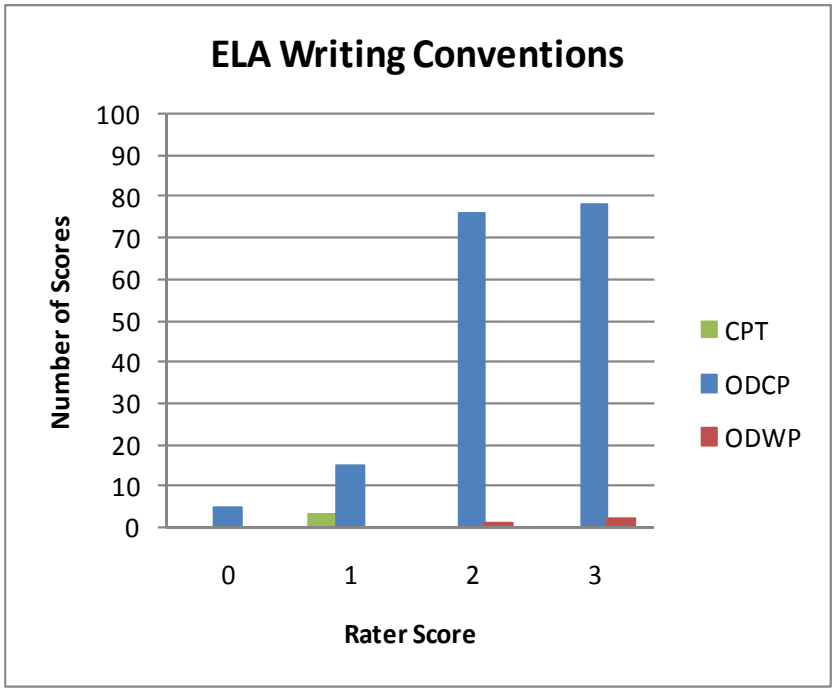



Figure 5.a.2.5 Distribution of rater scores for Writing Conventions

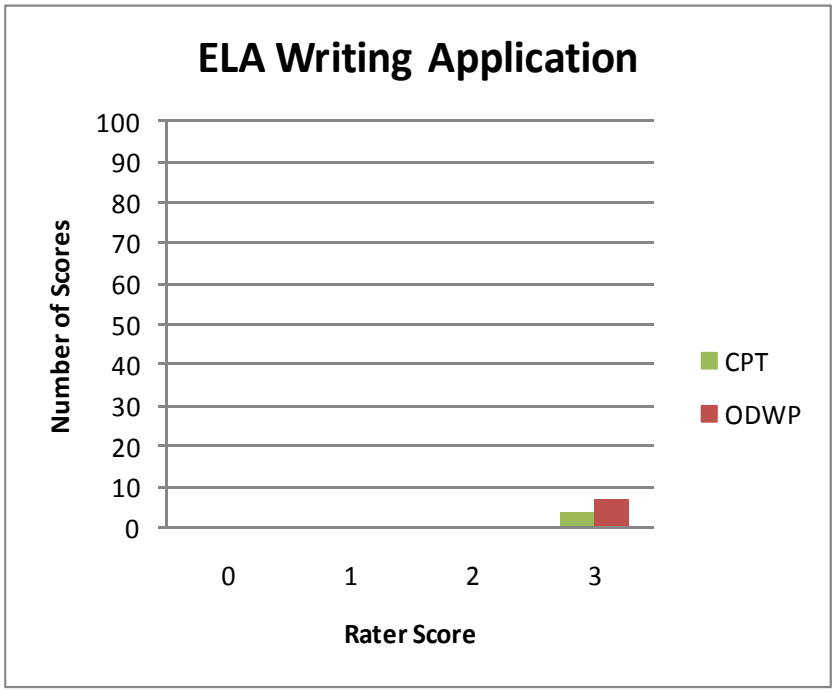



Figure 5.a.2.6 Distribution of rater scores for Writing Application

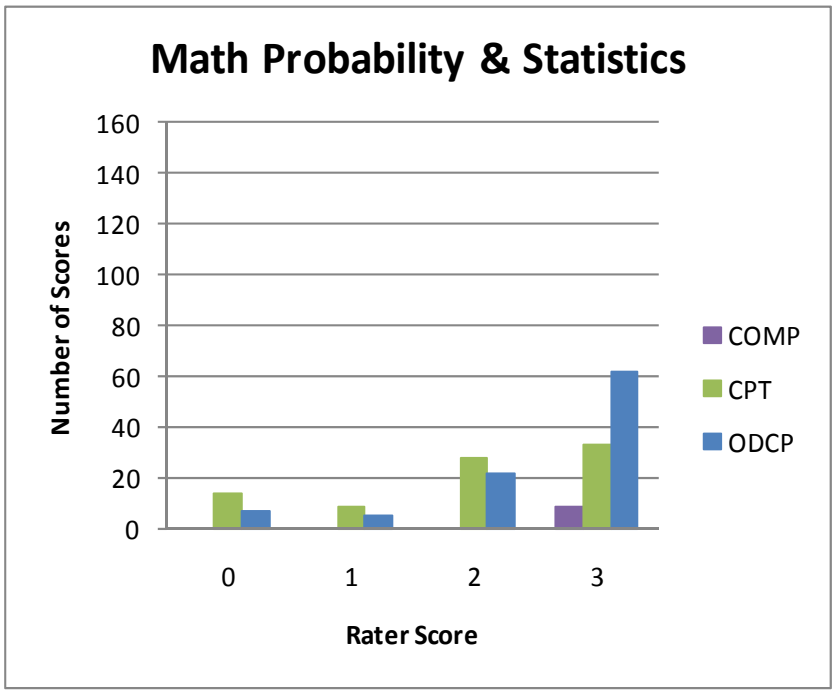



Figure 5.a.2.7 Distribution of rater scores for Probability and Statistics

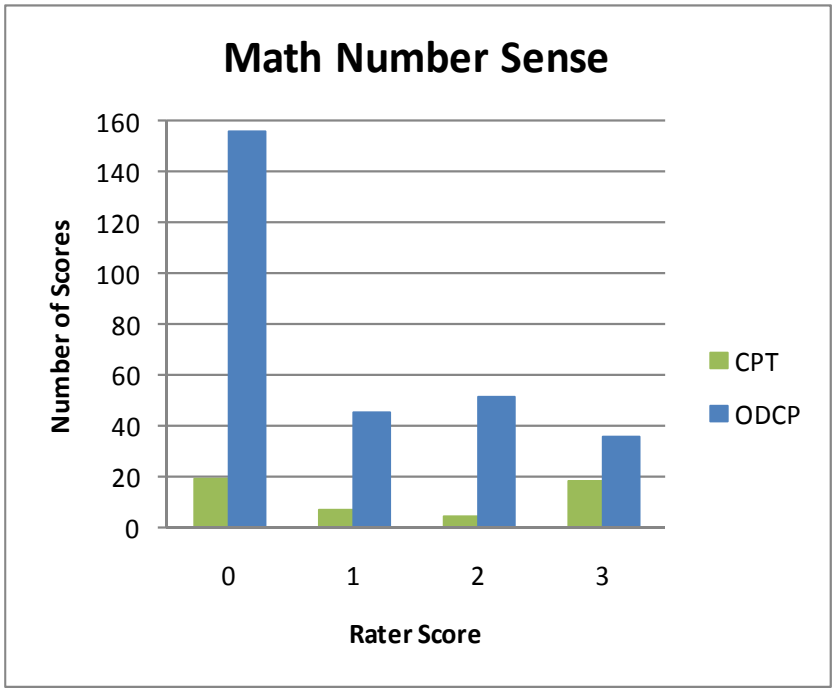



Figure 5.a.2.8 Distribution of rater scores for Number Sense

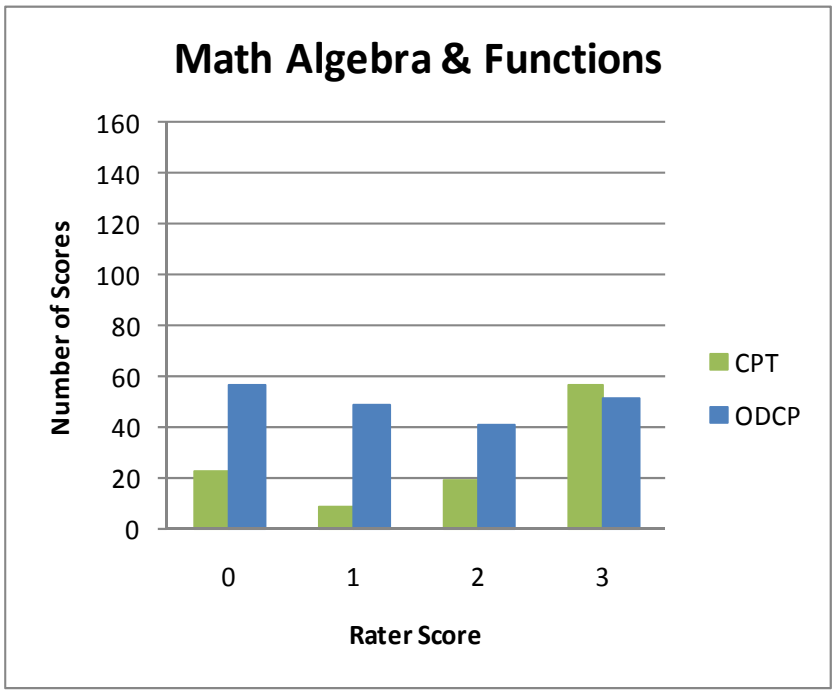



Figure 5.a.2.9 Distribution of rater scores for Algebra and Functions

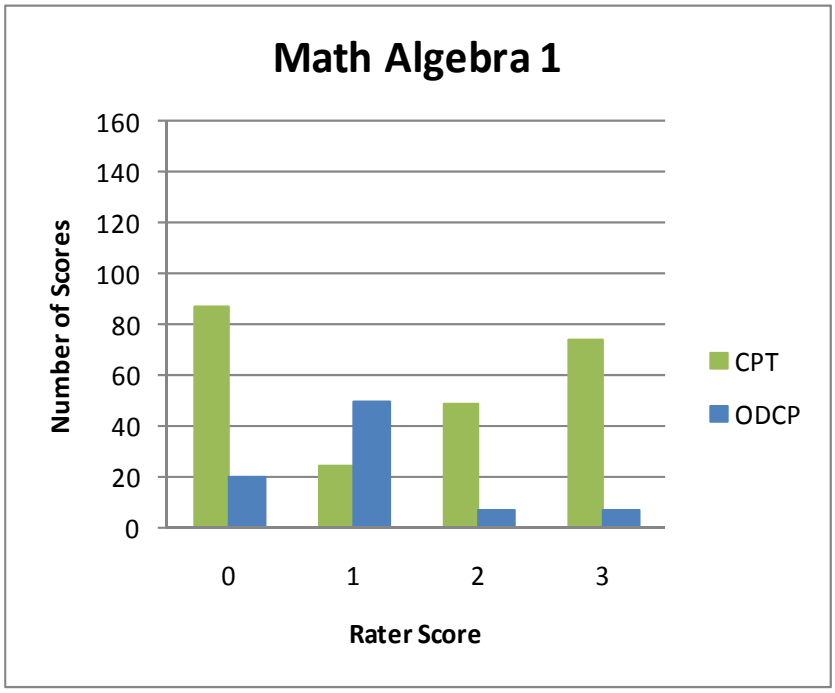



Figure 5.a.2.10 Distribution of rater scores for Algebra I

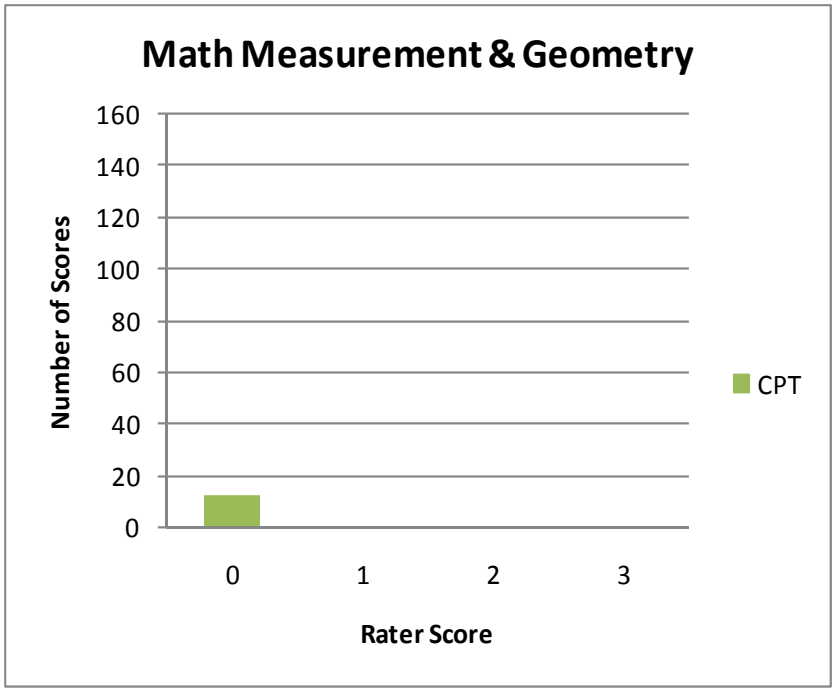



Figure 5.a.2.11 Distribution of rater scores for Measurement and Geometry

Since the constructs, strands, and standards being measured by the alternative means assessment are the same as the ones being measured by CAHSEE, one would expect the correlations to be significantly different from 0 even though the means of displaying competence are different. In other words, because both assessments measure the same things, but measure them through different means, they should show some moderate relation in performance. A correlation that is too high or too low would indicate no benefit with the addition of an alternative means.

To investigate this question, the CAHSEE performance data were matched to the alternative means by student identification numbers. The information was collapsed across work sample type. The correlations between the mean of the three rater scores and the corresponding CAHSEE strand raw scores are presented in Table 5.a.2.5. The correlations for ELA ranged from 0.50 for Writing Conventions to -0.20 for Writing Strategies. The correlations for mathematics ranged from 0.32 for Algebra and Functions to -0.11 for Algebra I. Three of the ELA strands and two of the mathematics strands had correlations that were significantly different from 0. As with the p-values presented earlier in this

Table 5.a.2.5 Correlations and Standard Errors between Rater Scores and CAHSEE Strand Scores

| Content | Strand | N | Correlation | SE |
|---|---|---|---|---|
| **ELA** | Word Analysis | 26 | 0.40* | 0.19 |
| | Reading Comprehension | 63 | 0.34** | 0.12 |
| | Literary Responses and Analysis | 64 | 0.23 | 0.12 |
| | Writing Strategies | 71 | -0.20 | 0.12 |
| | Writing Conventions | 44 | 0.50** | 0.13 |
| | Writing Application | 21 | 0.04 | 0.23 |
| | | | | |
| **Mathematics** | Probability and Statistics | 56 | 0.15 | 0.13 |
| | Number Sense | 95 | 0.20* | 0.10 |
| | Algebra and Functions | 65 | 0.32** | 0.12 |
| | Algebra 1 | 78 | -0.11 | 0.11 |
| | Measurement and Geometry | 4 | - | - |

Note: Correlations are not reported for samples of less than 10 observations.

* $p \leq 0.05$; ** $p \leq 0.01$

section, these correlations should be considered estimates due to the small sample size.

### *5.a.3 Rater Agreement*

Each strand by work sample was scored by three raters independently on a 0 to 3 scale. Rater agreement is summarized using the indices of rater consensus and intraclass correlations by work sample and strand. The results are shown in Tables 5.a.3.1 and 5.a.3.2 for ELA and mathematics, respectively. The consensus ratings express the percent of perfect agreement among the three independent raters. The consensus values ranged from 20 to 83 for ELA and from 52 to 78 for mathematics.

The intraclass correlation is a general measurement of agreement between multiple raters on the same set of observations, which are scores from student work samples in this case. The intraclass correlation assesses agreement by comparing the variability of ratings of the same response to the total variation across all ratings and responses. When raters score an item response the same way, this indicates that the total variation depends largely on the response attributes. The intraclass correlation ignores mean rater differences.

A higher intraclass coefficient reflects greater consistency of rater scores than a low intraclass correlation. Perfect agreement would yield a value of 1 and no

Table 5.a.3.1. Summary Statistics of Rater Agreement for ELA

| Work Sample | Strand | N | Consensus | Intraclass Correlation | Standard Error |
|---|---|---|---|---|---|
| **Audio-Visual Presentation** | **RL** | 8 | - | - | - |
| **Computer Presentation** | **RW** | 2 | - | - | - |
| | **WS** | 15 | 46.67 | 0.49 | 0.20 |
| **Classroom Prepared Task** | **RC** | 40 | 57.50 | 0.66* | 0.09 |
| | **RL** | 23 | 60.87 | 0.75* | 0.09 |
| | **RW** | 10 | 70.00 | 0.50 | 0.24 |
| | **WA** | 18 | 66.67 | 0.81* | 0.08 |
| | **WC** | 1 | - | - - | |
| | **WS** | 25 | 20.00 | 0.12 | 0.20 |
| **On Demand Classroom Performance** | **RC** | 100 | 25.00 | 0.48* | 0.08 |
| | **RL** | 94 | 40.43 | 0.56* | 0.07 |
| | **RW** | 14 | 21.43 | 0.16 | 0.27 |
| | **WC** | 58 | 82.76 | 0.54* | 0.09 |
| | **WS** | 49 | 48.98 | 0.80* | 0.05 |
| **On Demand Writing Prompt** | **WA** | 5 | - | - - | |
| | **WC** | 1 | - | - - | |
| | **WS** | 4 | - | - - | |

Notes: RC = Reading Comprehension, RL = Literary Responses & Analysis, RW = Word Analysis, WA = Writing Application, WC = Writing Conventions, WS = Writing Strategies; Statistics are not reported for samples of less than 10 observations.
* $p \leq 0.001$

Table 5.a.3.2. Summary Statistics of Rater Agreement for Mathematics

| Work sample | Strand | N | Consensus | Intraclass Correlation | Standard Error |
|---|---|---|---|---|---|
| **Computer Presentation** | **PS** | 3 | - | - - | |
| **Classroom Prepared Task** | **A1** | 78 | 78.21 | 0.91* | 0.02 |
| | **AF** | 36 | 77.78 | 0.93* | 0.02 |
| | **MG** | 4 | - | - - | |
| | **NS** | 16 | 56.25 | 0.89* | 0.05 |
| | **PS** | 28 | 60.71 | 0.65* | 0.11 |
| **On Demand Classroom Performance** | **A1** | 28 | 64.29 | 0.79* | 0.07 |
| | **AF** | 66 | 51.52 | 0.80* | 0.04 |
| | **MR** | 6 | - | - - | |
| | **NS** | 96 | 62.50 | 0.78* | 0.04 |
| | **PS** | 32 | 78.13 | 0.88* | 0.04 |

Notes: A1 = Algebra 1, AF = Algebra & Functions, MG = Measurement & Geometry, MR = Mathematical Reasoning, NS = Number Sense, PS = Probability & Statistics; Statistics are not reported for samples of less than 10 observations.
* $p \leq 0.001$

agreement would yield a value of 0. The majority of the ELA and all of the mathematics work sample-strand combinations intraclass correlation coefficients were significant. The intraclass correlations ranged from 0.12 to 0.81 for ELA. The intraclass correlations indicate that the rater scores were most consistent for the Writing Application strand of the Classroom Prepared Task and for the Writing Strategies strand of the On Demand Classroom Performance. The rater scores were least consistent for the Writing Strategies strand for the Classroom Prepared Task. The intraclass correlations ranged from 0.65 to 0.93 for mathematics. The intraclass correlations indicate that the rater scores were most consistent for the Algebra and Functions strand and least consistent for the Probability and Statistics strand of the Classroom Prepared Task. The intraclass correlations ranged from 0.65 to 0.93 for mathematics. The intraclass correlations indicate that the rater scores were most consistent for the Algebra and Functions strand and least consistent for the Probability and Statistics strand of the Classroom Prepared Task. Overall, the rater agreement was higher for mathematics than for ELA.

One issue concerned the accuracy of the assignment of the work samples to strand by teachers. Tables 5.a.3.3 and 5.a.3.4 show the cross-tabulation strand codes assigned by teachers and raters for ELA and mathematics, respectively. For each cell of the table, the number of observations and the total, row, and column percents are given. To illustrate, the intersection of the first row and first column in the ELA table shows where the raters and teachers indicated the student work sample belonged to the Reading Comprehension strand. There were 142 observations for that cell and 508 ELA student work samples in total. The agreement for the Reading Comprehension strand as a percent of the total was 27.95 (142/508). Looking across the row, the teachers rated 216 work samples as Reading Comprehension, so the percent of agreement with the raters was 65.74 (142/216). Glancing down the column, the raters judged 147 student work samples as Reading Comprehension, so the percent agreement with the teachers is 96.60 (142/147).

The agreement across the strands is indicated by the color cells marked on the diagonal. The overall agreement is computed by adding the total agreements for each strand (e.g., 142 for RC, 96 for RL, 18 for RW, 13 for WA, 56 for WC, 66 for WS). The percent agreement of strand assignment was 77 (391/508) for ELA and 73 (292/402) for mathematics.

### *5.a.4 Summary*

The vast majority of students (approximately 78 percent) who participated in the pilot study were SWDs. More than half of the ELA participants had not passed

the CAHSEE, whereas more than half of the mathematics participants had passed the CAHSEE. Student evidence was submitted for all five work sample types for ELA and for three work sample types for mathematics. Only the classroom prepared task had evidence submissions for each strand in both content areas. The numbers of student evidence submissions and the rater scores varied by work sample and strand. The correlations between the rater scores and the CAHSEE strand scores demonstrated a range of values

Table 5.a.3.3. Cross-tabulation of Rater and Teacher Strand Codes for ELA

| Teacher Strand Code | Value | Rater Strand Code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | RC | RL | RW | WA | WC | WS | Missing | Total |
| RC | N | 142 | 29 | 10 | 1 | 1 | 26 | 7 | 216 |
| | Total % | 27.95 | 5.71 | 1.97 | 0.20 | 0.20 | 5.12 | 1.38 | 42.52 |
| | Row % | 65.74 | 13.43 | 4.63 | 0.46 | 0.46 | 12.04 | 3.24 | |
| | Column % | 96.60 | 22.31 | 30.30 | 4.17 | 1.67 | 24.76 | 77.78 | |
| RL | N | 0 | 96 | 0 | 0 | 0 | 0 | 0 | 96 |
| | Total % | 0.00 | 18.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 18.90 |
| | Row % | 0.00 | 100.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Column % | 0.00 | 73.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| RW | N | 0 | 0 | 18 | 4 | 0 | 1 | 0 | 23 |
| | Total % | 0.00 | 0.00 | 3.54 | 0.79 | 0.00 | 0.20 | 0.00 | 4.53 |
| | Row % | 0.00 | 0.00 | 78.26 | 17.39 | 0.00 | 4.35 | 0.00 | |
| | Column % | 0.00 | 0.00 | 54.55 | 16.67 | 0.00 | 0.95 | 0.00 | |
| WA | N | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 14 |
| | Total % | 0.00 | 0.00 | 0.00 | 2.56 | 0.00 | 0.20 | 0.00 | 2.76 |
| | Row % | 0.00 | 0.00 | 0.00 | 92.86 | 0.00 | 7.14 | 0.00 | |
| | Column % | 0.00 | 0.00 | 0.00 | 54.17 | 0.00 | 0.95 | 0.00 | |
| WC | N | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 56 |
| | Total % | 0.00 | 0.00 | 0.00 | 0.00 | 11.02 | 0.00 | 0.00 | 11.02 |
| | Row % | 0.00 | 0.00 | 0.00 | 0.00 | 100.0 | 0.00 | 0.00 | |
| | Column % | 0.00 | 0.00 | 0.00 | 0.00 | 93.33 | 0.00 | 0.00 | |
| WS | N | 0 | 0 | 0 | 6 | 0 | 66 | 1 | 73 |
| | Total % | 0.00 | 0.00 | 0.00 | 1.18 | 0.00 | 12.99 | 0.20 | 14.37 |
| | Row % | 0.00 | 0.00 | 0.00 | 8.22 | 0.00 | 90.41 | 1.37 | |
| | Column % | 0.00 | 0.00 | 0.00 | 25.00 | 0.00 | 62.86 | 11.11 | |
| Missing | N | 5 | 5 | 5 | 0 | 3 | 11 | 1 | 30 |
| | Total % | 0.98 | 0.98 | 0.98 | 0.00 | 0.59 | 2.17 | 0.20 | 5.91 |
| | Row % | 16.67 | 16.67 | 16.67 | 0.00 | 10.00 | 36.67 | 3.33 | |
| | Column % | 3.40 | 3.85 | 15.15 | 0.00 | 5.00 | 10.48 | 11.11 | |
| Total | Total | 147 | 130 | 33 | 24 | 60 | 105 | 9 | 508 |
| | | 28.94 | 25.59 | 6.50 | 4.72 | 11.81 | 20.67 | 1.77 | 100.0 |

Note: RC = Reading Comprehension, RL = Literary Responses & Analysis, RW = Word Analysis, WA = Writing Application, WC = Writing Conventions, WS = Writing Strategies

Table 5.a.3.4. Cross-tabulation of Rater and Teacher Strand Codes for Mathematics

| Teacher Strand Code | Value | Rater Strand Code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | A1 | AF | MG | MR | NS | PS | Missing | Total |
| A1 | N | 38 | 5 | 0 | 0 | 5 | 0 | 0 | 48 |
| | Total % | 9.45 | 1.24 | 0.00 | 0.00 | 1.24 | 0.00 | 0.00 | 11.94 |
| | Row % | 79.17 | 10.42 | 0.00 | 0.00 | 10.42 | 0.00 | 0.00 | |
| | Column % | 35.85 | 4.81 | 0.00 | 0.00 | 4.46 | 0.00 | 0.00 | |
| AF | N | 64 | 92 | 2 | 4 | 10 | 0 | 0 | 172 |
| | Total % | 15.92 | 22.89 | 0.50 | 1.00 | 2.49 | 0.00 | 0.00 | 42.79 |
| | Row % | 37.21 | 53.49 | 1.16 | 2.33 | 5.81 | 0.00 | 0.00 | |
| | Column % | 60.38 | 88.46 | 50.00 | 66.67 | 8.93 | 0.00 | 0.00 | |
| MG | N | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| | Total % | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 |
| | Row % | 0.00 | 0.00 | 100.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Column % | 0.00 | 0.00 | 50.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| MR | N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Row % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Column % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| NS | N | 0 | 0 | 0 | 0 | 97 | 0 | 0 | 97 |
| | Total % | 0.00 | 0.00 | 0.00 | 0.00 | 24.13 | 0.00 | 0.00 | 24.13 |
| | Row % | 0.00 | 0.00 | 0.00 | 0.00 | 100.0 | 0.00 | 0.00 | |
| | Column % | 0.00 | 0.00 | 0.00 | 0.00 | 86.61 | 0.00 | 0.00 | |
| PS | N | 0 | 0 | 0 | 0 | 0 | 63 | 0 | 63 |
| | Total % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.67 | 0.00 | 15.67 |
| | Row % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 100.0 | 0.00 | |
| | Column % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 90.00 | 0.00 | |
| Missing | N | 4 | 7 | 0 | 2 | 0 | 7 | 0 | 20 |
| | Total % | 1.00 | 1.74 | 0.00 | 0.50 | 0.00 | 1.74 | 0.00 | 4.98 |
| | Row % | 20.00 | 35.00 | 0.00 | 10.00 | 0.00 | 35.00 | 0.00 | |
| | Column % | 3.77 | 6.73 | 0.00 | 33.33 | 0.00 | 10.00 | 0.00 | |
| Total | Total | 106 | 104 | 4 | 6 | 112 | 70 | 0 | 402 |
| | | 26.37 | 25.87 | 1.00 | 1.49 | 27.86 | 17.41 | 0.00 | 100.00 |

Note: A1 = Algebra 1, AF = Algebra & Functions, MG = Measurement & Geometry, MR = Mathematical Reasoning, NS = Number Sense, PS = Probability & Statistics

from small negative correlations to moderate positive correlations. Rater agreement was expressed by the percent of perfect agreement among the three raters and by intraclass correlations. As expected, higher agreement was

observed for mathematics compared to ELA. The raters agreed with the teachers on strand assignment about three-quarters of the time.

The basic procedures related to scoring a collection of evidence appear to be feasible but refinements to the procedures are necessary. For future studies, representative student samples and distributions of responses to all the strand and work sample combinations will be necessary in order to evaluate whether the target student population can demonstrate the skills required to pass the Tier II alternative means screening.

## *5.b Qualititative Data*

### *5.b.1 Survey Outcomes*

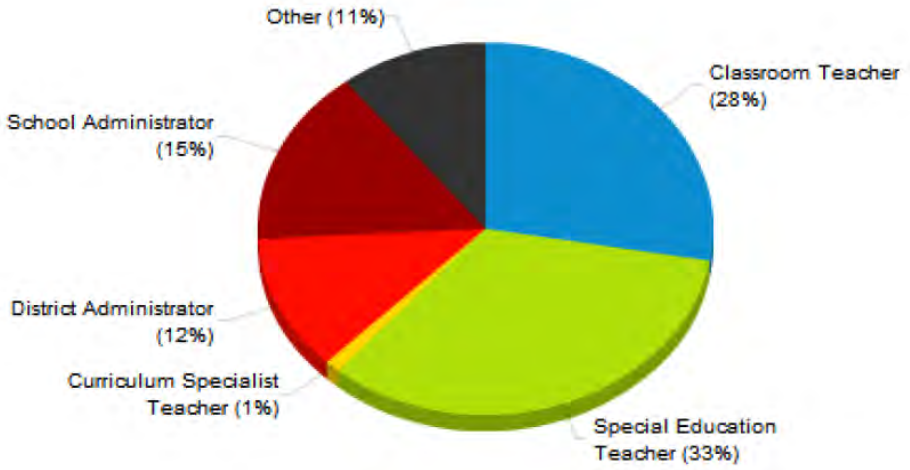
This section presents the results of the CAHSEE Alternative Means Survey according to the four survey sections: respondent profile, experience with CAHSEE, CAHSEE alternative means, and alternative means pilot study.

Respondent Profile

The survey sample included 371 submissions, with 62 percent of the submissions from high-school teachers, 27 percent from school or district administrators, and 11 percent from respondents who classified themselves as "other." Nearly all respondents (97 percent) were directly involved with high school students, with 12 percent reporting that the majority of their students were in grade nine, ten percent reporting that the majority of their students were in grade ten, 12 percent were in grade eleven, and 51 percent reporting that their students were in all high school grades. Two percent reported that the majority of their students were adults, and five percent responded "not applicable." These responses are presented in Figure 5.b.1.1 below.

Respondents were also asked about the subject area currently taught and about years of teaching experience. Regarding subject area, 32 percent of respondents indicated "not applicable," presumably because they were not currently teaching but may have been a school or district administrator, for example. The majority of the remaining respondents reported teaching in areas of relevance to CAHSEE alternative means, with 16 percent ELA, 13 percent mathematics, and 18 percent special education. Other respondents reported currently teaching multiple subject areas (ten percent), science (four percent), social studies/history (three percent), or visual and performing arts (one percent). Regarding years of experience, the majority of respondents (53 percent) reported more than ten years of teaching experience, with 22 percent reporting more than 20 years teaching. These data are shown in Figure 5.b.1.2.

**What is your current job responsibility?**




**What is the grade level of the majority of your students?**

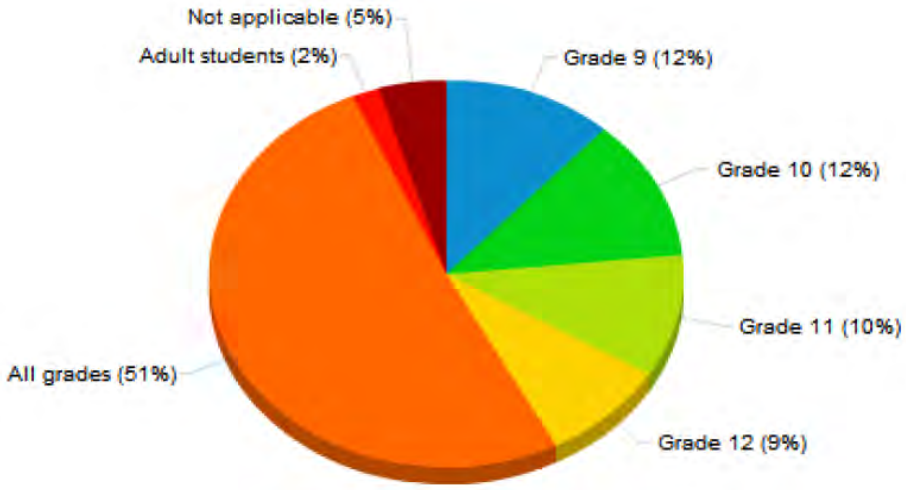
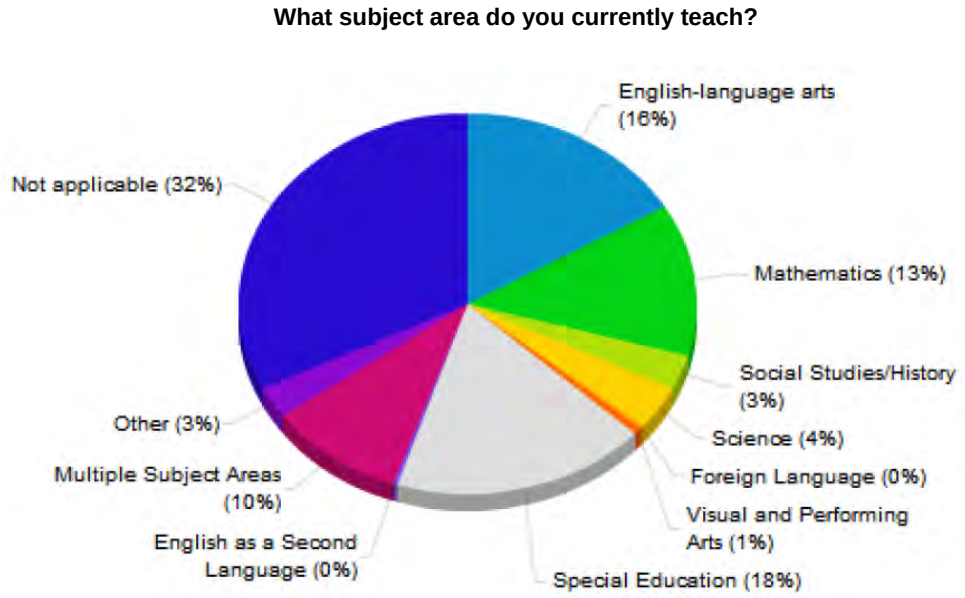



Figure 5.b.1.1: Responses to profile items on the CAHSEE Alternative Means Survey.



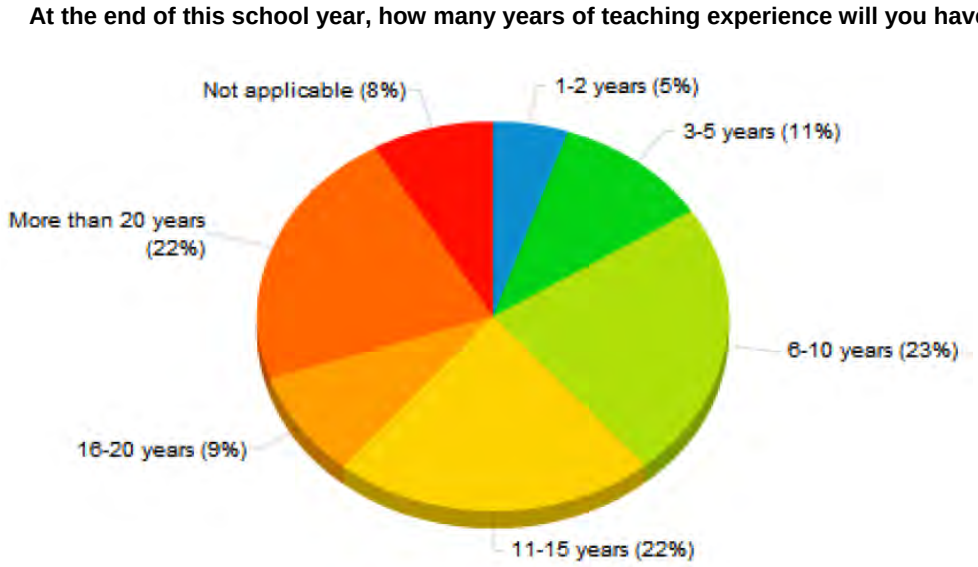




Figure 5.b.1.2: Responses to profile items on the CAHSEE Alternative Means Survey.

Experience with CAHSEE

Respondents were asked about their experience with the CAHSEE and SWDs. As shown in Figure 5.b.1.3, 98 percent of respondents agreed or strongly agreed that they were familiar with CAHSEE administration procedures. And as shown in

Figure 5.b.1.4, 97 percent agreed or strongly agreed that they were familiar with the content standards measured by CAHSEE.

Regarding SWDs, 95 percent of respondents agreed or strongly agreed that SWDs in their school or district were administered the CAHSEE with appropriate accommodations and modifications; and fully 97 percent agreed or strongly agreed that they were aware of SWDs who were on a diploma track, and were likely to meet all other graduation requirements, but may not pass CAHSEE. These data are presented in Figures 5.b.1.5 and 5.b.1.6.

While the overall sample size was not large, the responses to the profile and experience with CAHSEE sections of the survey show that the respondent sample was highly representative of the high school education community, was quite familiar with CAHSEE administration and content, and was aware of issues with SWDs. The sample thus appears qualified to respond to questions regarding possible implementation of CAHSEE alternative means.

CAHSEE Alternative Means

CAHSEE alternative means was defined for respondents to the survey as "a collection of student work samples that demonstrate a level of achievement in the

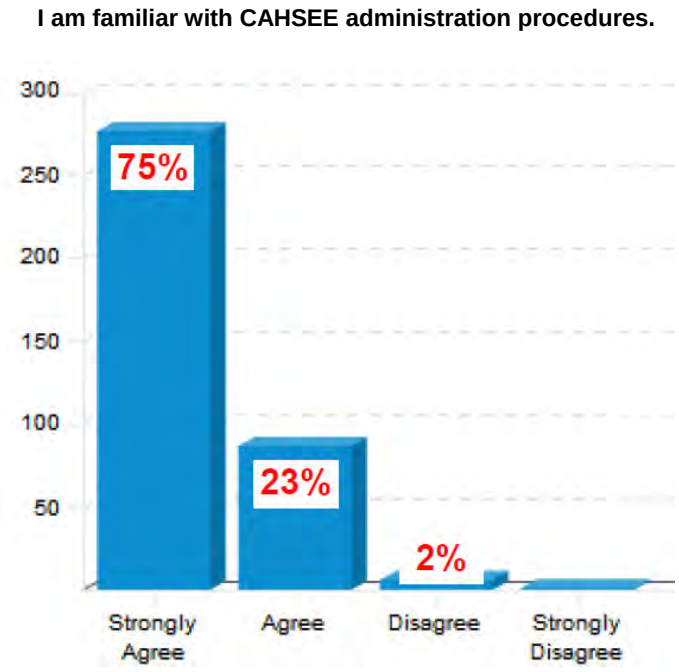



Figure 5.b.1.3: The extent of agreement with statements about the respondents' experience with CAHSEE.

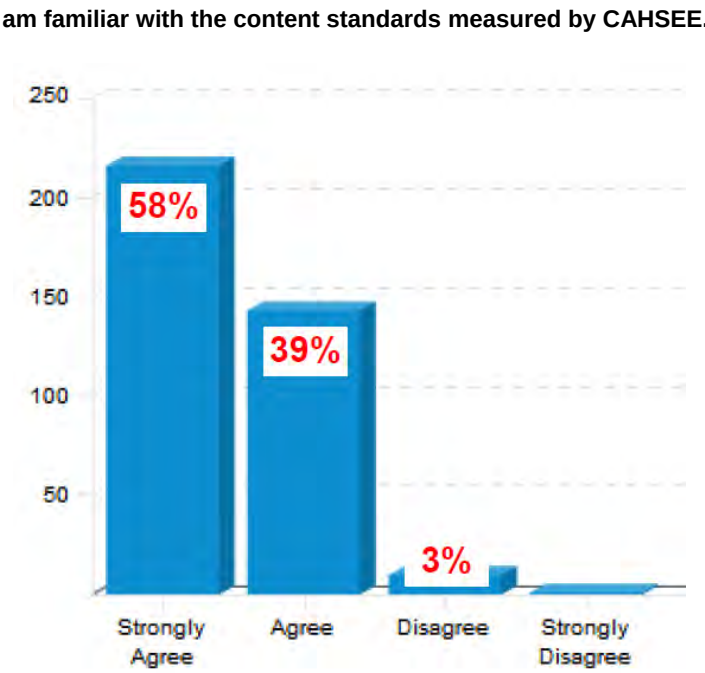



Figure 5.b.1.4: The extent of agreement with statements about the respondents' experience with CAHSEE.

content standards that is the same as the one required for passage of the exam." First, respondents were asked about their beliefs regarding SWDs' ability to demonstrate competency by alternative means as defined. As shown in Figure 5.b.1.7, 85 percent agreed or strongly agreed that SWDs who had not passed CAHSEE would be able to demonstrate high-school competency by alternative means. This was, however, the first survey item where any significant level of disagreement was noted, with a total of 15 percent of respondents who disagreed or strongly disagreed.

Similarly, when asked whether they agreed that a collection of work samples would accurately reflect what students know and are able to do, 79 percent of respondents agreed or strongly agreed, while 21 percent disagreed or strongly disagreed. These results are shown in Figure 5.b.1.8.

Next, respondents were asked about the availability of student work samples that could be submitted as part of a collection of evidence, specifically whether they collected student work samples during the school year that target standards measured by CAHSEE. As shown in Figure 5.b.1.9, the addition of a "not applicable" option to this item allowed 32 percent of respondents to neither agree nor disagree with the statement, implying that their work is not directly related to standards measured by CAHSEE. This is likely due to the inclusion of

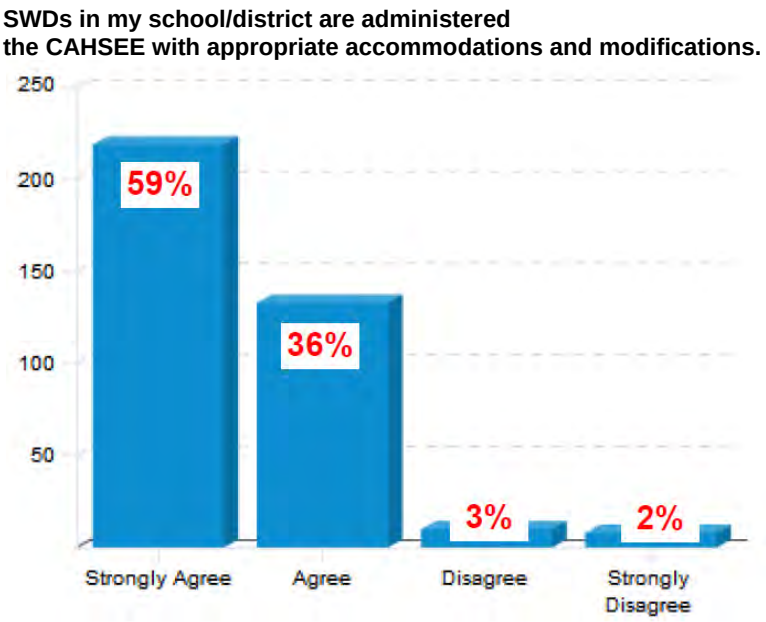



Figure 5.b.1.5: The extent of agreement with statements about the respondents' experience with CAHSEE.

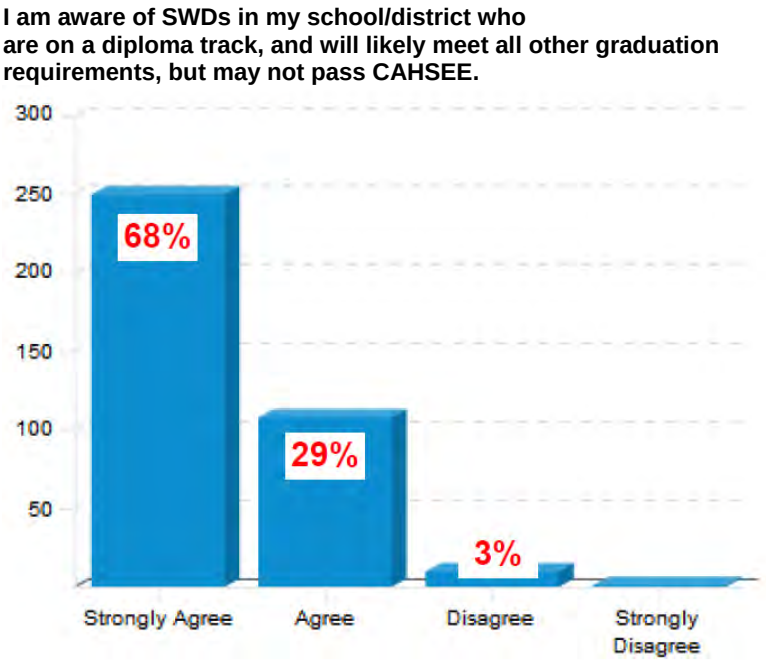



Figure 5.b.1.6: The extent of agreement with statements about the respondents' experience with CAHSEE.

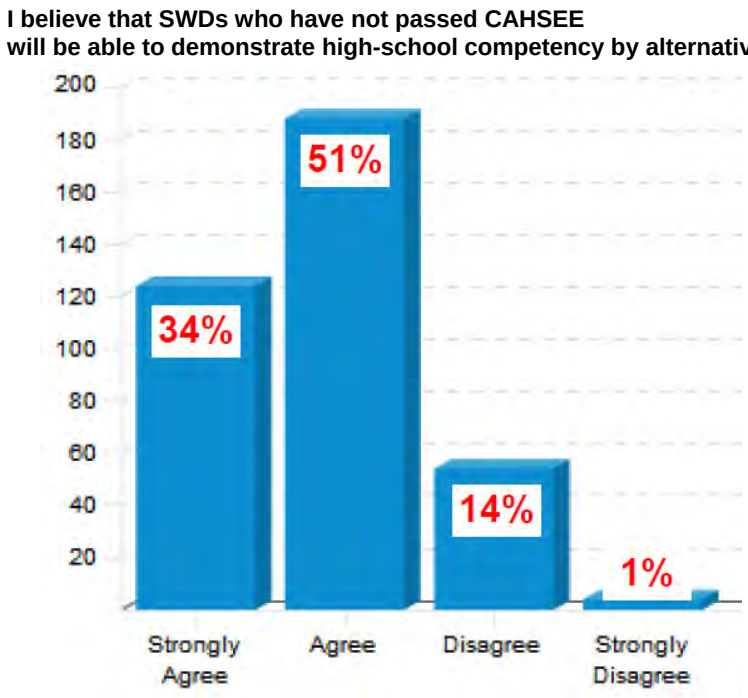



Figure 5.b.1.7: The extent of respondents' agreement with statements about CAHSEE alternative means.

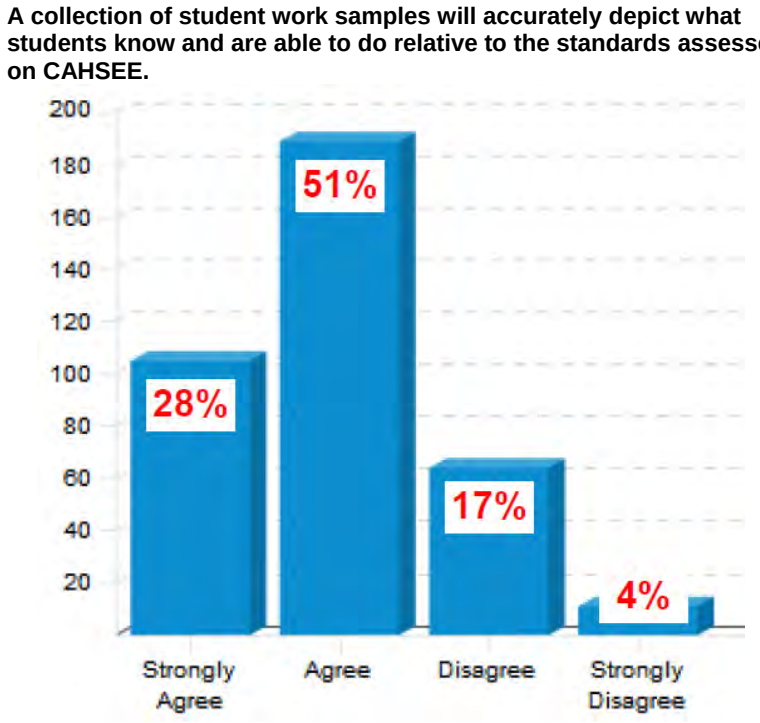



Figure 5.b.1.8: The extent of respondents' agreement with statements about CAHSEE alternative means.

administrators and teachers who do not teach ELA or mathematics in the sample.

With the “not applicable” group included, 52 percent of respondents agreed or strongly agreed with the statement, while 16 percent disagreed or strongly disagreed. When the “not applicable” group was excluded from the sample, fully 77 percent of respondents agreed or strongly agreed that they collect work samples relevant to CAHSEE content during the school year, while 23 percent disagreed or strongly disagreed.

When asked whether providing an alternative means to meet the CAHSEE requirement would increase academic expectation for SWDs, 74 percent of respondents agreed or strongly agreed that it would, while 26 percent disagreed or strongly disagreed. These results are shown in Figure 5.b.1.10.

**During the school year, I collect student work samples (e.g. classroom quizzes, student essays, class projects) that target standards measured by CAHSEE and could be submitted as part of a collection of evidence for alternative means.**

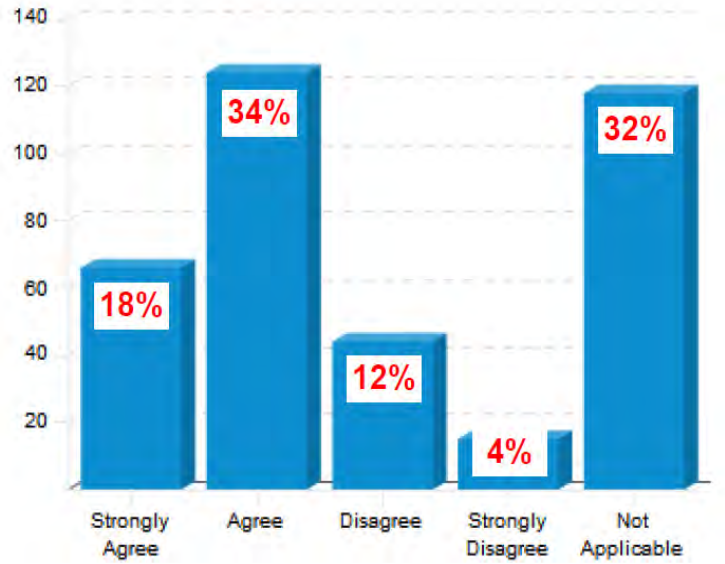



Figure 5.b.1.9: The extent of respondents’ agreement with statements about CAHSEE alternative means.

**Providing an alternative means to meet the CAHSEE requirement would increase academic expectations for SWDs.**

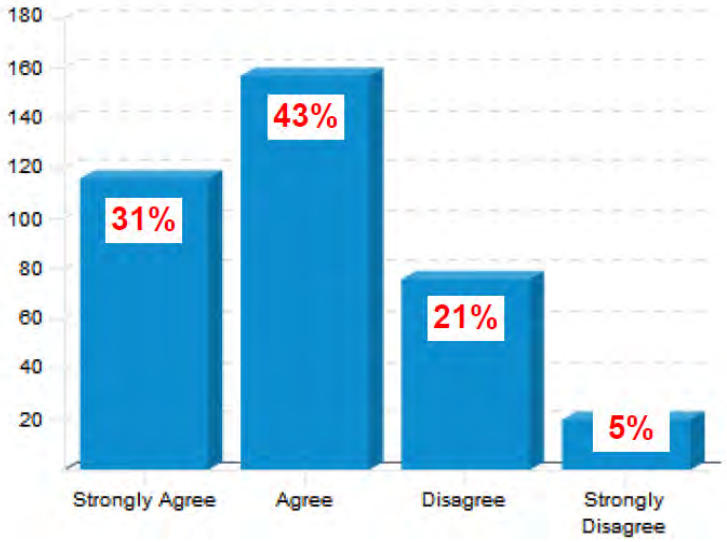



Figure 5.b.1.10: The extent of respondents' agreement with statements about CAHSEE alternative means.

**Compiling a collection of evidence for CAHSEE alternative means will place an undue burden on the teachers of eligible students.**

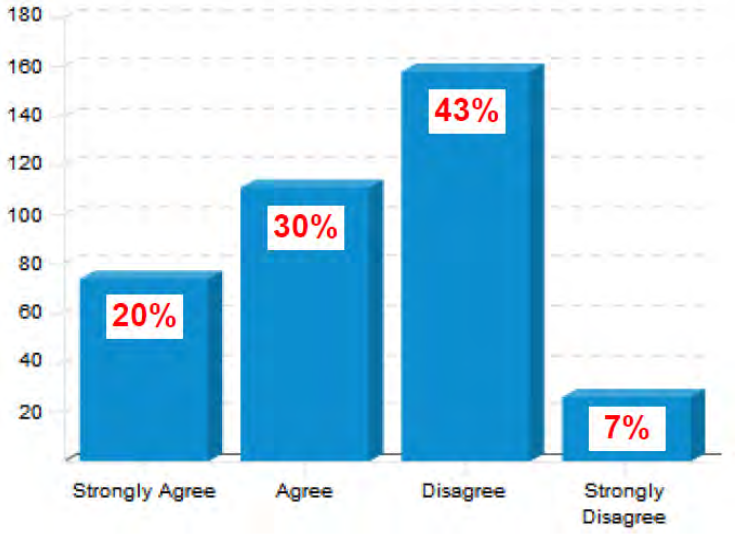



Figure 5.b.1.11: The extent of respondents' agreement with statements about CAHSEE alternative means.

Respondents were then asked whether compiling a collection of evidence would place an undue burden on teachers of eligible students. As shown in Figure 5.b.1.11, responses to this item were evenly split, with 50 percent who agreed or strongly agreed and 50 percent who disagreed or strongly disagreed. The largest percentage of respondents (43 percent) disagreed with this statement.

The last item in this section of the survey asked respondents whether professional development would be required to successfully implement CAHSEE alternative means. As shown in Figure 5.b.1.12, 91 percent of respondents agreed or strongly agreed with this statement, with the largest group of respondents (49 percent) strongly agreeing.

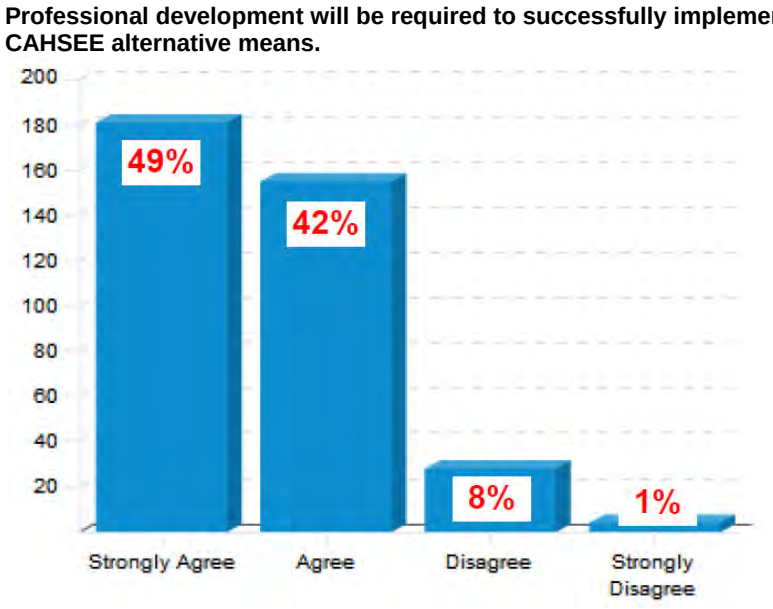



Figure 5.b.1.12: The extent of respondents' agreement with statements about CAHSEE alternative means.

At the end of this section of the survey, respondents were asked to offer any additional comments or suggestions they may have regarding CAHSEE alternative means. The responses to this open-ended query generally fell into three categories.

First were respondents who seemed to question whether many SWDs were capable of
demonstrating the same level of academic achievement in the standards as required for passage of CAHSEE. Select comments typical of this group follow:

- *"In my many years of teaching special education (all levels) I believe that if a student who has a documented specific learning disability, for example in reading and/or writing, that student rarely can complete the same level of competency as a non-disabled student."*
- *"Often special education students don't understand higher level of math reasoning skills like algebra and that is why they do not pass the CAHSEE. They may do examples with teachers, guided by teachers, but they do not have the understanding of the concepts."*

The second category were those respondents who felt that SWDs should either be held to the same expectations as non-disabled students or continue to be exempt, questioning the need at all for an alternative means to CAHSEE:

- *"Passing the CAHSEE has been a motivating factor for our Special Ed students. They have typically worked and tried very hard to pass it, and the great majority do. I do not agree w/an alternate means of assessment."*
- *"In some ways the alternative assessment is just another way of jumping through hoops--more work for teachers--the exemption or waiver after several attempts is sufficient."*

The comments provided seemed fairly evenly split between those who supported an alternative means and those who did not.

Finally, the third category were those who questioned the mechanics of CAHSEE alternative means as currently envisioned, particularly the details of compiling and scoring work samples:

- *"I think if you are going to ask already overburdened with paperwork, special education teachers to develop a portfolio of work on each student as alternative assessment it needs to be very specific and very easy to compile. Also if we receive a student their senior year we will not have a portfolio of work. Some juniors and seniors do not take math … for example. How would we obtain work samples their senior year if these were not passed from the previous years?"*
- *"Professional development and extremely clear directions will be paramount to ensuring an effective and fair alternative means process. Scoring should definitely be done by a group of well trained individuals in one place and with careful calibration (not by site/district teachers or professionals)."*

Alternative Means Pilot Study

The last section of the survey was specifically for those who had participated in the alternative means pilot study. Respondents were instructed to complete this section only if they had participated. However, because of their familiarity with the pilot materials and procedures, the teachers who participated in the alternative means evaluation session and focus group activities also responded, for a total sample size of 77 for this section of the survey.

Respondents were asked to rate their satisfaction with the pilot study DFA, both for individual sections and overall. The satisfaction ratings are shown in Figure 5.b.1.13.

Overall satisfaction was quite high, with 91 percent expressing that they were satisfied or very satisfied with the DFA overall. The highest ranking section was the *Student/Information Signature Form*, for which 86 percent of respondents said they were satisfied or very satisfied. This was followed by the on-demand performance task for ELA included in the appendix of the DFA, with a satisfaction rating of 82 percent. The lowest satisfaction ratings were for the on-demand performance task for mathematics and the *Student Work Sample Submission Form*, which both rated 25 percent unsatisfied or very unsatisfied.

Respondents were allowed to provide any feedback regarding the DFA in the form of open-ended comments. Typical comments included the following:

- *"Directions need to include how much work, how much work per standards, which standards - directions could include sample submissions with rubric and scores given. The more specific we can be (I don't mean don't allow various work - I mean be specific about what that various work could/should include) - the better the chances are that students/teachers will submit portfolios that pass"*
- *"Make the instructions more clear and concise. Make the packet smaller and more direct. Have an explanation packet for teachers who have more time to go in depth but keep the submission form and packet of work to be turned in direct and to the point."*
- *"Obviously a decision still needs to be made regarding number of Strands/submission pieces required to show adequate evidence toward competency. These are big questions that must be answered in order to determine effectiveness of alt. means assessment."*

Respondents were also asked about the ease or difficulty in implementing each of the five work sample types. A "not applicable" response option was included in

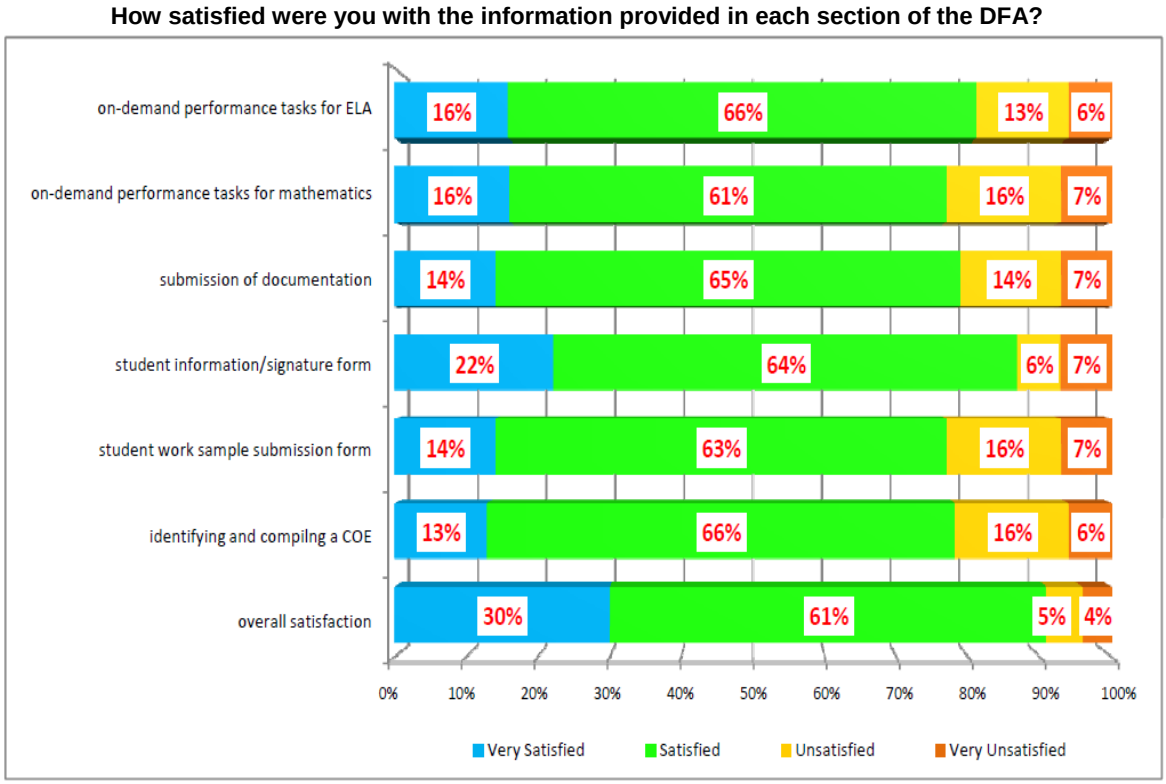



Figure 5.b.1.13: The extent of respondents' satisfaction with sections of the CAHSEE alternative means pilot study *Directions for Administration.*

this item for respondents who did not utilize a particular work sample type in their submission for the pilot.

As shown in Figure 5.b.1.14, the "easiest" sample type to implement was an on-demand classroom performance task, with 61 percent of respondents rating this type of work sample to be easy or very easy. This was followed by the on-demand writing prompt, with 58 percent of respondents rating this type of work sample to be easy or very easy. The most "difficult" work sample types were the audio/visual presentation with 24 percent rating it as difficult or very difficult, and the computer presentation, with 30 percent rating it as difficult or very difficult.

The percentage of "not applicable" responses can also be considered a proxy for difficulty in that the respondents who submitted materials for the pilot were allowed to choose what type of work samples to submit. The not applicable response was appropriate only if the respondent did not submit that type of work sample, for whatever reason, whether it was not available or difficult to compile. The not applicable rate was highest for audio/visual presentation with 45 percent, followed by the computer presentation, with a 36 percent rating. The lowest not

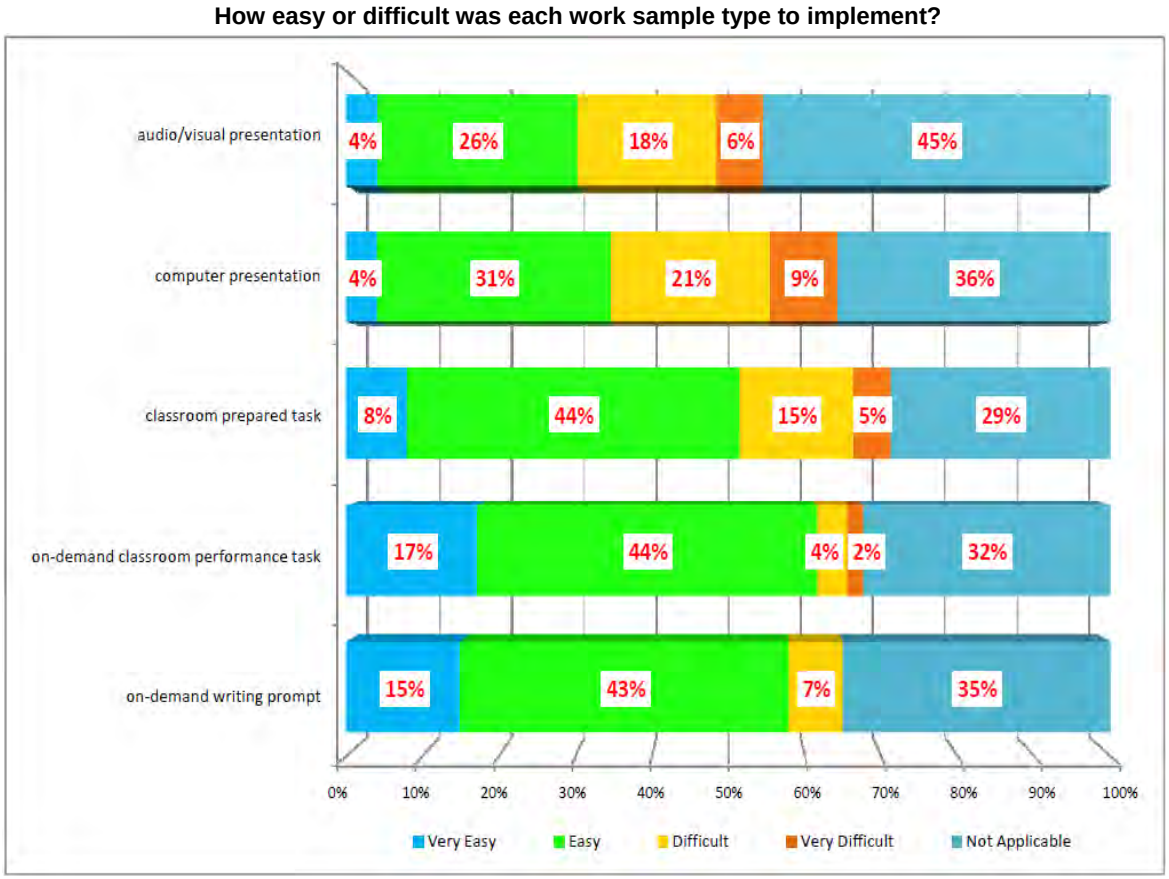



Figure 5.b.1.14: The extent of respondents' ease or difficulty with implementing the CAHSEE alternative means pilot study work samples.

applicable rating was for classroom prepared tasks, with a 29 percent rating. Respondents were then asked to estimate the amount of time it took them to compile the collection of evidence submitted for each student. The results for this item are shown in Figure 5.b.1.15. It should be noted that the requirements for submission of materials for the pilot study were considerably less than those that would be required for submission of a complete collection of evidence. The responses here are referenced to a single student with no more than three work samples covering two CAHSEE content strands. The most popular response to this item was "less than one hour," with 63 percent. Combined results indicate that 90 percent of respondents took two hours or less to compile evidence for a single student.

Finally, the last item on the survey asked respondents to consider whether or not they agreed that the collection of evidence process is an effective means of demonstrating academic achievement of the content standards assessed by CAHSEE, based on their experience with the pilot study. As shown in Figure

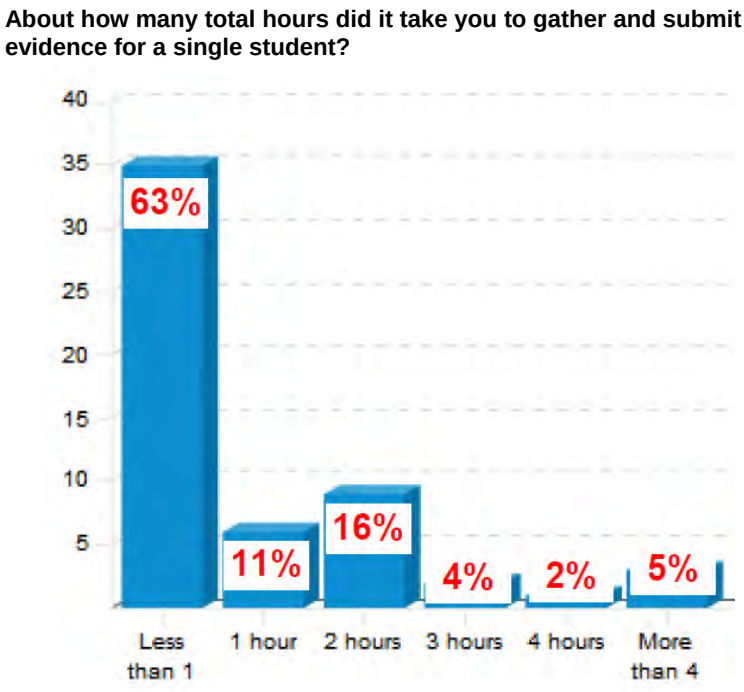



Figure 5.b.1.15: The estimated amount of time it took respondents to compile and submit materials for the CAHSEE alternative means pilot study.

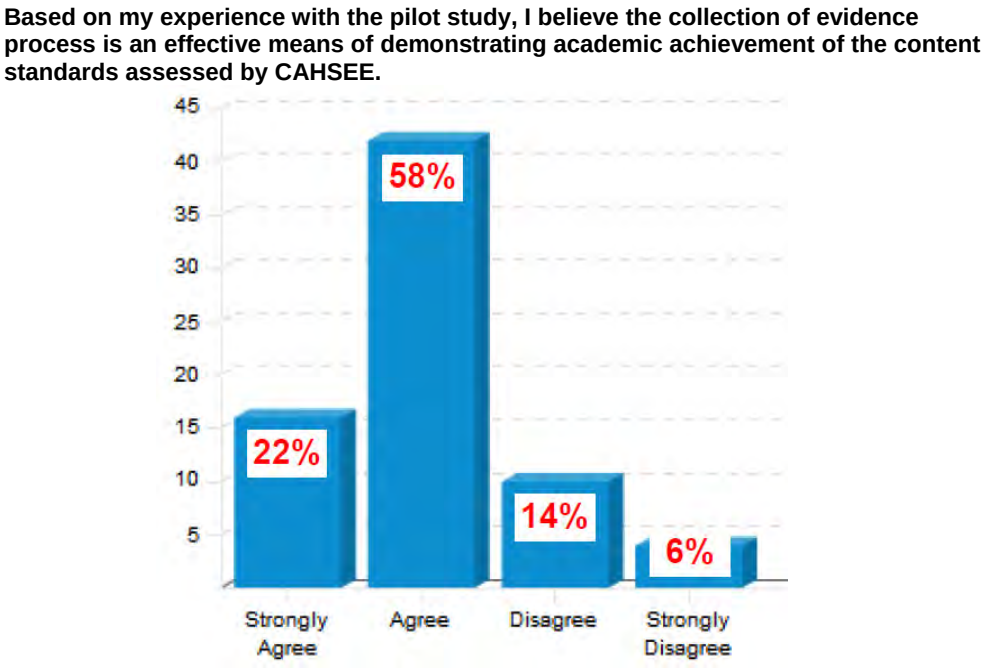



Figure 5.b.1.16: The extent of respondents' agreement with statements about the effectiveness of CAHSEE alternative means.

5.b.1.16, fully 80 percent of respondents agreed or strongly agreed with this statement, and 20 percent disagreed or strongly disagreed.

When asked to provide any additional feedback that they may have regarding the implementation of CAHSEE alternative means for SWDs, typical comments included the following:

- *"The collection of evidence process can be an effective way for students to demonstrate academic achievement. However, more guidance in terms of the types of "evidence" needs to be given to teachers. This type of alternative "testing" can potentially make it more difficult (rather than more accessible) for students."*
- *"We do not have the equipment necessary to tape audio and/or video presentations in each special education department. If this becomes part of an alternative process for the CAHSEE, we'd need to make plans to acquire this equipment for each school site."*
- *"Need a larger window to submit/resubmit work. Provide more specific guidelines as to only provide less work per standard. Provide answer key."*
- *"I think districts should provide in-service for spec ed. teachers to explain to them how this would work. I think they may be reluctant at first, but if the process is clear and simple then it will be accepted."*

### *5.b.2 Focus Group Outcomes*

This section presents a synthesis of the outcomes derived from focus group discussions and the follow-up interviews with student and teacher participants in the pilot study. The information presented here is an attempt to summarize the considerable, often lively debates that addressed selected areas of implementation of the CAHSEE alternative means Tier II collection of evidence. Focus group discussions were structured around four topics:

- Rubrics and Evaluation Procedures
- Alternative Means Survey
- Directions for Administration and Submission Forms
- Operationalized Submission of Work Samples

In addition to the 34 teachers involved with the focus groups during the evaluation session at ETS offices, ETS staff visited 12 special education teachers and nine students who participated in the pilot at a school site, and three additional teachers who participated were interviewed one-on-one in their

classrooms. All participants in the focus groups and interviews were given a brief overview of the proposed CAHSEE alternative means process and were provided copies of the pilot study flowchart included on page 15 of this report. The flowchart outlines current eligibility requirements and the Tier I and Tier II criteria. Teachers' and students' thoughts, interactions with others in the educational field, and general themes are outlined here to guide decision-makers in further developing the alternative means process.

Student Input

Students were asked for their general impressions of the CAHSEE examination, their experience in taking the examination, and their opinions of how CAHSEE alternative means would impact them and their fellow students. It should be noted that the students included in this interview attended a high-performing charter high school, were reported to belong to the SWD subgroup, and although many reported repeated difficulty with the CAHSEE examination, almost all had ultimately passed. The impressions of this small group are not meant to be representative of students throughout the state.

Most of the students agreed that the CAHSEE was a fair measure of student knowledge and ability and felt the requirement should remain as a condition for graduation. One student related how he had taken the CAHSEE in grade ten and passed, although he felt that the mathematics portion was more difficult than the ELA portion. Other students agreed. The same student felt that the CAHSEE alternative means would affect students differently, depending on what subjects they had difficulty with. When asked to clarify the ways different students would deal with an alternative means assessment, he was unable to provide specific details of his opinion.

Another student, speaking American Sign Language through an interpreter, expressed that although she passed the mathematics portion of the CAHSEE on the first attempt, she struggled repeatedly with the ELA portion, particularly with the essay. She went on to articulately explain that she felt this was not due to her knowledge or ability to express herself, but instead was due to discrepancies between the English language of the examination and the American Sign Language she uses to communicate. She is required to dictate the essay to an interpreter, but certain aspects of her language do not directly translate into English. She reported barely passing the ELA portion after repeated attempts with a scale score of 353, which she did not feel accurately assessed her ability. This particular student submitted a video recording of herself signing a response to literature for the pilot study and felt that the possibilities of the alternative means assessment would be beneficial to other students who communicate as she does. Other students agreed.

Rubrics/Evaluation Procedures

Discussion in these sessions was focused on the appropriateness of the rubric used to score student work samples submitted for the pilot study and any changes or improvements that could be made.

Teachers were generally satisfied with the zero-to-three point holistic rubric used to score the pilot study work samples, with one teacher stating that it was *"easy to use and apply to different tasks."* Others indicated that the use of multiple rubrics would be too cumbersome considering the varied work sample types submitted. When evaluating the student work, some felt that the addition of a fourth score point was needed in order to give additional credit to students who go *"above and beyond"* adequate performance. Many disliked the use of the phrase "adequate evidence" to describe a 3-score point performance, preferring the more neutral phrase "sufficient evidence." The group felt that a score point of three should be interpreted as a passing score that met the CAHSEE requirement. An additional suggestion for improving the rubric was to change the language of the bullet point descriptors that define the score points from "completes task" to "completes task accurately" as *"completion, in and of itself, should not be given credit."*

Concern was expressed about who would do the evaluation, with agreement that local scoring would incur less expense, but would also be subject to bias and possible inaccuracies. As one teacher noted, *"Scoring should definitely be done by a group of well-trained individuals in one place and with careful calibration (not by site/district teachers)."*

The work study samples evaluated for the pilot were scored at the standard level. These scores were then aggregated to the strand level for analyses (see Chapter 5.a of this report). There was concern expressed that some teachers who submitted work samples *"seemed unaware of the CAHSEE standards"* or perhaps had difficulty aligning the work samples to standards. For example, some tasks were aligned to the wrong standard and others measured standards not assessed on CAHSEE. There was a general consensus that *"the implementation of this assessment will require a great deal of training and support."*

No complete collection of evidence covering all the CAHSEE standards and strands was available for evaluation. Teachers in the focus group were prompted, however, to have considerable debate and discussion about what a complete collection would be comprised of and how it should be evaluated. Two competing viewpoints emerged within the group about how to evaluate the work, each dependent upon different conceptions of the composition of the collection.

One stance was that all the work samples should be as standardized as possible, for example, using only prescribed performance tasks to be administered during extended periods in the classroom. This position was forwarded as addressing concerns of appropriate alignment with CAHSEE content, comparable judgment across varied task types, and making evaluation procedures more efficient and accurate. The other position was to not prescribe any task types beyond those already defined for the pilot and allow the diversity of classroom work samples to function as appropriate accommodations for the target SWD population.

Considerable discussion ensued regarding the appropriate focus of compiling the collection of evidence and evaluating it; whether it was appropriate to focus on CAHSEE content standards or content strands. All agreed that the performance demonstrated by the collection must be equivalent to that demonstrated by performance on the examination, but all acknowledged that a focus on individual standards would result in excessive and non-equivalent demands on teachers and students. Competency by strand was deemed to be the more equitable option, with flexibility in the standards covered by the performance constrained by the judgment of adequacy used in evaluating the work.

Alternative Means Survey

Discussions with the teachers regarding the survey results confirmed the general findings and served to explicate some of the responses.

One item on the survey asked respondents to indicate the extent to which they agreed with the statement: *During the school year, I collect student work samples (e.g. classroom quizzes, student essays, class projects) that target standards measured by CAHSEE and could be submitted as part of a collection of evidence for alternative means.* Results from the survey showed that nearly a third of respondents neither agreed nor disagreed with the statement, but instead indicated “not applicable.” An additional 16 percent of respondents disagreed with the statement. Focus group participants felt that this was at least partially due to administrators completing the survey. However, while the ELA committee felt that teachers would most likely agree that they could collect work samples in their regular classes, the mathematics committee felt that this could be a difficult undertaking. It was explained that the content of high school mathematics classes is not, for the most part, aligned with CAHSEE, which measures middle school mathematics. Several other teachers related how they would not collect student work unless they knew well ahead of time that students were eligible for alternative means.

Another survey item of interest asked respondents the extent to which they agreed that: *Providing an alternative means to meet the CAHSEE requirement*

*would increase academic expectations for SWDs.* A relatively large proportion of respondents, 26 percent, disagreed with this statement. Focus group participants felt that there were three possible explanations for the results. First, some respondents may believe that anything alternative to the CAHSEE would *"by definition not be equal,"* and would thus result in lower expectations. Second, others felt that many respondents may *"already have high expectations for all students,"* and the addition of an alternative measure would not alter these expectations. Third, participants also speculated about how many survey respondents may not have been aware that the current exemption for SWDs is going to expire, which may have impacted responses to this item.

Responses were split for the survey item that asked the extent of agreement with the statement that: *Compiling a collection of evidence for CAHSEE alternative means will place an undue burden on teachers of eligible students*. Fifty percent of respondents agreed, while 50 percent disagreed. Focus group participants felt that this response may have been influenced by administrators in the sample, who would likely disagree with the statement, while teachers were likely to agree. There was also a split between the ELA and mathematics committees regarding this item, with ELA teachers tending to disagree and mathematics teachers tending to agree. This was primarily due to the misalignment of high school mathematics with CAHSEE content. One suggestion made was for a school to appoint an alternative means coordinator to manage the collection of evidence, or to have CAHSEE support staff be responsible for collecting appropriate work samples. It was recognized that this was not an option for many sites, as such resources may not be available. Other suggestions for lessening the burden on teachers were early notification of student eligibility and greater use of prescribed tasks which could provide *"equitable access to students in spite of site capacity."*

Other comments recorded during the survey focus group include:

- *"The amount of time that was required by participants in the pilot to cover two strands will greatly increase once [CAHSEE alternative means] goes operational and all the strands are covered."*
- *"Providing complete sample portfolios would be extremely helpful to the field. Building a website to house resources and teacher-developed tasks would also be helpful."*
- "*Professional development and extremely clear directions will be paramount to ensuring an effective and fair alternative means process."*

Directions for Administration and Submission Forms

These focus group sessions addressed the Alternative Means Pilot Study DFA and the submission forms contained within it (see Appendix B of this report).

General comments on the DFA for the limited purpose of conducting the pilot study were positive. As one teacher put it, *"This is well done. It has all the information they should have needed."* However, beyond the purposes of the pilot, it was agreed that an operational DFA would need to expand upon the information provided and include details on rubrics and evaluation procedures, as well as exemplars of what constitutes adequate and inadequate student work samples.

One suggestion from the group was to include two submission checklists within the DFA: a procedural checklist and a materials checklist. The procedural checklist would include a step-by-step listing for teachers to follow in collecting work samples for submission. The materials checklist would include a step-by-step guide of all materials that are to be included in a complete submission. Both checklists would include explicit directions to ensure that they are filled out correctly.

There were two submission forms included in the DFA: the Student Work Sample Submission Form and the Student Information/Signature Form. The Work Sample Submission Form was intended to be a cover sheet attached to each student work sample describing the content tasks represented (ELA or mathematics), the content strand to which the work aligns, the type of work sample submitted, and a description of how the work sample was administered. The Student Information/Signature Form included student demographic information and a signature line where the teacher submitting the work would certify that the submitted collection of evidence is the student's independent work. The focus group participants felt that both of these forms should be automated to the extent possible, particularly the student information form. As one participant put it, *"As a teacher, I don't know most of this information and it would be hard to get it. Who is supposed to fill this out? Information in the DFA should specify who should find and fill out the information."* A suggestion was made to utilize a Pre-ID process for alternative means similar to that used for the CAHSEE.

There was considerable debate surrounding the issue of independent work prompted by the discussion of the teacher certification signature on the form. All agreed that verification must be provided that the work sample submitted was the independent work of the student, but there was considerable disagreement of

how to ensure this. Some felt that the teacher signature was sufficient, while others wanted both the student and a school administrator to also provide a signature. One teacher stated that instructions in the DFA should repeat *"independent and in class*" throughout when describing student work sample submissions.

As mentioned in previous topic groups, teachers/educators also again expressed the need for professional development, training and support to meet the requirements outlined in the operational alternative means DFA.

Operationalize Submission of Work Samples

This topic was focused on how teachers would select and compile appropriate student work samples for submission as a CAHSEE Tier II collection of evidence.

Two primary concerns emerged from the discussion. As in the survey discussion group, concern was expressed over the misalignment of content taught in typical high school mathematics classes and the content assessed by CAHSEE. It was suggested that an administrator may be required to provide oversight to the collection of student work and coordination between ELA and mathematics departments. Participants wanted to minimize any extra work required of teachers submitting work samples to the extent possible. While most were *"willing to go the extra mile"* for their students to meet the CAHSEE requirement, the collection of evidence process could extend beyond the purview of the classroom. More questions were raised than answers provided: *"Who at the school site would maintain the student work? Case managers? Counselors? CAHSEE coordinators? How will a collection of student work follow students when they move to a new district? How will it be kept secure?"*

A second concern was over the timeline for submission. As currently outlined, students must take the CAHSEE at least once during their senior year in order to be eligible for alternative means. Participants expressed some doubt as to whether this eligibility requirement would provide adequate time to compile an adequate collection of evidence at the end of the senior year and still receive a score in time for graduation decisions. Further, this timeline curtailed the possibility of resubmitting a collection that did not meet the adequate score point.

## 6 Conclusions

The CAHSEE Alternative Means Pilot Study was conducted to explore the possibilities and challenges inherent in the concept of utilizing a collection of evidence to demonstrate the same level of achievement in the content standards

as that required for passage of the standardized examination. A previous analysis of alternative means suggested that while the proposed Tier I screen of considering previous CST and CMA scores as an alternate to CAHSEE performance is a valid approach, relatively small numbers of SWDs would benefit (HumRRO, 2010). The Tier II collection of evidence explored here could potentially benefit considerable numbers of SWDs in meeting the CAHSEE requirement.

Results from the pilot study suggest that basic procedures of the collecting and scoring of evidence are operable, but many refinements will need to be made before fully implementing a Tier II CAHSEE alternative means.

### *6.a. Summary of Findings*

The quantitative data produced by the pilot study was, unfortunately, too small to specify widely generalizable inferences. The results do, however, suggest several high level conclusions. The qualitative data from practitioners and experts produced by the survey and focus group activities provided a rich source of information to further inform the development of the CAHSEE alternative means process.

Collection of Evidence

The types of student work samples as defined in the pilot study seem practical for compiling a collection of evidence that demonstrates students' competency in the content standards assessed on CAHSEE. Of the five work sample types, audio-visual presentation, computer presentation, classroom prepared tasks, on-demand classroom performance, and on demand writing prompt, the vast majority of submitted work came from classroom prepared tasks (i.e.; an assignment, unit quiz, or chapter test completed in the classroom) and on-demand classroom performance (i.e.; a performance task provided by ETS and completed in the classroom). There were relatively few samples of audio-visual or computer presentations, and these were rated as most difficult to implement, although the samples submitted suggest that these types of tasks may work well for particular types of students.

High school ELA teachers affirmed that their regular classroom work was generally aligned with CAHSEE standards and would be amenable for collection, but high school mathematics teachers expressed concern about the alignment of their regular classroom work with CAHSEE content. With the exception of CAHSEE remediation classes, the content taught in junior or senior year mathematics classes does not align with the middle school mathematics content assessed by CAHSEE. This could pose a considerable challenge to high school

mathematics teachers attempting to compile a collection of evidence that demonstrates equivalent performance to that of CAHSEE.

The data show a split in opinion on whether a collection of evidence would place an undue burden on teachers of eligible students. Strong consensus was reached that teachers and other staff responsible for collecting evidence needed early notification of students' eligibility, specific guidelines for compiling evidence, and clear examples of appropriate work in order to ensure an effective and reasonably efficient collection process.

It was noted that numerous work samples were incorrectly coded to CAHSEE content strands and had to be recoded to correct strands by the evaluators, while other work samples measured standards not assessed on CAHSEE at all. This finding seems to indicate that detailed knowledge of the CAHSEE content standards is inconsistent. Some practitioners may lack a full understanding of the concept of alignment to standards. A robust professional development agenda and support system targeting educators who work with eligible students will be required to ensure that submitted work samples tightly align with the required CAHSEE content.

Scoring Procedures

The four-point holistic rubric used during the evaluation session functioned well for the calibration and evaluation sessions. The score points used were as follows: 0 = no evidence, 1 = little evidence, 2 = some evidence, and 3 = adequate evidence. Evaluators decided that the use of a holistic approach to evaluating Tier II screening was appropriate given the range of materials and work sample types represented in the pilot. It was felt that the holistic rubric could result in a somewhat quicker and more uniform scoring process than the use of task-specific analytic rubrics.

Given that assessment of the overall performance is key to CAHSEE pass/fail scoring, it was also decided that an overall score of "3" was required to pass and adequately meet the CAHSEE requirement with a collection of evidence. One disadvantage to this approach is that only limited feedback can be provided to the student in the event that students are allowed to resubmit a collection that does not initially pass.

Evaluators felt that centralized state-level scoring by highly trained raters was preferable to regional LEA-level scoring in order to ensure equitable and unbiased scoring procedures. The consensus ratings and correlations across multiple raters used to evaluate the limited student work submitted for the pilot were not high enough to produce reliable scores on a large-scale assessment.

Additional work in developing evaluation procedures and materials will be needed.

Passing Rates

The vast majority of students who participated in the pilot study were receiving Special Education services and had IEPs. Nearly two-thirds of the students had taken the CAHSEE repeatedly and not passed. Estimated correlations between alternative means and CAHSEE strand scores were generally low-to-moderate, possibly indicating related, but differentiated performance. These findings, while not definitive, hint at the possibility of increased performance and passing rates for eligible students provided an alternative means to CAHSEE.

Opinions from the field were not uniform with regards to whether SWDs who have not passed CAHSEE would be able to demonstrate high-school competency through a collection of evidence. Some questioned the functional equivalence of anything alternative, while others expressed concern over the independence of student work, how much work is enough to meet the requirements of a full collection, about who does the scoring, and how passing criteria would be set.

Timeline and Estimated Costs

The current regulations and timeline for CAHSEE alternative means establishes July 2012 as the implementation date for an operational assessment. The status of assessment development as described in this study supports the position that this date is not practicable. The intent of the pilot study was to inform California's possible next steps in fully implementing a collection of evidence for a Tier II process. Following traditional development procedures for large-scale constructed-response assessments, a practical next step would be a field test designed to clearly establish guidelines for administering and compiling work samples, to fine-tune scoring procedures and rubrics and establish validity and reliability for a full collection of evidence, and to develop methods to report the results in a timely fashion and in ways that are meaningful to all stakeholders. There is simply not enough time remaining before the July 2012 deadline to accomplish these essential tasks.

Projections of associated costs for California are difficult to estimate at this stage of development, although similar systems in use in other states may provide comparable cost structures. For example, the Massachusetts portfolio option described earlier in this report costs an average of $180 dollars per student, including professional development, administration, scoring, and reporting.

However, beyond the initial investment in development costs, the incremental cost per student is considerably lower than the average cost per student. This is because of the fixed costs associated with a large-scale assessment program. Fixed initial costs such as designing a student report costs thousands of dollars, while printing an extra report for an additional student costs about $0.05. The variable cost associated with each extra student participating in the Massachusetts portfolio is around $55. This includes $35 for scoring, $15 for shipping, and $5 for materials and reports.

For several years, the State of Washington has offered an alternative collection of evidence for their high school reading and writing requirements. Costs have been about $300 dollars per student at the state level and an additional $300 dollars per student reimbursement to districts. Recent legislation has required that costs be reduced to $200 dollars at the state level and $200 dollars at the district level. Changes to the program in order to meet these targets have not yet been designed.

An alternative assessment from the State of Maine, the Personalized Alternate Assessment Portfolio (PAAP), utilizes a prescribed set of performance tasks selected from a test bank by teachers and/or IEP teams. The tasks are selected for inclusion in the portfolio based on grade-level goals and a determination of appropriate levels of complexity for the particular student. The PAAP is administered and compiled over a five month administration window and submitted for central scoring. The total cost is $261 dollars per student, including task bank development, professional development, administration, scoring, and reporting.

Upfront development costs for California will vary depending on the extent to which prescribed performance tasks are a part of the operational collection of evidence. Two general options to consider are on-demand performance tasks, which are designed prior to implementation and provided to the field, and classroom prepared tasks, which are selected and compiled at the discretion of practitioners. The pros, cons, and estimated costs associated with these two options are presented in Table 6.a.1.

In regards to the variable costs of scoring, there are four options: design a test that can be scored electronically, have LEAs score the test locally, have the test scored centrally by professional scorers, or have the test scored centrally by teachers. The decision to be made here is based on trading accuracy and standardization for cost. Table 6.a.2 presents the pros, cons, and estimated costs of each of these scoring options.

Table 6.a.1: Pros, cons, and estimated costs associated with general work sample types for the CAHSEE alternative means collection of evidence.

| Test Options | Pros | Cons | Estimated Cost |
|---|---|---|---|
| **On-demand performance tasks** | Easy to score, somewhat greater flexibility in assessment style, clear directions to field about expectations | Costly to create and maintain a task bank, requires more professional development than MC items, not as flexible as classroom tasks | High ($400,000 and up) |
| **Classroom prepared tasks** | Maximum flexibility for teachers and students, builds understanding of standards in schools at a fundamental level | Requires maximum training/professional development, logistically complex, requires resource heavy scoring | Minimal (Possible consulting fees and Advisory Committee for training) |

Table 6.a.2: Pros, cons, and estimated costs associated with scoring options for the CAHSEE alternative means collection of evidence.

| Scoring Style | Pros | Cons | Estimated Cost |
|---|---|---|---|
| **Score locally** | Inexpensive, local involvement, good professional development | Ethical hazard, non-standardization of scoring procedures, requires training | $0 (after Professional development/ training) |
| **Computer Based Scoring (Automated Essay/Short CR)** | Fast, low cost (after initial investment) | High initial investment, low flexibility in assessment design | Variable, depending on system, initial investment, and maintenance costs |
| **Professional Scorers (central)** | Most accurate results, lower cost than scoring with teachers, ability to easily monitor standardized scoring procedures | Inability to give the highest quality feedback to teachers | $15 and up per hour |
| **Teacher Scorers (central)** | Great feedback to teachers, reliable results, ability to easily monitor standardized scoring procedures | Most expensive, restricted to times of the year when teachers are available (not in school) | $35 and up per hour |

Final consideration is professional development associated with the implementation of CAHSEE alternative means. While not considered mutually exclusive, three possible options are to disseminate information through documentation on a standard Web page, to develop online training modules to de delivered via a Website, or to provide face-to-face regional training throughout the state. The pros, cons, and estimated costs of these options for professional development are presented in Table 6.a.3.

Table 6.a.3: Pros, cons, and estimated costs associated with professional development for the CAHSEE alternative means collection of evidence.

| Professional Development | Pros | Cons | Estimated Cost |
|---|---|---|---|
| Manual/Web page text only | Standardization of information disseminated | Increased number of phone calls for clarification, open to possible misinterpretation of text, low level of feedback | Minimal |
| Online training modules | Standardization of information disseminated, Could be used by a wider audience, teachers can watch modules at a time that is convenient for them | Cost of development, inability to answer questions during training, low to medium level of feedback | Medium |
| Face-to-face regional training | Answer specific questions, communicate face to face, get direct feedback from teachers on the assessment and the training | Expensive, time consuming, potential for issues with standardization of information dissemination | High $10k-20K per training |

# 7 Recommendations

The following recommendations are not presented in order of importance or priority, but rather in terms of the research team's logical flow of thought upon contemplation of the available evidence from the pilot study.

***Recommendation 1: A full-scale census field test should take place prior to operational implementation of Tier II.***

A much more representative sample of student work than that collected for the pilot study is needed in order to fully understand how teachers will respond to the complete collection of evidence process. A field test will allow for further improvements in the directions for administration, training materials, support services, performance level descriptors, and scoring procedures. In addition, a standard-setting procedure should take place prior to operational implementation of Tier II, requiring a much larger and varied sample of student work. Materials and procedures can be re-validated once CAHSEE alternative means become operational.

The pilot study results reported here are limited in scope, due to the short timeframe available for its implementation and the low response rate from participating LEAs. The study design did not envision the collection and submission of a complete collection of evidence; rather, only pieces of the process were explored. The pilot work was approved in March and begun in April, with materials distributed in May and collected in early June. This relatively brief window came at the end of the school year, immediately following extensive state testing, and thereby lead to limited participation. A full-scale census field test to resolve these limitations of the pilot will need to be timed to the seasonal demands of California high schools.

***Recommendation 2: CDE should consider earlier identification of Tier II eligible students, prior to the commencement of a student's senior year.***

The field clearly expressed concern over the eligibility requirements for participation in Tier II as currently conceptualized. In practice, the requirement that students have to take the CAHSEE at least once during their senior year will likely mean that students will not be identified as eligible until winter of their senior year. This translates into a very restricted time period in which to develop, assemble, submit, and score an appropriate collection of evidence prior to graduation decisions. It further does not allow for any type of feedback loop or resubmission process should the submitted collection fall short of CAHSEE requirements.

It is recommended that students be identified as eligible for CAHSEE alternative means no later than the end of their junior year, and that initial submission of an alternative means collection of evidence occurs in the fall of their senior year, at the latest. This would allow adequate time for collecting evidence and possibly a second submission, if needed, to get evaluative feedback with regard to missing evidence and the adequacy of the overall performance prior to graduation. This would also encourage collection of materials over a longer period of time, which may be necessary for many eligible students in this population.

***Recommendation 3: Evaluating the Tier II collection of evidence should be approached holistically and conducted at the state level.***

Holistic evaluation is a procedure for scoring varied student work samples in which the evaluator makes a single judgment of the overall quality of the response, instead of awarding points separately for different features. Evaluation of student work with a holistic rubric is especially appropriate for complex learning tasks or for types of tasks that integrate content from more than one area, such as those found in the current study. Trained evaluators would use a scoring guide that describes a typical response at each score level, along with exemplar responses that serve as illustrations of each score level, and would be calibrated with continual monitoring of scoring and inter-rater reliability calculations.

Concerns for potential bias and inconsistent reliability of scoring at the local level lead to the recommendation that the collections of evidence for CAHSEE alternative means be submitted to the state for centralized scoring by highly trained and monitored evaluators.

***Recommendation 4: The focus of student work samples collected for CAHSEE alternative means should be at the strand level.***

The current threshold for a passing score on the CAHSEE is approximately 60 percent correct for ELA and 55 percent correct for mathematics, and the goal of an alternative means assessment is to create an alternate pathway for eligible students to demonstrate the same level of achievement as students who pass the CAHSEE. It should not be a requirement that all CAHSEE standards be addressed individually in this alternative assessment, as this is more than is required for the passing of the regular CAHSEE. The CAHSEE alternative means collection of evidence need not address every standard on the CAHSEE assessment.

Required work samples could be sophisticated enough to cover multiple standards within a strand or even across strands. A judgment can then be made

as to whether the evidence is adequate to support a passing score on each strand. The state will have to make a decision as to how many strands students should be required to perform adequately in order to meet the overall CAHSEE requirement. One consideration for an overall holistic score is in terms of a compensatory model that combines strand scores, where strong performance in one strand could compensate for weaker performance in another strand. This would require the reinstatement of the "4 - ample evidence" rating not utilized in the scoring rubric for the current study. In this manner, various combinations of strand scores could be averaged to produce an overall "3 - adequate evidence" rating required for passing CAHSEE alternative means.

***Recommendation 5: The state should consider providing a bank of prescribed on-demand performance tasks for each CAHSEE strand, and allow other work sample types as supplements.***

In order to maximize the effectiveness of CAHSEE alternative means, a reasonable balance must be struck between constraints placed on acceptable work sample types and total autonomy to select whatever may be judged suitable for a particular student. While the educators involved with the pilot study felt that the sample types provided were appropriate for the assessment, they also strongly supported the idea of "structure with flexibility" when delineating the contents of an alternative means collection of evidence.

A well-developed and field-tested bank of prescribed on-demand performance tasks of the type utilized for this pilot study could provide the desired structure and could mitigate several issues. Submission of a performance task for each strand would ensure adequate and equitable coverage of the CAHSEE content standards, provide for clear exemplars of performance to the field, and make the scoring and evaluation process much more efficient and accurate. Selection of the particular performance task to be submitted and the selection of additional work as supplements allows for balanced flexibility in adapting submissions for a particular student. Although this approach would add additional development time and effort, these would be balanced by decreasing the time and effort needed to score and evaluate the work.

***Recommendation 6: Make guidance to the field as simple and specific as possible.***

The directions to the field for collecting and submitting an adequate Tier II collection of evidence should be both simple and specific. While the pilot was intentionally designed to be open to many different submission options, the consistent feedback from most of the educators involved in the study is to make

manuals and support materials released to the field very specific and easy to understand. Detailed checklists dictating how each strand should be addressed with regard to both accuracy and quantity must be provided, including multiple examples of an adequate performance for each required strand.

Practitioners are more likely to embrace this style of assessment if they have a very clear understanding of what is expected of them and why. In addition to reducing the frustration level of teachers and setting clear expectations for students, increasing standardization of submission will also simplify receiving, scoring, and reporting on this assessment.

***Recommendation 7: Provide for a robust professional development program focused on the required CAHSEE content and guidance toward appropriate student work samples for submission.***

Pilot study participants indicated the need for training in order to better understand the standards assessed by CAHSEE. While 95 percent of the survey respondents said they were familiar with the standards assessed through the CAHSEE, the evidence submitted for the pilot often did not match the specific standard the teacher stated they were attempting to address. Ongoing professional development for the content assessed by the CAHSEE alternative means, particularly targeting educators who work with eligible students, will be necessary.

One suggestion for increasing teachers' understanding of the content standards would be to create a set of online tutorials on how to address each required strand for the CAHSEE alternative means collection of evidence. Professional development such as this would be an effective way to share standardized information with a large group of teachers. These tutorials do not necessarily need to be restricted to teachers working on the CAHSEE alternative means submission. They could be helpful to teachers working with any student having trouble with the CAHSEE, ultimately reducing the number of students who need to participate in an alternative means.

***Additional considerations:***

The state has recognized that students can demonstrate that they have achieved the same level of academic achievement in the content standards in English-language arts and/or mathematics using assessments other than the CAHSEE. California could consider expanding this logic to include multiple assessments following the approach taken by Virginia and Florida and adding a cohort appeal

as has been done in Massachusetts. The avenues for Tier I qualification for alternative means could be expanded to include both a cohort appeal and equivalency scores from other assessments. Using equivalence scores and cohort worksheets to demonstrate that a student has achieved competency will greatly reduce the number of students who need to take an alternative means to CAHSEE; thereby saving time, effort, and funding.

California could also consider including all students who struggle with passing CAHSEE as eligible for alternative means, not just SWDs. Although the original recommendation from the state was to allow a collection of evidence to show competency in ELA and mathematics for SWDs, equitable consideration for other underperforming subgroups suggests no reason to restrict this type of assessment to one specific group of students. The AB 2040 panel's recommendation to have all students attempt the traditional CAHSEE multiple times before pursuing an alternative means assessment is sensible. However; nationwide, a sizeable number of students do not perform well on high school exit examinations simply because they are not good test takers. These students should be allowed to show what they know and earn a competency determination for their state diploma regardless of their disability status. An alternative means assessment is an excellent vehicle for these students to prove what they can do.

## References


2.a.

California Department of Education (2011). *California High School Exit Examination Program Overview*. Retrieved August 9, 2011, from http://www.cde.ca.gov/ta/tg/hs/overview.asp

2.a.1

Hernandez, D. (2010). *California High School Exit Examination (CAHSEE) Program Update* [PowerPoint slides]. Retrieved July 19, 2011, from http://sccoe.org/depts/ell/bcn/Sep2010/BCN%209-16-10/7_CAHSEE%20Update%20BCN%209-16-10_Hernandez.ppt

2.b.3

American Institutes for Research (2010). *Independent evaluation study of certain students who used modifications and/or accommodations on the California High School Exit Examination (CAHSEE)*. Washington, DC: American Institutes for Research.

Human Resources Research Organization (2010). *Independent evaluation of the California High School Exit Examination (CAHSEE): 2010 evaluation report*. Alexandria, VA: Human Resources Research Organization. http://www.cde.ca.gov/ta/tg/hs/evaluations.asp

2.c.1

Massachusetts Department of Elementary and Secondary Education. (2010). MCAS Performance Appeals. *Massachusetts Department of Elementary and Secondary Education.* Retrieved August 3, 2011, from http://www.doe.mass.edu/mcasappeals/

2.c.2

Virginia Department of Education (2011). Graduation Requirements. *Virginia Department of Education.* Retrieved August 4, 2011, from http://www.doe.virginia.gov/instruction/graduation/index.shtml

2.c.3

Florida Department of Education (2010). Graduation Requirements. *Florida Department of Education.* Retrieved August 3, 2011, from http://fcat.fldoe.org/pdf/fcatpass.pdf

Educational Testing Service

# Alternative Means Pilot Study: Appendix A Test Blueprints

September 2011

# CAHSEE Language Arts Blueprint*

**Revised July 2003**

| California Content Standard | Number and Type of Items |
|---|---|
| **Reading (Grades Nine and Ten with two standards from Grade Eight as noted*)** | **45** Multiple-choice Items Total |
| 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development<br>Students apply their knowledge of word origins to determine the meaning of new words encountered in reading materials and use those words accurately. | 7 Multiple-choice Items |
| 1.1 Identify and use the literal and figurative meanings of words and understand word derivations. | 5 |
| 1.2 Distinguish between the denotative and connotative meanings of words and interpret the connotative power of words. | 2 |
| 1.3 Identify Greek, Roman, and Norse mythology and use the knowledge to understand the origin and meaning of new words (e.g., the word narcissistic drawn from the myth of Narcissus and Echo). | 0 |
| 2.0 Reading Comprehension (Focus on Informational Materials)<br>Students read and understand grade-level-appropriate material. They analyze the organizational patterns, arguments, and positions advanced. The selections in *Recommended Literature, Grades Nine Through Twelve* (1990) illustrate the quality and complexity of the materials to be read by students. In addition, by grade twelve, students read two million words annually on their own, including a wide variety of classic and contemporary literature, magazines, newspapers, and online information. In grades nine and ten, students make substantial progress toward this goal. | 18 Multiple-choice Items |
| *Structural Features of Informational Materials* | |
| †8.2.1 Compare and contrast the features and elements of consumer materials to gain meaning from documents (e.g., warranties, contracts, product information, instruction manuals). | 1 |
| 2.1 Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes. | 3 |

† *Eighth-grade content standard.*

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# CAHSEE Language Arts Blueprint*
**Revised July 2003**

| California Content Standard | Number and Type of Items |
|---|---|
| 2.2 Prepare a bibliography of reference materials for a report using a variety of consumer, workplace, and public documents. | 0 |
| *Comprehension and Analysis of Grade-Level-Appropriate Text* | |
| 2.3 Generate relevant questions about readings on issues that can be researched. | 0 |
| 2.4 Synthesize the content from several sources or works by a single author dealing with a single issue; paraphrase the ideas and connect them to other sources and related topics to demonstrate comprehension. | 3 |
| 2.5 Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration. | 3 |
| 2.6 Demonstrate the use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and in access guides to World Wide Web sites on the Internet). | 0 |
| *Expository Critique* | |
| 2.7 Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings. | 3 |
| 2.8 Evaluate the credibility of an author's argument or defense of a claim by critiquing the relationship between generalizations and evidence, the comprehensiveness of evidence, and the way in which the author's intent affects the structure and tone of the text (e.g., in professional journals, editorials, political speeches, primary source material). | 5 |

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# CAHSEE Language Arts Blueprint*

**Revised July 2003**

| California Content Standard | Number and Type of Items |
|---|---|
| 3.0 Literary Response and Analysis<br>Students read and respond to historically or culturally significant works of literature that reflect and enhance their studies of history and social science. They conduct in-depth analysis of recurrent patterns and themes. The selections in *Recommended Literature, Grades Nine Through Twelve* illustrate the quality and complexity of the materials to be read by students. | **20**<br>Multiple-choice Items |
| *Structural Features of Literature* | |
| 3.1 Articulate the relationship between the expressed purposes and the characteristics of different forms of dramatic literature (e.g., comedy, tragedy, drama, dramatic monologue). | 2 |
| 3.2 Compare and contrast the presentation of a similar theme or topic across genres to explain how the selection of genre shapes the theme or topic. | 0 |
| *Narrative Analysis of Grade-Level-Appropriate Text* | |
| 3.3 Analyze interactions between main and subordinate characters in a literary text (e.g., internal and external conflicts, motivations, relationships, influences) and explain the way those interactions affect the plot. | 2 |
| 3.4 Determine characters' traits by what the characters say about themselves in narration, dialogue, dramatic monologue, and soliloquy. | 2 |
| 3.5 Compare works that express a universal theme and provide evidence to support the ideas expressed in each work. | 2 |
| 3.6 Analyze and trace an author's development of time and sequence, including the use of complex literary devices (e.g., foreshadowing, flashbacks). | 2 |
| 3.7 Recognize and understand the significance of various literary devices, including figurative language, imagery, allegory, and symbolism, and explain their appeal. | 2 |

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| California Content Standard | Number and Type of Items |
|---|---|
| 3.8 Interpret and evaluate the impact of ambiguities, subtleties, contradictions, ironies, and incongruities in a text. | 2 |
| 3.9 Explain how voice, persona, and the choice of a narrator affect characterization and the tone, plot, and credibility of a text. | 2 |
| 3.10 Identify and describe the function of dialogue, scene designs, soliloquies, asides, and character foils in dramatic literature. | 1 |
| *Literary Criticism* | |
| †8.3.7 Analyze a work of literature, showing how it reflects the heritage, traditions, attitudes, and beliefs of its author. (Biographical approach) | 3 (Tasks that assess the three different approaches will be rotated across test forms.) |
| 3.11 Evaluate the aesthetic qualities of style, including the impact of diction and figurative language on tone, mood, and theme, using the terminology of literary criticism. (Aesthetic approach) | |
| 3.12 Analyze the way in which a work of literature is related to the themes and issues of its historical period. (Historical approach) | |
| **Writing (Grades Nine and Ten)** | **27** **Multiple-choice Items** |
| 1.0 Writing Strategies<br>Students write clear, coherent, and focused essays. The writing exhibits students' awareness of audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed. | 12 Multiple-choice Items |
| *Organization and Focus* | |
| 1.1 Establish a controlling impression or coherent thesis that conveys a clear and distinctive perspective on the subject and maintain a consistent tone and focus throughout the piece of writing. | 3 |
| 1.2 Use precise language, action verbs, sensory details, appropriate modifiers, and the active rather than the passive voice. | 3 |

*† Eighth-grade content standard.*

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# CAHSEE Language Arts Blueprint*
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| California Content Standard | Number and Type of Items |
|---|---|
| *Research and Technology* | |
| 1.3 Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources. | 0 |
| 1.4 Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions). | 2 |
| 1.5 Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents). | 1 |
| 1.6 Integrate quotations and citations into a written text while maintaining the flow of ideas. | 0 |
| 1.7 Use appropriate conventions for documentation in the text, notes, and bibliographies by adhering to those in style manuals (e.g., *Modern Language Association Handbook, The Chicago Manual of Style*). | 0 |
| 1.8 Design and publish documents by using advanced publishing software and graphic programs. | 0 |
| *Evaluation and Revision* | |
| 1.9 Revise writing to improve the logic and coherence of the organization and controlling perspective, the precision of word choice, and the tone by taking into consideration the audience, purpose, and formality of the context. | 3 |
| 2.0 Writing Applications (Genres and Their Characteristics)<br>Students combine the rhetorical strategies of narration, exposition, persuasion, and description to produce texts of at least 1,500 words each. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0. | Essay Item |

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## Revised July 2003

| California Content Standard | Number and Type of Items |
|---|---|
| Using the writing strategies of grades nine and ten outlined in Writing Standard 1.0, students: | √ |
| 2.1 Write biographical ~~or autobiographical~~ narratives ~~or short stories~~: | |
| a. Relate a sequence of events and communicate the significance of the events to the audience. | |
| b. Locate scenes and incidents in specific places. | |
| c. Describe with concrete sensory details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of the characters; use interior monologue to depict the characters' feelings. | |
| d. Pace the presentation of actions to accommodate changes in time and mood. | |
| e. Make effective use of descriptions of appearance, images, shifting perspectives, and sensory details. | |
| 2.2 Write responses to literature: | √ |
| a. Demonstrate a comprehensive grasp of the significant ideas of literary works. | |
| b. Support important ideas and viewpoints through accurate and detailed references to the text or to other works. | |
| c. Demonstrate awareness of the author's use of stylistic devices and an appreciation of the effects created. | |
| d. Identify and assess the impact of perceived ambiguities, nuances, and complexities within the text. | |
| 2.3 Write expository compositions, including analytical essays and research reports: | √ |
| a. Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives. | |

√ *Covered on this exam.*

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# CAHSEE Language Arts Blueprint*
## Revised July 2003

| California Content Standard | Number and Type of Items |
|---|---|
| b. Convey information and ideas from primary and secondary sources accurately and coherently. | |
| c. Make distinctions between the relative value and significance of specific data, facts, and ideas. | |
| ~~d. Include visual aids by employing appropriate technology to organize and record information on charts, maps, and graphs.~~ | |
| e. Anticipate and address readers' potential misunderstandings, biases, and expectations. | |
| f. Use technical terms and notations accurately. | |
| 2.4 Write persuasive compositions: | √ |
| a. Structure ideas and arguments in a sustained and logical fashion. | |
| b. Use specific rhetorical devices to support assertions (e.g., appeal to logic through reasoning; appeal to emotion or ethical belief; relate a personal anecdote, case study, or analogy). | |
| c. Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, and expressions of commonly accepted beliefs and logical reasoning. | |
| d. Address readers' concerns, counterclaims, biases, and expectations. | |
| 2.5 Write business letters: | √ |
| a. Provide clear and purposeful information and address the intended audience appropriately. | |
| b. Use appropriate vocabulary, tone, and style to take into account the nature of the relationship with, and the knowledge and interests of, the recipients. | |
| c. Highlight central ideas or images. | |

√ *Covered on this exam*

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**Revised July 2003**

| California Content Standard | Number and Type of Items |
|---|---|
| d. Follow a conventional style with page formats, fonts, and spacing that contribute to the documents' readability and impact. | |
| 2.6 Write technical documents (e.g., a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, minutes of a meeting): | |
| a. Report information and convey ideas logically and correctly. | |
| b. Offer detailed and accurate specifications. | |
| c. Include scenarios, definitions, and examples to aid comprehension (e.g., troubleshooting guide). | |
| d. Anticipate readers' problems, mistakes, and misunderstandings. | |
| 1.0 Written and Oral English Language Conventions<br>Students write and speak with a command of standard English conventions. | 15<br>Multiple-choice Items |
| *Grammar and Mechanics of Writing* | |
| 1.1 Identify and correctly use clauses (e.g., main and subordinate), phrases (e.g., gerund, infinitive, and participial), and mechanics of punctuation (e.g., semicolons, colons, ellipses, hyphens). | *5* |
| 1.2 Understand sentence construction (e.g., parallel structure, subordination, proper placement of modifiers) and proper English usage (e.g., consistency of verb tenses). | *5* |
| 1.3 Demonstrate an understanding of proper English usage and control of grammar, paragraph and sentence structure, diction, and syntax. | *5* |
| *Manuscript Form* | |
| 1.4 Produce legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization. | 0 |
| 1.5 Reflect appropriate manuscript requirements, including title page presentation, pagination, spacing and margins, and integration of source and support material (e.g., in-text citation, use of direct quotations, paraphrasing) with appropriate citations. | 0 |

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# CAHSEE Language Arts Blueprint*
## Revised July 2003

### 1 Essay – Randomly rotate all categories of writing for each test administration

From standards 2.2 or 2.3

Response to Literature or Analytic Essay (Expository Writing)

From standards 2.1, 2.4, or 2.5

Biography, persuasion, business letter

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| **Grade 6—Statistics, Data Analysis, and Probability** | **8 Items Total** |
| 1.0 Students compute and analyze statistical measurements for data sets: | |
| 1.1 Compute the ~~range,~~ mean, median, and mode of data sets. | 3 |
| 1.2 Understand how additional data added to data sets may affect these computations of measures of central tendency. | 0 |
| 1.3 Understand how the inclusion or exclusion of outliers affects measures of central tendency. | 0 |
| 1.4 Know why a specific measure of central tendency (mean, median, mode) provides the most useful information in a given context. | 0 |
| 2.0 Students use data samples of a population and describe the characteristics and limitations of the samples: | |
| 2.1 Compare different samples of a population with the data from the entire population and identify a situation in which it makes sense to use a sample. | 0 |
| 2.2 Identify different ways of selecting a sample (e.g., convenience sampling, responses to a survey, random sampling) and which method makes a sample more representative for a population. | 0 |
| 2.3 Analyze data displays and explain why the way in which the question was asked might have influenced the results obtained and why the way in which the results were displayed might have influenced the conclusions reached. | 0 |
| 2.4 Identify data that represent sampling errors and explain why the sample (and the display) might be biased. | 0 |
| 2.5 Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims. | 1 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| 3.0 Students determine theoretical and experimental probabilities and use these to make predictions about events: | |
| 3.1 Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome. | 1 |
| 3.2 Use data to estimate the probability of future events (e.g., batting averages or number of accidents per mile driven). | 0 |
| 3.3 Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if *P* is the probability of an event, 1-*P* is the probability of an event not occurring. | 2 |
| 3.4 Understand that the probability of either of two disjoint events occurring is the sum of the two individual probabilities and that the probability of one event following another, in independent trials, is the product of the two probabilities. | 0 |
| 3.5 Understand the difference between independent and dependent events. | 1 |
| **Grade 7—Number Sense** | **14 Items Total** |
| 1.0 Students know the properties of, and compute with, rational numbers expressed in a variety of forms: | |
| 1.1 Read, write, and compare rational numbers in scientific notation (positive and negative powers of 10) with approximate numbers using scientific notation. | 1 |
| 1.2 Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers. | 3 |
| 1.3 Convert fractions to decimals and percents and use these representations in estimations, computations, and applications. | 2 |

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# CAHSEE Mathematics Blueprint*

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| California Content Standard | Number of Items |
|---|---|
| 1.4 Differentiate between rational and irrational numbers. | 0 |
| 1.5 Know that every rational number is either a terminating or repeating decimal and be able to convert terminating decimals into reduced fractions. | 0 |
| 1.6 Calculate the percentage of increases and decreases of a quantity. | 1 |
| 1.7 Solve problems that involve discounts, markups, commissions, and profit, and compute simple and compound interest. | 2 |
| 2.0 Students use exponents, powers, and roots, and use exponents in working with fractions: | |
| 2.1 Understand negative whole-number exponents. Multiply and divide expressions involving exponents with a common base. | 1 |
| 2.2 Add and subtract fractions by using factoring to find common denominators. | 1 |
| 2.3 Multiply, divide, and simplify rational numbers by using exponent rules. | 1 |
| 2.4 Use the inverse relationship between raising to a power and extracting the root of a perfect square integer; for an integer that is not square, determine without a calculator the two integers between which its square root lies and explain why. | 1 |
| 2.5 Understand the meaning of the absolute value of a number; interpret the absolute value as the distance of the number from zero on a number line; and determine the absolute value of real numbers. | 1 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| Grade 7—Algebra and Functions | 17 Items Total |
|---|---|
| 1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs: | |
| 1.1 Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A). | 2 |
| 1.2 Use the correct order of operations to evaluate algebraic expressions such as $3(2x+5)^2$. | 1 |
| 1.3 Simplify numerical expressions by applying properties of rational numbers (e.g., identity, inverse, distributive, associative, commutative) and justify the process used. | 0 |
| 1.4 Use algebraic terminology (e.g., variable, equation, term, coefficient, inequality, expression, constant) correctly. | 0 |
| 1.5 Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph. | 3 |
| 2.0 Students interpret and evaluate expressions involving integer powers and simple roots: | |
| 2.1 Interpret positive whole-number powers as repeated multiplication and negative whole-number powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents. | 1 |
| 2.2 Multiply and divide monomials; extend the process of taking powers and extracting roots to monomials when the latter results in a monomial with an integer exponent. | 1 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| 3.0 Students graph and interpret linear and some nonlinear functions: | |
| 3.1 Graph functions of the form $y=nx^2$ and $y=nx^3$ and use in solving problems. | 1 |
| 3.2 Plot the values from the volumes of three-dimensional shapes for various values of the edge lengths (e.g., cubes with varying edge lengths or a triangle prism with a fixed height and an equilateral triangle base of varying lengths). | 0 |
| 3.3 Graph linear functions, noting that the vertical change (change in *y*-value) per unit of horizontal change (change in *x*-value) is always the same and know that the ratio ("rise over run") is called the slope of a graph. | 2 |
| 3.4 Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of a line equals the quantities. | 1 |
| 4.0 Students solve simple linear equations and inequalities over the rational numbers: | |
| 4.1 Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results. | 3 |
| 4.2 Solve multistep problems involving rate, average speed, distance, and time or a direct variation. | 2 |

**Blueprint approved by the State Board of Education on July 9, 2003.*

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| **Grade 7—Measurement and Geometry** | **17 Items Total** |
| 1.0 Students choose appropriate units of measure and use ratios to convert within and between measurement systems to solve problems: | |
| 1.1 Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters). | 2 |
| 1.2 Construct and read drawings and models made to scale. | 1 |
| 1.3 Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer. | 2 |
| 2.0 Students compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area and volume are affected by changes of scale: | |
| 2.1 Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders. | 3 |
| 2.2 Estimate and compute the area of more complex or irregular two- and three-dimensional figures by breaking the figures down into more basic geometric objects. | 2 |
| 2.3 Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and volume is multiplied by the cube of the scale factor. | 1 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| 2.4 Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units (1square foot = 144 square inches or [1 $ft^2$] = [144 $in^2$], 1 cubic inch is approximately 16.38 cubic centimeters or [1 $in^3$] = [16.38 $cm^3$]). | 1 |
| 3.0 Students know the Pythagorean theorem and deepen their understanding of plane and solid geometric shapes by constructing figures that meet given conditions and by identifying attributes of figures: | |
| 3.1 Identify and construct basic elements of geometric figures (e.g., altitudes, mid-points, diagonals, angle bisectors, and perpendicular bisectors; central angles, radii, diameters, and chords of circles) by using a compass and straightedge. | 0 |
| 3.2 Understand and use coordinate graphs to plot simple figures, determine lengths and areas related to them, and determine their image under translations and reflections. | 2 |
| 3.3 Know and understand the Pythagorean theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean theorem by direct measurement. | 2 |
| 3.4 Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures. | 1 |
| 3.5 Construct two-dimensional patterns for three-dimensional models, such as cylinders, prisms, and cones. | 0 |
| 3.6 Identify elements of three-dimensional geometric objects (e.g., diagonals of rectangular solids) and describe how two or more objects are related in space (e.g., skew lines, the possible ways three planes might intersect). | 0 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| **Grade 7—Statistics, Data Analysis, and Probability** | **4 Items Total** |
| 1.0 Students collect, organize, and represent data sets that have one or more variables and identify relationships among variables within a data set by hand and through the use of an electronic spreadsheet software program: | |
| 1.1 Know various forms of display for data sets, ~~including a stem-and-leaf plot or box-and-whisker plot;~~ use the forms to display a single set of data or to compare two sets of data. | 2 |
| 1.2 Represent two numerical variables on a scatterplot and informally describe how the data points are distributed and any apparent relationship that exists between the two variables (e.g., between time spent on homework and grade level). | 2 |
| 1.3 Understand the meaning of, and be able to compute the minimum, the lower quartile, the median, the upper quartile, and the maximum of a data set. | 0 |
| **Grade 7—Mathematical Reasoning** | **8 Items Total Plus Integrated into Other Strands** |
| 1.0 Students make decisions about how to approach problems: | |
| 1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns. | 2 |
| 1.2 Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed. | 1 |
| 1.3 Determine when and how to break a problem into simpler parts. | 0 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| 2.0 Students use strategies, skills, and concepts in finding solutions: | |
| 2.1 Use estimation to verify the reasonableness of calculated results. | 2 |
| 2.2 Apply strategies and results from simpler problems to more complex problems. | 0 |
| 2.3 Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques. | 1 |
| 2.4 Make and test conjectures by using both inductive and deductive reasoning. | 1 |
| 2.5 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning. | 0 |
| 2.6 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work. | 0 |
| 2.7 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy. | 0 |
| 2.8 Make precise calculations and check the validity of the results from the context of the problem. | 0 |
| 3.0 Students determine a solution is complete and move beyond a particular problem by generalizing to other situations: | |
| 3.1 Evaluate the reasonableness of the solution in the context of the original situation. | 0 |
| 3.2 Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems. | 0 |
| 3.3 Develop generalizations of the results obtained and the strategies used and apply them to new problem situations. | 1 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| **Algebra I** | **12 Items Total** |
| 1.0 Students identify and use the arithmetic properties of subsets of integers and rational, irrational, and real numbers, including closure properties for the four basic arithmetic operations where applicable: | |
| 1.1 Students use properties of numbers to demonstrate whether assertions are true or false. | 0 |
| 2.0 Students understand and use such operations as taking the opposite, finding the reciprocal, and taking a root~~, and raising to a fractional power~~. They understand and use the rules of exponents. | 1 |
| 3.0 Students solve equations and inequalities involving absolute values. | 1 |
| 4.0 Students simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x-5) + 4(x-2) = 12$. | 2 |
| 5.0 Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step. | 1 |
| 6.0 Students graph a linear equation and compute the $x$- and $y$-intercepts (e.g., graph $2x + 6y = 4$). ~~They are also able to sketch the region defined by linear inequality (e.g., they sketch the region defined by $2x + 6y < 4$).~~ | 2<br>(1 graphing item; 1 computing item) |
| 7.0 Students verify that a point lies on a line, given an equation of the line. Students are able to derive linear equations. ~~by using the point-slope formula.~~ | 1 |
| 8.0 Students understand the concepts of parallel lines ~~and perpendicular lines~~ and how their slopes are related. ~~Students are able to find the equation of a line perpendicular to a given line that passes through a given point~~. | 1 |

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| California Content Standard | Number of Items |
|---|---|
| 9.0 Students solve a system of two linear equations in two variables algebraically and are able to interpret the answer graphically. Students are able to solve a system of two linear inequalities in two variables and to sketch the solution sets. | 1 |
| 10.0 Students add, subtract, multiply, and divide monomials and polynomials. Students solve multistep problems, including word problems, by using these techniques. | 1 |
| 11.0 Students apply basic factoring techniques to second- and simple third-degree polynomials. These techniques include finding a common factor for all terms in a polynomial, recognizing the difference of two squares, and recognizing perfect squares of binomials. | 0 |
| 12.0 Students simplify fractions with polynomials in the numerator and denominator by factoring both and reducing them to the lowest terms. | 0 |
| 13.0 Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems by using these techniques. | 0 |
| 14.0 Students solve a quadratic equation by factoring or completing the square. | 0 |
| 15.0 Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems. | 1 |
| 16.0 Students understand the concepts of a relation and a function, determine whether a given relation defines a function, and give pertinent information about given relations and functions. | 0 |
| 17.0 Students determine the domain of independent variables and the range of dependent variables defined by a graph, a set of ordered pairs, or a symbolic expression. | 0 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| 18.0 Students determine whether a relation defined by a graph, a set of ordered pairs, or a symbolic expression is a function and justify the conclusion. | 0 |
| 19.0 Students know the quadratic formula and are familiar with its proof by completing the square. | 0 |
| 20.0 Students use the quadratic formula to find the roots of a second-degree polynomial and to solve quadratic equations. | 0 |
| 21.0 Students graph quadratic functions and know that their roots are the x-intercepts. | 0 |
| 22.0 Students use the quadratic formula or factoring techniques or both to determine whether the graph of a quadratic function will intersect the x-axis in zero, one, or two points. | 0 |
| 23.0 Students apply quadratic equations to physical problems, such as the motion of an object under the force of gravity. | 0 |
| 24.0 Students use and know simple aspects of a logical argument: | |
| 24.1 Students explain the difference between inductive and deductive reasoning and identify and provide examples of each. | 0 |
| 24.2 Students identify the hypothesis and conclusion in logical deduction. | 0 |
| 24.3 Students use counterexamples to show that an assertion is false and recognize that a single counterexample is sufficient to refute an assertion. | 0 |
| 25.0 Students use properties of the number system to judge the validity of results, to justify each step of a procedure, and to prove or disprove statements: | |
| 25.1 Students use properties of numbers to construct simple, valid arguments (direct and indirect) for, or formulate counterexamples to, claimed assertions. | 0 |

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# CAHSEE Mathematics Blueprint*

**Revised July 2003**

| California Content Standard | Number of Items |
|---|---|
| 25.2 Students judge the validity of an argument according to whether the properties of the real number system and the order of operations have been applied correctly at each step. | 0 |
| 25.3 Given a specific algebraic statement involving linear, quadratic, or absolute value expressions or equations or inequalities, students determine whether the statement is true sometimes, always, or never. | 0 |

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Educational Testing Service

# Alternative Means Pilot Study: Appendix B Directions for Administration

September 2011

# *California High School Exit Examination*

## Directions for Administration — Alternative Means Pilot Study

May–June 2011

# Table of Contents

# INTRODUCTION

## Background

The primary purpose of the California High School Exit Examination (CAHSEE) is to improve student achievement and to ensure that students who graduate from public high schools can demonstrate competency in reading, writing, and mathematics. The CAHSEE helps identify students who are not developing skills that are essential for life after high school and encourages local educational agencies (LEAs) to provide these students the attention and resources needed to help them achieve these skills during their high school years. All California public school students, except eligible students with disabilities (SWDs), must satisfy the CAHSEE requirement, as well as all other state and local requirements, in order to receive a high school diploma.

## CAHSEE Alternative Means Pilot Study

The purpose of this pilot study is to determine the feasibility of using a collection of evidence as an alternative means to the CAHSEE for eligible SWDs. This pilot study will examine the work samples submitted by general education students and eligible SWDs, demonstrating the same level of achievement in the English–language arts (ELA) and mathematics content standards that is required for passage of the CAHSEE.

**Note: Participation in this pilot study does NOT mean that a student has met existing requirements for passing the CAHSEE.**

## Student Eligibility Criteria

In the context of the pilot study for purposes of comparison, current grade eleven and grade twelve general education students and SWDs who took the CAHSEE and passed or did not pass one or both portions of the CAHSEE are needed to participate in the pilot study. Participating students fall into one of three groups meeting the following criteria:

<u>SWDs</u>

- Have a current individualized education program (IEP) that indicates the student has an anticipated graduation date and is scheduled to receive a high school diploma on or after January 1, 2011

- Have certification from the LEA (school district, county office of education, state special school, or charter school) that the student has satisfied or will satisfy all other state and local requirements

- Have attempted to pass those sections of the CAHSEE not yet passed at least twice after grade ten, with the accommodations or modifications, if any, specified in the student's IEP

- Have/have not met the CAHSEE requirement

Students with a Section 504 Plan

- Have a current Section 504 plan that indicates the student has an anticipated graduation date and is scheduled to receive a high school diploma on or after January 1, 2011

- Have certification from the LEA (school district, county office of education, state special school, or charter school) that the student has satisfied or will satisfy all other state and local requirements

- Have attempted to pass those sections of the CAHSEE not yet passed at least twice after grade ten, with the accommodations or modifications, if any, specified in the student's Section 504 plan

- Have/have not met the CAHSEE requirement

Students in General Education

- Do not have an IEP or a Section 504 plan

- Have certification from the LEA (school district, county office of education, state special school, or charter school) that the student has satisfied or will satisfy all other state and local requirements

- Have/have not met the CAHSEE requirement

- Have achieved a scale score between 325 and 375 the last time he/she took the CAHSEE

## Variations, Accommodations, and Modifications

Test variations, accommodations, and modifications specified in the student's IEP or Section 504 plan may be used by students participating in the pilot study. Examples of **variations** that apply to all students include:

- Directions may be simplified or clarified.

- Tasks are not timed; all students may be provided as much time as necessary to complete the task.

Testing variations also available to any student who regularly uses them in the classroom include:

- Special or adaptive furniture
- Special lighting, special acoustics, or visual magnifying or audio amplification equipment
- Individual carrel or study enclosure
- Separate, supervised location
- Colored overlay, mask, or other means to maintain visual attention to the examination or test questions
- Manually Coded English or American Sign Language to present directions for test administration

Accommodations and modifications (as defined in California *Education Code* Section 60850) change the manner in which a test is administered or in how a test taker is allowed to respond. Accommodations do not change what is being measured, whereas modifications change what is measured or affect the comparability of scores. IEPs or Section 504 plans alone determine whether a student is tested with accommodations or modifications. For additional information, refer to the Testing Variations, Accommodations, and Modifications Matrix located on the CDE Testing Variations, Accommodations, and Modifications Web site at http://www.cde.ca.gov/ta/tg/sa/documents/matrix2010.doc.

## Student Confidentiality

Please take care to ensure student confidentiality when compiling work samples or collecting information about students for submission. Please remember:

- A Parent Consent Form is required when submitting a video recording or audiotape of student work (refer to Appendix I).
- There may be occasions while recording the voice or image of the participating student when other students are present in the room. Therefore, there may be limited occasions during which students not being assessed may appear incidentally in videotapes and/or photographs or during which an unintended or non-tested student voice may be recorded on audiotape. In these cases, an Incidental Consent Form is required when submitting a video recording or audiotape of student work (refer to Appendix J).

**Any video or audio consent forms must be kept on file with the participating LEA.**

### Security

The on-demand tasks provided in Appendixes E and F are considered secure and confidential material. Please do not distribute or review them with students prior to administration of the task. These task templates may be photocopied for use with multiple students. All materials are the property of the CDE and may be copied only for use in this pilot study. Disclosure of any secure information is a serious breach of test security and is prohibited.

Teachers will receive *Directions for Administration* directly from Educational Testing Service (ETS).

Students should remain in the testing room during the completion of tasks; however, please follow standard test site procedures for allowing students to use the restroom, etc.

### Setting

When selecting a room in which to administer the tasks, it is essential to provide students with good lighting, comfortable temperature, adequate ventilation, and freedom from noise and interruptions. Try to maintain a natural classroom atmosphere during administration of the tasks. Encourage students to do their best. Check periodically to make sure that students are recording their responses properly. In addition:

- Put the —Do Not Disturb" sign on the door (refer to Appendix K).
- Arrange seating so that the students work independently; all seats should face the same direction, with spacing of at least four feet from center of desk to center of desk.
- If using a scribe, be sure the scribe is seated close to the student and that conversations will not reach other students in the room.
- If video- or audio-recording a student's responses, be sure the student is working in a separate area so that conversations will not reach other students in the room.
- Make sure students' desks are free of books, electronic devices (e.g., cellular phones), or reference materials.
- Remove or cover information that is displayed on bulletin boards, whiteboards, or charts and could be used by students to help respond to tasks.

## COLLECTION OF EVIDENCE (WORK SAMPLES)

A work sample is a task-based representation of the student's mastery of the state content standards assessed on the CAHSEE. The teacher/proctor and the student (if deemed appropriate) have options for the types of student work samples that may be submitted.

The table below outlines five distinct types of work samples (refer to Appendixes C and D for specific examples of work samples).

| Type of Work Sample | Definition | Options (aligned to a strand) |
|---|---|---|
| **On-Demand Writing Prompt** | **A performance writing prompt provided by ETS and completed in the classroom under the supervision of the teacher/proctor** | • **Provided by ETS; refer to Appendix F** |
| **On-Demand Classroom Performance Task** | **A performance task provided by ETS and completed in the classroom under the supervision of the teacher/proctor** | • **Provided by ETS; refer to Appendixes E and F** |
| **Classroom-Prepared Task** | **An assignment, unit quiz, or chapter test completed in the classroom by the student under the supervision of the teacher/proctor** | • **Essay**<br>• **Student journal entry**<br>• **Class projects**<br>• **Poster board presentation**<br>• **Previously completed writing tasks**<br>• **Collection of data charts, graphs**<br>• **Assignment, unit quiz, or chapter test**<br>• **Worksheets**<br>• **Teacher-developed tests**<br>• **Critical analysis/research paper**<br>• **Character study**<br>• **PowerPoint slide presentation** |
| **Computer Presentation** | **An electronic presentation completed in the classroom by the student under the supervision of the teacher/proctor** | |
| **Audio/Visual Presentation** | **A video or audio recording of a student demonstrating knowledge and skills** | • **Recordings of in-class dramatic interpretation**<br>• **Student response to literature**<br>• **Readings from student journal entries**<br>• **Verbal responses to teacher questions or discussion of pertinent topics**<br>• **Peer-teaching demonstrations**<br>• **Use of manipulatives**<br>• **Photos or video of a scale model** |

## IDENTIFYING AND COMPILING A COLLECTION OF EVIDENCE

Work samples produced during current instruction or coming from a student's portfolio are acceptable. The work must have been completed during grade eleven or grade twelve, measure the content standards assessed on the CAHSEE (see Appendixes G and H for full lists of standards), and be within the content strand assigned to the LEA when materials were ordered. Each work sample submitted must measure at least one content standard. Samples must represent either ELA or mathematics and be focused only on the assigned content area.

Please submit a maximum of three work samples for each student, including one each of the following types of tasks:

- On-demand writing prompt OR on-demand classroom performance task
- Classroom-prepared task (may be current or previously completed work)
- Computer presentation OR audio/visual presentation

Depending upon the availability of current or previously developed materials that align to the assigned strand, submitting one each of the above types of work samples may not be possible. Submission of less than three work samples will not preclude a teacher from including a student's collection of evidence in the pilot study. However, greater diversity in student materials received will allow more in-depth analysis of the feasibility of using student work samples as an alternative means for showing mastery of the content standards assessed on the CAHSEE. Submission of samples representing each of these three categories is the target for this pilot study.

### Administration

When administering on-demand tasks, follow these guidelines:

- Ensure that the student has a quiet, private work environment.
- These are not timed tasks, so give students sufficient time for completion.
- Give the student the task (see Appendixes E and F), and ask the student to complete it to the best of his or her ability.
- The student may use the back of the paper or additional sheets, as needed, to complete the task.
- The teacher/proctor must stay in the room while the student completes the task to ensure that the work is that of the student.
- Verify that the work sample measures the appropriate content standard/strand.

After the student completes the task, the teacher/proctor collects the work sample(s) and attaches the Student Work Sample Submission Form (see Appendix B for a blank form).

- For hard-copy projects (e.g., book reports, research reports): Print or photocopy a hard copy of the report.

- For electronic submissions (e.g., computer presentations): Print a hard copy of the presentation. You may print it as a handout provided all details on each slide are legible.

- For projects: Take photographs of the project—one showing the completed project and at least two of specific sections of the project. Work must be visible, and photographs should include captions describing the contents. Include sequence numbers on the photographs.

- For audio or video recordings: Include a marker of the time and date when the recording was made.

For student work samples that do not fall into these specific categories, use your best judgment when submitting a student's work samples.

## STUDENT WORK SAMPLE SUBMISSION FORM

Each student work sample will require a CAHSEE alternative means pilot study Student Work Sample Submission Form to be attached to the submission. The following sections must be completed by the teacher/proctor:

- **Date work sample completed**
  For on-demand writing prompts or on-demand classroom performance tasks, enter the date the task was administered. For current or previously completed tasks, enter the date when the task was completed by the student.

- **SSID**
  Student Identification

- **LEA**
  Identify the name of the LEA where the student resides or is enrolled.

- **Course**
  Course name (ELA, mathematics, etc.) in which the student completed the task

- **Content task(s) represented**
  ELA or mathematics

- **Strand**
  The content strand to which the work sample aligns

- **Code of standard(s) assessed**
  One or more standards may be assigned to a given work sample (refer to Appendixes G and H of this manual for standard codes).

- **Work sample**
  Type of work sample submitted (identify one of the five types of work samples described on page 8 of this manual)

- **Description of completed work sample**
  Detailed information describing the student's work sample, such as:
    - How the work sample was administered
    - The materials used for the creation of the work sample
    - How the task was presented to the student

***Be sure to submit a separate Student Work Sample Submission Form for each work sample*.**

The following page shows a sample submission form (refer to Appendix B for a blank Student Work Sample Submission Form).

## STUDENT WORK SAMPLE SUBMISSION FORM – EXAMPLE

<table>
<tr><td>Date Work Sample Completed: 01/01/11</td><td>SSID: XXXXXXXXXX</td></tr>
<tr><td>LEA: Calaveras Unified</td><td>Course: General Math</td></tr>
<tr><td colspan="2">Content Task(s) Represented: □ ELA X Mathematics<br>(Please check one content area and one strand per work sample.)</td></tr>
<tr><td>ELA Strand:</td><td>Code of Standard(s) Assessed:</td></tr>
<tr><td>□ Word Analysis<br>□ Reading Comprehension<br>□ Literary Response and Analysis<br>□ Writing Strategies<br>□ Writing Conventions<br>□ Writing Applications</td><td rowspan="2">7NS2.2</td></tr>
<tr><td>Mathematics Strand:</td></tr>
<tr><td>□ Probability and Statistics<br>X Number Sense<br>□ Algebra and Functions<br>□ Measurement and Geometry<br>□ Algebra I</td><td></td></tr>
<tr><td>Work Sample:</td><td>Description of Completed Work Sample:</td></tr>
<tr><td>□ On-Demand Writing Prompt<br>A performance writing prompt provided by ETS and completed in the classroom under the supervision of the teacher/proctor</td><td rowspan="8">Student work sample was a previously developed worksheet completed in the classroom as an assignment; a sample copy of the assignment given to the students is attached. The assignment was given to the student after a week-long study of adding and subtracting fractions using factoring to find common denominators. The student was given the worksheet and was able to complete 19 out of the 20 questions. Student answered 16 of the questions correctly with a final score of 80 out of 100 points.</td></tr>
<tr><td>□ On-Demand Classroom Performance Task<br>A performance task provided by ETS and completed in the classroom under the supervision of the teacher/proctor</td></tr>
<tr><td>X Classroom-Prepared Task<br>An assignment, unit quiz, or chapter test completed in the classroom by the student under the supervision of the teacher/proctor</td></tr>
<tr><td>□ Computer Presentation<br>An electronic presentation completed in the classroom by the student under the supervision of the teacher/proctor</td></tr>
<tr><td>□ Audio/Visual Presentation<br>A video or audio recording of student demonstrating knowledge and skills</td></tr>
</table>

## COMPLETING THE STUDENT INFORMATION/SIGNATURE FORM

One **Student Information/Signature Form** must be submitted for each collection of evidence for an individual student. The information provided on this form will allow for an accurate description of the population sampled. Please be as accurate and thorough as possible when completing this form.

For each box, select the response that is most descriptive of the student, or fill in the blank as appropriate. *A teacher must sign the bottom of the form certifying that the work samples submitted are the student's work and that the samples are aligned with the content standards assessed by the CAHSEE*. The fields on the form are as follows:

- **School**
  Write the name of the school this student attends.

- **LEA**
  Identify the name of the LEA where the student resides or is enrolled (e.g., in the case of a charter school).

- **SSID**
  Please **do not** write the student's name on this form. The only identification required is the student's unique 10-digit Statewide Student Identifier (SSID).

- **Gender**
  Select Female or Male.

- **Ethnicity/Race**
  Every student must have at least one indicator marked in this box. First, select whether or not the student's ethnicity is Hispanic or Latino. Then mark all other racial categories that apply. Some students may have more than one racial indicator marked.

- **IEP/504**
  Indicate whether the student has an IEP, a Section 504 plan, or neither.

- **Grade Level**
  Indicate the grade level in which the student is currently enrolled (grade 11 or 12).

**Socioeconomically Disadvantaged**

Indicate whether or not the student is socioeconomically disadvantaged. This is defined as a student for whom both parents have not received a high school diploma and/or a student who participates in the free or reduced-price lunch program, also known as the National School Lunch Program (NSLP).

## English Proficiency

Indicate whether the student is classified as English Only (EO), Initially Fluent English Proficient (IFEP), English Learner (EL), or Reclassified Fluent English Proficient (RFEP). EO is defined as a student whose primary language is English. EL is defined as a student for whom there is a report of a primary language other than English and who, on the basis of the state-approved assessment, has been determined to lack the clearly defined English language skills to succeed in the school's regular instructional programs. IFEP and RFEP students are those whose primary language is other than English and who have met LEA criteria for determining proficiency in English (i.e., those students who were initially identified as IFEP and students reclassified from EL to RFEP). Mark only one selection in this box.

## Special Education Services

Indicate whether the student receives no special education services, or indicate the student's disability code if receiving services. Only one of the following disability codes should be marked, if appropriate.

| | | | |
|---|---|---|---|
| MR/ID | mental retardation/intellectual disability | OHI | other health impairment |
| HH | hard of hearing | SLD | specific learning disability |
| DEAF | deaf | DB | deaf blindness |
| SLI | speech or language impairment | MD | multiple disabilities |
| VI | visual impairment | AUT | autism |
| ED | emotional disturbance | TBI | traumatic brain injury |
| OI | orthopedic impairment | | |

## Accommodations and/or Modifications Used for Testing

Indicate whether or not the student regularly uses accommodations and/or modifications for state testing. An accommodation is any variation in the assessment environment or process that does not fundamentally alter what the test measures or affect the comparability of test scores. Examples of accommodations for the CAHSEE include using a Braille transcription; having the mathematics section of the test read to the student; or having extra time beyond the school day to complete the test. A modification changes what is measured or affects the comparability of scores. Examples of modifications include the use of a calculator for a mathematics assessment or a dictionary for an ELA assessment.

## Most recent CAHSEE scale scores

Indicate the student's scale score from English–language arts (ELA) and mathematics the last time the CAHSEE was taken, whether or not the student passed. Scale scores used for the CAHSEE range from 275 to 450. A scale score of 350 or higher is necessary to pass each portion of the CAHSEE.

**CAHSEE Attempts**

Indicate the cumulative number of times the student has taken the ELA portion of the CAHSEE, and then the cumulative number of times the student has taken the mathematics portion of the CAHSEE, to date.

**Teacher Certification**

Please have a teacher who administered the task with this student sign the form to certify that the submitted collection of evidence is the student's work and that the work is aligned with the content standards assessed by the CAHSEE. The teacher certification also provides acknowledgement that all Parent and Incidental Consent Forms have been received for the work submission.

The following page shows a sample Student Information/Signature Form (refer to Appendix A for a blank Student Information/Signature Form). This document may be photocopied for use in the pilot study.

## STUDENT INFORMATION/SIGNATURE FORM – EXAMPLE

# Student Information/Signature Form

**School**: ____Central High_____ **LEA**:_____Any_____

**Student SSID _0 1 2 3 4 5 6 7 8 9_**

**This student has a(n):**
☒ IEP ❑ 504 Plan ❑ Neither

**Gender**:
☒ Female ❑ Male

**Grade Level**:
❑ 11th ☒ 12th ❑ Ungraded

**Ethnicity**:
Hispanic or Latino ❑ Yes ☒ No

**Race**:

| | |
|---|---|
| Black or African American | ❑ |
| Am. Indian or Alaskan Native | ❑ |
| Asian | |
| Chinese | ❑ |
| Japanese | ❑ |
| Korean | ❑ |
| Vietnamese | ❑ |
| Asian Indian | ❑ |
| Laotian | ❑ |
| Cambodian | ❑ |
| Hmong | ❑ |
| Other Asian | ❑ |
| Filipino | ☒ |
| Pacific Islander | |
| Native Hawaiian | ❑ |
| Samoan | ❑ |
| Guamanian | ❑ |
| Tahitian | ❑ |
| Other Pacific Islander | ❑ |
| White | ❑ |

**Socioeconomically Disadvantaged**:
❑ Yes ☒ No

**English Proficiency**:

| | |
|---|---|
| English Only (EO) | ☒ |
| Initially Fluent (IFEP) | ❑ |
| English Learner (EL) | ❑ |
| Reclassified Fluent (RFEP) | ❑ |

**Special Education Services**:

| | |
|---|---|
| ❑ None | ❑ OI |
| ❑ MR/ID | ❑ OHI |
| ❑ HH | ☒ SLD |
| ❑ DEAF | ❑ DB |
| ❑ SLI | ❑ MD |
| ❑ VI | ❑ AUT |
| ❑ ED | ❑ TBI |

**Accommodations used for testing**:
❑ Yes ☒ No

**Most Recent CAHSEE Scale Scores**:
ELA _275_____ Math __290____

**CAHSEE Attempts:** How many times has this student taken the CAHSEE up to and including May 2011 (if applicable)?
**ELA**: ❑1 ❑2 ❑3 ☒4 ❑5 ❑>5 times **Math**: ❑1 ❑2 ❑3 ☒4 ❑5 ❑>5 times

## TEACHER CERTIFICATION

Name: _____Jane Doe_____

*I have read everything in this collection, and to the best of my knowledge all work samples in this collection are the student's work. I have reviewed this collection for alignment with the content standards assessed by the CAHSEE. I have ensured that all Parent and Incidental Consent Forms are filed at the school.*

Signature: Jane Doe Date: ____5/15/11_____

## SUBMISSION OF DOCUMENTATION

### Roles

Site Coordinator (or Teacher/Proctor)

Step 1: Determine which work samples to submit. Submit no more than three work samples per student. The work samples will measure a single content strand assigned to the school. For each student, the submitted work samples for a given content area (mathematics or ELA) must be for the strand assigned to the school. The work samples should represent the five different task types: 1) on-demand writing prompt, 2) on-demand classroom performance task, 3) classroom-prepared task, and 4) computer presentation, or 5) audio/visual presentation.

Step 2: Complete **one** Student Work Sample Submission Form for **each** work sample submitted. See page 10 for instructions on how to complete this form and page 12 for an example of a completed form. Refer to Appendix B for a blank copy. Attach the form to the completed work sample.

Step 3: Complete and sign the Student Information/Signature Form. Only one form per student is required. See page 13 for instructions on how to complete this form and page 16 for an example of a completed form. Refer to Appendix A for a blank copy. Secure all materials for an individual student with a rubber band or binder clip or put them in a separate envelope or folder.

Repeat steps 1 through 3 for each student for whom you are submitting work samples.

Step 4: Please return all materials promptly to the LEA testing coordinator.

LEA Coordinator

Step 5: Please verify all forms are complete and follow specific instructions from the CAHSEE Support and Processing Center to submit all materials to:

ETS – CAHSEE Alternative Means Pilot Study
Systron Business Center
2731 Systron Drive
Concord, CA 94518

**All materials are due to ETS by June 10, 2011**, so please ensure carrier pickup no later than June 8, 2011.

Please note that work samples cannot be returned. LEAs are encouraged to make copies of work samples for their records prior to submission of the collection of evidence to ETS. Contact the CAHSEE Support and Processing Center by phone (800-241-5687) or email (CAHSEE-Support@ets.org) for more information.

## APPENDIX A – STUDENT INFORMATION/SIGNATURE FORM

# Student Information/Signature Form

**School**: _____ **LEA:** ___

**Student SSID** _ _ _ _ _ _ _ _ _ _

**This student has a(n):**
❑ IEP ❑ 504 Plan ❑ Neither

**Gender**:
❑ Female ❑ Male

**Grade Level**:
❑ 11th ❑ 12th ❑ Ungraded

**Ethnicity**:
Hispanic or Latino ❑ Yes ❑ No

**Race**:
Black or African American ❑
Am. Indian or Alaskan Native ❑
Asian
- Chinese ❑
- Japanese ❑
- Korean ❑
- Vietnamese ❑
- Asian Indian ❑
- Laotian ❑
- Cambodian ❑
- Hmong ❑
- Other Asian ❑

Filipino ❑
Pacific Islander
- Native Hawaiian ❑
- Samoan ❑
- Guamanian ❑
- Tahitian ❑
- Other Pacific Islander ❑

White ❑

**Socioeconomically Disadvantaged**:
❑ Yes ❑ No

**English Proficiency**:
English Only (EO) ❑
Initially Fluent (IFEP) ❑
English Learner (EL) ❑
Reclassified Fluent (RFEP) ❑

**Special Education Services**:
❑ None ❑ OI
❑ MR/ID ❑ OHI
❑ HH ❑ SLD
❑ DEAF ❑ DB
❑ SLI ❑ MD
❑ VI ❑ AUT
❑ ED ❑ TBI

**Accommodations used for testing**:
❑ Yes ❑ No

**Most Recent CAHSEE Scale Scores**:
ELA _____ Math _____

**CAHSEE Attempts:** How many times has this student taken the CAHSEE up to and including May 2011 (if applicable)?
**ELA**: ❑1 ❑2 ❑3 ❑4 ❑5 ❑>5 times **Math**: ❑1 ❑2 ❑3 ❑4 ❑5 ❑>5 times

## TEACHER CERTIFICATION

Name: _____

*I have read everything in this collection, and to the best of my knowledge all work samples in this collection are the student's work. I have reviewed this collection for alignment with the content standards assessed by the CAHSEE. I have ensured that all Parent and Incidental Consent Forms are filed at the school.*

Signature: _____Date: _____

## APPENDIX B – STUDENT WORK SAMPLE SUBMISSION FORM

<table>
<tr><td>Date Work Sample Completed:</td><td>SSID:</td></tr>
<tr><td>LEA:</td><td>Course:</td></tr>
<tr><td colspan="2">Content Task(s) Represented: □ ELA □ Mathematics<br>(Please check one content area and one strand per work sample.)</td></tr>
<tr><td>ELA Strand:</td><td rowspan="3">Code of Standard(s) Assessed:</td></tr>
<tr><td>□ Word Analysis<br>□ Reading Comprehension<br>□ Literary Response and Analysis<br>□ Writing Strategies<br>□ Writing Conventions<br>□ Writing Applications</td></tr>
<tr><td>Mathematics Strand:<br>□ Probability and Statistics<br>□ Number Sense<br>□ Algebra and Functions<br>□ Measurement and Geometry<br>□ Algebra I</td></tr>
<tr><td>Work Sample:</td><td>Description of Completed Work Sample:</td></tr>
<tr><td>□ On-Demand Writing Prompt<br>A performance writing prompt provided by ETS and completed in the classroom under the supervision of the teacher/proctor.</td><td rowspan="8"></td></tr>
<tr><td>□ On-Demand Classroom Performance Task<br>A performance task provided by ETS and completed in the classroom under the supervision of the teacher/proctor.</td></tr>
<tr><td>□ Classroom-Prepared Task<br>An assignment, unit quiz, or chapter test completed in the classroom by the student under the supervision of the teacher/proctor.</td></tr>
<tr><td>□ Computer Presentation<br>An electronic presentation completed in the classroom by the student under the supervision of the teacher/proctor.</td></tr>
<tr><td>□ Audio/Visual Presentation<br>A video or audio recording of student demonstrating knowledge and skills.</td></tr>
</table>

# APPENDIX C – SPECIFIC EXAMPLES FOR MATHEMATICS

# ON-DEMAND CLASSROOM PERFORMANCE TASK, CLASSROOM-PREPARED TASK, COMPUTER PRESENTATION, AND AUDIO/VISUAL PRESENTATION

### Mathematics Strand—Statistics, Data Analysis, and Probability

**1. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**2. Classroom-Prepared Task:** Provide an assignment, unit quiz or chapter test (e.g., worksheets, other teacher-produced classroom assignments) or student-produced classroom project (e.g., poster board or a folder containing the student's project).

**3. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3).

**4. Audio/Visual Presentation:** Provide an audio or video recording of the student responding to questions posed by the teacher or provide an audio or video recording of the student using manipulatives.

### Mathematics Strand—Number Sense

**1. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**2. Classroom-Prepared Task:** Provide an assignment, unit quiz or chapter test (e.g., worksheets, other teacher-produced classroom assignments) or student-produced classroom project (e.g., poster board or a folder containing the student's project).

**3. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3).

**4. Audio/Visual Presentation:** Provide an audio or video recording of the student responding to questions posed by the teacher or provide an audio or video recording of the student using manipulatives.

**Mathematics Strand—Algebra and Functions**

**1. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**2. Classroom-Prepared Task:** Provide an assignment, unit quiz or chapter test (e.g., worksheets, other teacher-produced classroom assignments) or student-produced classroom project (e.g., poster board or a folder containing the student's project).

**3. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3).

**4. Audio/Visual Presentation:** Provide an audio or video recording of the student responding to questions posed by the teacher or provide an audio or video recording of the student using manipulatives.

**Mathematics Strand—Measurement and Geometry**

**1. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**2. Classroom-Prepared Task:** Provide an assignment, unit quiz or chapter test (e.g., worksheets, other teacher-produced classroom assignments) or student-produced classroom project (e.g., poster board or a folder containing the student's project).

**3. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3).

**4. Audio/Visual Presentation:** Provide an audio or video recording of the student responding to questions posed by the teacher or provide an audio or video recording of the student using manipulatives.

**Mathematics Strand—Algebra I**

**1. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**2. Classroom-Prepared Task:** Provide an assignment, unit quiz or chapter test (e.g., worksheets, other teacher-produced classroom assignments) or student-produced classroom project (e.g., poster board or a folder containing the student's project).

**3. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3).

**4. Audio/Visual Presentation:** Provide an audio or video recording of the student responding to questions posed by the teacher or provide an audio or video recording of the student using manipulatives.

# APPENDIX D – SPECIFIC EXAMPLES FOR ELA

## ON-DEMAND WRITING PROMPT, ON-DEMAND CLASSROOM PERFORMANCE TASK, CLASSROOM-PREPARED TASK, COMPUTER PRESENTATION, AND AUDIO/VISUAL PRESENTATION

### ELA Strand—Word Analysis

**1. On-Demand Writing Prompt:** N/A

**2. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**3. Classroom-Prepared Task:** Provide an assignment, unit quiz, or chapter test or student-produced classroom project. Please include the teacher's answer key used to score any submissions.

OR

Provide a photograph or a copy of a student-produced work (e.g., poster board, word wall, annotated drawing) demonstrating that the student understands the literal or figurative meanings of words or can distinguish between denotative and connotative meanings of words commonly found in classroom texts. Please note: photographs must clearly depict the student work or activity being submitted as evidence and must include captions so that the scorers know what tasks the photographs depict.

**4. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3) demonstrating the difference between connotative and denotative meanings of words and/or phrases commonly found in classroom texts.

**5. Audio/Visual Presentation:** Provide an audio or visual recording of the student responding to questions posed by the teacher related to word derivations (e.g., identifying roots, prefixes, suffixes) of grade nine or above vocabulary words.

**ELA Strand—Reading Comprehension**

**1. On-Demand Writing Prompt:** N/A

**2. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**3. Classroom-Prepared Task:** Provide an assignment, unit quiz, or chapter test or student-produced classroom project. Please include the teacher's answer key used to score any submissions.

OR

Provide a student-produced critique or analysis of a functional or informational document that the student has read independently. A sample critique or analysis might include the purpose of a functional document, the method of organization used by the author, the types of structural features employed, and the effectiveness of structural features such as headings and bullets.

**4. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3) that demonstrates the student understands the Reading Comprehension strand tested on the CAHSEE.

**5. Audio/Visual Presentation:** Provide an audio or video recording of the student presenting a critical analysis of the evidence presented by the author in a nonfiction essay. The presentation might include:

- an analysis of the author's main point, tone, or bias
- an evaluation of the quality of the author's argument/position
- an evaluation of the author's supporting evidence and/or suggestions for additional support

**ELA Strand—Literary Response and Analysis**

**1. On-Demand Writing Prompt:** N/A

**2. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**3. Classroom-Prepared Task:** Provide an assignment, unit quiz, or chapter test or student-produced classroom project. Please include the teacher's answer key used to score any submissions.

OR

Provide a work sample created from the list of options included on page 8 of this manual that demonstrates the student's understanding of character and plot, time and sequence, theme and literary elements, and ambiguities and point of view. Provide a copy of the teacher's evaluation tool (e.g., rubric).

**4. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3) showing various story elements from a short story and/or novel the student has read independently. The presentation might include:

- identification of conflict/resolution, character traits, or theme
- plot line showing time and sequence, examples of flashback and/or foreshadowing
- examples of author's style, tone, or use of literary devices

**5. Audio/Visual Presentation:** Provide an audio or video recording of the student presenting a critical analysis of a literary work (e.g., drama, poem, short story, novel). The presentation might include:

- author's use of literary devices, voice, persona, or choice of narrator
- function of drama devices, such as dialogue, soliloquy, asides, foils, or scene design
- examples of author's tone, mood, or foreshadowing

**ELA Strand—Writing Strategies**

**1. On-Demand Writing Prompt:** N/A

**2. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**3. Classroom-Prepared Task:** Provide an assignment, unit quiz, or chapter test or student-produced classroom project. Please include the teacher's answer key used to score any submissions.

OR

Provide a work sample, aligned to the Writing Strategies strand tested on the CAHSEE, which demonstrates the student's awareness of audience and purpose using a coherent thesis, consistent tone, and precise language to develop main ideas. The work sample should be prepared in the classroom under the direction of the teacher. Provide a copy of the teacher's evaluation tool (e.g., rubric).

**4. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3) that includes slides that show the student participated in the writing process (draft, revising, editing) and that addresses the skills in the Writing Strategies strand tested on the CAHSEE.

**5. Audio/Visual Presentation:** Submit an audio or video recording of the student editing a draft paragraph and explaining the rationale for the edits being made based on the Writing Strategies strand tested on the CAHSEE.

**ELA Strand—Writing Conventions**

**1. On-Demand Writing Prompt:** N/A

**2. On-Demand Classroom Performance Task:** Provide the ETS on-demand classroom performance task.

**3. Classroom-Prepared Task:** Provide an assignment, unit quiz, or chapter test or student-produced classroom project. Please include the teacher's answer key used to score any submissions.

OR

Provide a work sample created from the list of options included on page 8 of this manual appropriate for a classroom-prepared task aligned to the Writing Conventions strand tested on the CAHSEE that was prepared in the classroom under the direction of the teacher and that demonstrates the student's control of grammar, paragraph and sentence structure, accurate spelling, and correct punctuation and capitalization.

**4. Computer Presentation:** Provide a student-created computer presentation (e.g., Microsoft PowerPoint, MP3) that includes slides that show the student editing a piece of writing that demonstrates the student's understanding of the Writing Conventions strand tested on the CAHSEE.

**5. Audio/Visual Presentation:** Submit an audio or video recording of the student editing a piece of writing and explaining the rationale for the edits made based on the Writing Conventions strand tested on the CAHSEE.

**ELA Strand—Writing Applications**

**1. On-Demand Classroom Performance Writing Prompt:** Provide the ETS performance writing prompt and have the student complete the essay in the classroom under the supervision of the teacher/proctor.

**2. On-Demand Classroom Performance Task:** N/A

**3. Classroom-Prepared Task:** Provide a copy of an independently written composition (e.g., biographical or autobiographical, response to literature, expository or persuasive, or business letter) completed by the student in the classroom under the immediate supervision of the teacher. Please include the teacher's scoring guide and commentary with the submission.

**4. Computer Presentation:** Provide an electronic version of an independently written composition (e.g., biographical or autobiographical, response to literature, expository or persuasive, or business letter) completed by the student in the classroom under the immediate supervision of the teacher. Please include the teacher's scoring guide and commentary with the submission.

**5. Audio/Visual Presentation:** N/A

# APPENDIX E – ON-DEMAND CLASSROOM PERFORMANCE TASKS FOR MATHEMATICS

The following pages contain on-demand classroom performance tasks for the following mathematics strands:

- Grade 7- Number Sense
- Grade 7- Algebra and Functions
- Grade 7- Measurement and Geometry
- Grade 7- Statistics, Data Analysis, and Probability
- Algebra I

# CAHSEE On-Demand Classroom Performance Mathematics Task
# Grade 7- Number Sense

**Standard(s) Assessed:**

**1.2** Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.
**1.3** Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.

**Task:**

A school team is made up of students in grades nine through twelve. Of the total students on the team, $\frac{1}{8}$ are in grade eleven, and $\frac{5}{16}$ are in grade twelve.

- What decimal is equivalent to the grade eleven students on the team? Show or explain how the decimal was determined.

- What percentage of the students on the team are in grade twelve? Show or explain how the percentage was determined.

- What fraction of the total students on the team are in grade eleven or grade twelve? Show or explain how the fraction was determined.

# CAHSEE On-Demand Classroom Performance Mathematics Task
# Grade 7- Algebra and Functions

**Standard(s) Assessed:**

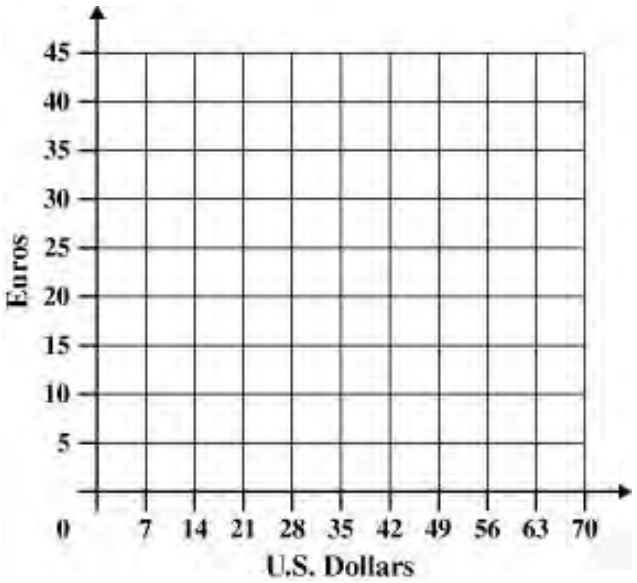
**1.5** Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph.
**3.3** Graph linear functions, noting that the vertical change (change in *y*-value) per unit of horizontal change (change in *x*-value) is always the same and know that the ratio (~~"ri~~se over run") is called the slope of a graph.
**3.4** Plot the values whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of a line equals the quantities.
*Mathematical Reasoning*
**2.3** Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques.

## Task:

The table below shows the exchange rate for U.S. dollars and Euros in March 2011.

| U.S. Dollars | Euros |
|---|---|
| 7 | 5 |
| 21 | 15 |
| 28 | 20 |
| 49 | 35 |
| 56 | 40 |

Plot the data from the table on the following coordinate grid. Once plotted, connect the points with a line.




- What is the slope of the graphed line? Show or explain how the slope was determined.

- What does the slope of the line represent?

- Approximately how many Euros are equivalent to 40 U.S. dollars?

# CAHSEE On-Demand Classroom Performance Mathematics Task
# Grade 7- Measurement and Geometry

**Standard(s) Assessed:**

**1.2** Construct and read drawings and models made to scale.
**2.1** Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms and cylinders.
**2.3** Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and volume is multiplied by the cube of the scale factor.

**Task:**

Materials needed to make a scale drawing of a rectangular prism: Pencil, Paper, Ruler

- Use the scale 1 inch = 4 inches to draw and label a scale drawing of a rectangle with an actual width of 16 inches and an actual length of 12 inches.

- The scale drawing of the rectangle represents the base of a rectangular prism. The height of the scale prism is 5 inches. Use your scale drawing of the rectangle to construct the scale drawing of the prism and label the height of the prism.

- What is the volume, in cubic inches, of the scale prism? Show or explain how the volume of the scale prism was determined.

- What would be the volume, in cubic inches, of the actual prism? Show or explain how the volume of the actual prism was determined.

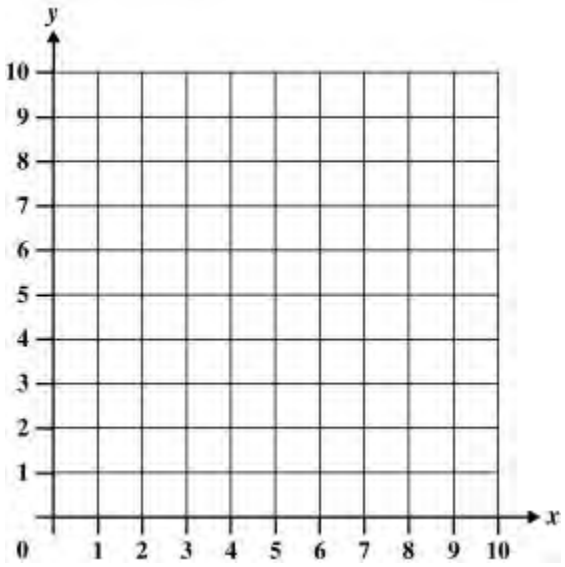
# CAHSEE On-Demand Classroom Performance Mathematics Task
# Grade 7- Statistics, Data Analysis, and Probability

**Standard(s) Assessed:**

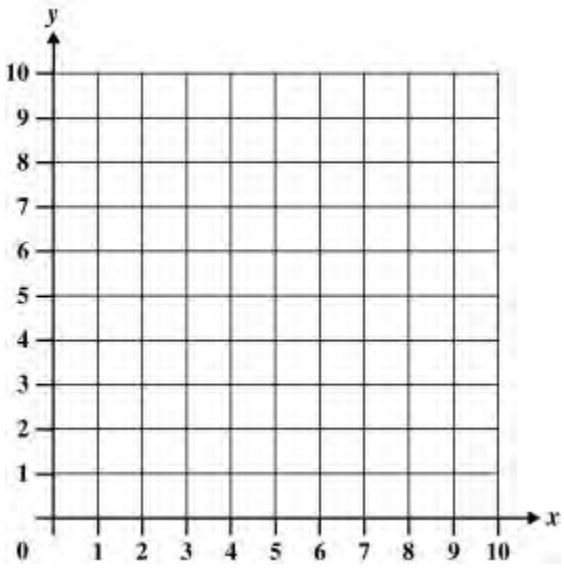
1.2 Represent two numerical variables on a scatterplot and informally describe how the data points are distributed and any apparent relationship that exists between the two variables (e.g., between time spent on homework and grade level).

**Task:**

- On the grid, plot and arrange data points to represent a strong positive correlation between the *x*-variable and *y*-variable.



- Describe or plot on the following grid how the data points would be placed if there were NO correlation between the *x*-variable and *y*-variable.



# CAHSEE On-Demand Classroom Performance Mathematics Task
# Algebra I

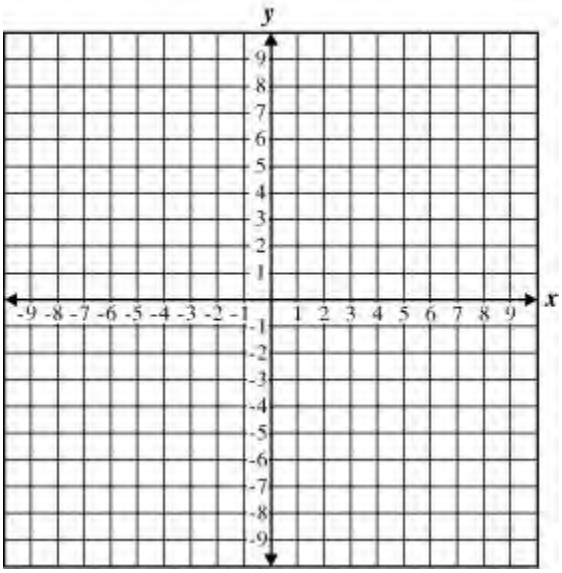
**Standard(s) Assessed:**

**9.0** Students solve a system of two linear equations in two variables algebraically and are able to interpret the answer graphically. Students are able to solve a system of two linear inequalities in two variables and to sketch the solution sets.

**Task:**

On the coordinate grid shown, sketch the solution set to the system of inequalities shown below.

$$\begin{cases} 3x + y \leq 4 \\ x - y > 4 \end{cases}$$




Circle Yes or No to answer the following questions.

- Does the solution set contain the point located at (– 4, 3)? Yes / No
- Does the solution set contain the point located at (4, – 8)? Yes / No
- Does the solution set contain the point located at (– 4, – 8)? Yes / No
- Does the solution set contain the point located at (3, – 8)? Yes / No

# APPENDIX F – ON-DEMAND CLASSROOM PERFORMANCE TASKS FOR ELA

The following pages contain on-demand tasks for the following ELA strands:

- Grade 10- Word Analysis
- Grade 10- Reading Comprehension
- Grade 10- Literary Response and Analysis
- Grade 10- Writing Strategies
- Grade 10- Writing Applications
- Grade 10- Writing Conventions

**Read the following poem and answer questions 1 through 4.**

## Friend in the Garden

*by Juliana Horatia Ewing*

He is not John the gardener,
And yet the whole day long
Employs himself most usefully,
The flowerbeds among.

He is not Tom the pussycat,
And yet the other day,
With stealthy stride and glistening eye,
He crept upon his prey.

He is not Dash the dear old dog,
And yet, perhaps, if you
Took pains with him and petted him,
You'd come to love him too.

He's not a Blackbird, though he chirps,
And though he once was black;
And now he wears a loose grey coat,
All wrinkled on the back.

He's got a very dirty face,
And very shining eyes!
He sometimes comes and sits indoors;
He looks—and p'r'aps is—wise.

But in a sunny flowerbed
He has his fixed abode;
He eats the things that eat my plants—
He is a friendly TOAD.

[Public Domain]

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# CAHSEE ELA On-Demand Classroom Performance Reading Task
# Grade 10- Word Analysis

**Standard(s) Assessed:**
**1.1** Identify and use the literal and figurative meanings of words and understand word derivations.
**1.2** Distinguish between the denotative and connotative meanings of words and interpret the connotative power of words.

**Task:**

Read the poem *Friend in the Garden* and answer the following questions.

1. In line 3, what does the phrase —Employs himself most usefully" mean?

2. What do lines 21 and 22 suggest about the toad?

3. In line 7, what does the phrase —With stealthy stride" mean?

4. What does the phrase —And now he wears a loose grey coat" mean in line 15 of the poem?

**Read the following document and answer questions 1 through 6.**

# Denton Township Summer Youth Program

Denton Township is proud to offer recreational and academic opportunities in the Summer Youth Program. All Denton youth are encouraged to learn a new skill or develop an existing one. Classes are taught by experts who have offered their time and talent at a reduced cost. Some classes are even eligible for high school credit. Most classes meet six times during the summer at the high school.

## CLASSES

Requirements:

1. Participants must be 13 to 18 years old. Fishing, survival, and self-defense participants must be at least 16 years old.
2. Each participant must submit a signed parental permission slip, registration form, and payment by June 2.

Additional Information:

1. Tuition and fees can be exchanged for office or maintenance work at the high school.
2. Photography, art, and video-game design classes, which take place in a lab, may require additional materials fees.
3. Some classes require a public performance to earn high school credit.
4. A catalogue of all class information is available at the Web site below.

## REGISTRATION

1. Complete a registration form available in the school office, at the Town Hall, or online at Dentondce.gov\summeryouthprograms.
2. Checks should be made payable to Denton Department of Continuing Education.
3. Submit registration form and check (or application for work exchange) in one of the following ways:

    - IN PERSON. The Denton Department of Continuing Education will hold a ―Sign-Up Night" in the high school cafeteria on May 20. Liz Garbaldi, the department director, will assist with selecting courses and completing forms. After May 20, you may register in person at the Town Hall, Monday through Friday, 8:00 a.m. to 3:00 p.m.

    - ONLINE. Complete the registration form at Dentondce.gov\summeryouthprograms. Registration, tuition, and fees can be submitted electronically or mailed to the address below. A signed parental permission form is due at the first class.

- BY MAIL. Send registration and payment (or application for work exchange) to:

  Liz Garbaldi
  Director
  Department of Continuing Education
  Denton Town Hall
  118 Main Street
  Denton, CA 92000

## Sample of Classes Offered

A complete catalogue is available online, at —Sign-Up Night," and in the high school and township offices.

| Class | Tuition | Days | Time | Start Date | Location |
|---|---|---|---|---|---|
| Voice | $35 | Monday or Wednesday | 10–11 a.m. | June 22 | HS Choir Room |
| Fishing | $45 | Saturday | 2–3 p.m. | June 20 | Hardey River |
| Math Masters | $30 | Tuesday or Thursday | 10–11 a.m. | June 23 | HS Rm 24 |
| Poetry Workshop | $30 | Tuesday or Thursday | 12–1 p.m. | June 23 | HS Rm 35 |
| Photography | $45 | Monday or Wednesday | 12–2 p.m. | June 29 | HS Photography Lab |

# CAHSEE ELA On-Demand Classroom Performance Reading Task
# Grade 10- Reading Comprehension

**Standard(s) Assessed:**
**2.1** Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.
**2.7** Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.
**2.5** Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.

**Task:**

Read the document —Benton Township Summer Youth Program," and answer the following questions.

1. What is the most likely reason the author includes bullets in the registration section?

2. What other information should be included to make the —Additional Information" section more effective?

3. Why did the author include the information about the —Sign-Up Night"?

4. What is the main purpose of the document?

5. How are the two sections, —CLASSES" and —REGISTRATION," similar?

6. How does the formatting of the document help the reader understand the information?

**Read the following play and answer questions 1 through 10.**

# A Day in the Park

**MR. GARZA,** father

**MRS. GARZA,** mother

**GRACIELA GARZA,** teenage daughter

**ALBERTO GARZA,** eight-year-old son

**RAMIRO GARZA,** nine-year-old son

**COACH CRUZ,** college football coach

**MRS. CRUZ,** Coach Cruz's wife

***(The Garza family is sitting on a blanket in the park. Other people are randomly sitting and moving around them.)***

**MRS. GARZA:** Oh, I just love celebrating *Cinco de Mayo* in the park each year! The fifth of May is always so special because of this. *(She pauses and looks around.)* Let me know when you see Julio, my cousin. I believe he's performing this year.

**MR. GARZA:** *(Looking intently in the distance.)* Isn't that one of the singers over there?

**MRS. GARZA:** *(Looking around at other people.)* No, I think that's the guitarist. *(MR. GARZA rolls his eyes playfully.)*

**GRACIELA:** Mom, why don't you read the program to figure out who is performing and when?

**MRS. GARZA:** *(Smiles and winks at her husband.)* It's much more fun this way.

**GRACIELA:** Hey, guess what happened yesterday in math class.

*(GRACIELA and MRS. GARZA begin talking about school while MR. GARZA continues to look for different performers. RAMIRO and ALBERTO are spending most of their time looking around the park and being silly. COACH CRUZ and his wife enter the park area. People are aware of who the CRUZES are and react to their presence in the park. COACH CRUZ even shakes a few hands. They set their blanket down slightly behind the Garza family.)*

**ALBERTO:** *(Swiping at bugs.)* We should have brought the bug spray.

**RAMIRO:** The bugs aren't that bad. . . . *(Suddenly stops talking and stares with his mouth open.)* Do you see that?

**ALBERTO:** *(Turning around.)* See what?

**RAMIRO:** *(Grabbing his brother's shirt and pulling.)* Shh. He's going to hear you.

**ALBERTO:** Who's going to hear me?

**RAMIRO:** *(Very excited.)* Over there, behind us. Don't look! It's Coach Cruz! He just sat down.

**ALBERTO:** *(Staring, speaking loudly, and attempting to stand.)* No way!

**MR. GARZA:** Sit down. And why are you yelling?

**RAMIRO:** *(Leaning across the blanket, he whispers loudly to his father.)* That's Coach Cruz from the university, the coach of the regional football champions! Can you believe he's really here?

**MR. GARZA:** Yes, I can. Even football coaches like Latin music. *(Distracted by his wife looking over his shoulder again.)* Here, read the program.

**ALBERTO:** *(Starting to stand up.)* Let's go talk to him.

**RAMIRO:** *(Again, pulling on his brother's shirt to keep him in his seat.)* We can't do that! What would we do? Just walk up and say, "Hey, we think you're great?" That's kind of silly; he'd be too annoyed.

**ALBERTO:** You're just scared.

**RAMIRO:** Am not. YOU go talk to him.

**ALBERTO:** *(Looking over at them and hesitating.)* I can't, at least not right now. He's talking to someone else.

*(RAMIRO grins, knowing his little brother won't go either. Both boys continue squirming while waiting for the performance to begin, occasionally turning around to stare at COACH CRUZ. They quickly look away when he turns in their direction. Soon, their sister notices their behavior.)*

**GRACIELA:** *(Poking RAMIRO in the arm.)* What's going on? Normally you two can't wait for the cultural performances to start. Today you haven't even noticed they're a minute late.

**RAMIRO:** *(Staring at COACH CRUZ, but he quickly turns around.)* Nothing. Just didn't notice, I guess.

**GRACIELA:** *(Laughing.)* Didn't notice? That's a good one. *(Then she sees that the boys are staring at Coach Cruz.)* I get it now. You're too busy watching your hero to think about music. He obviously likes music too. Now you can talk to him about something besides football, like the Aztec dancers!

**RAMIRO:** *(Putting his hand toward his sister's mouth.)* Shh! Don't be so loud. He'll hear you.

**GRACIELA:** *(Backing away from his hand.)* So . . . Why don't you go say hello?

*(ALBERTO and RAMIRO both start to speak and then stop a few times. The brothers look at each other. Then both shrug.)*

**GRACIELA:** *(Trying not to laugh.)* You're being ridiculous. He wouldn't mind.

*(MR. and MRS. GARZA are now listening to the children. MR. GARZA begins to speak, but his wife stops him by placing her hand on his.)*

**ALBERTO:** Well, I might go if Ramiro goes, but . . .

**RAMIRO:** I told you, we'd just be annoying him. I'm sure he's got too much on his mind to worry about a couple of kids.

**MR. GARZA:** I think both of you had better turn around. The music is about to start.

*(Both boys turn toward the musicians. RAMIRO glances at his watch. GRACIELA looks thoughtfully at her brothers and then quietly excuses herself and steps away. She heads toward the ladies' room but turns out of sight of her brothers and approaches COACH CRUZ. She then retraces her steps to return to her family.)*

**ALBERTO:** Hey Dad, they're not starting yet. Can I watch Coach Cruz until they do?

*(Meanwhile, COACH CRUZ has stepped away from his blanket and stands behind the two boys.)*

**COACH CRUZ:** *(Placing his hands on the boys' shoulders.)* Well, you can watch me if you want, but I'd much rather talk with you. I hear you boys are planning to join the team in a few years.

*(MR. GARZA makes room for COACH CRUZ to sit. ALBERTO and RAMIRO are momentarily speechless, and then both start talking at the same time. COACH CRUZ laughs and speaks with them while the rest of the family listens.)*

**ALBERTO:** *(Suddenly realizing something, he jumps up and runs to GRACIELA and gives her a big hug and whispers.)* Thanks! You're a great sister!

# CAHSEE ELA On-Demand Classroom Performance Reading Task
# Grade 10- Literary Response and Analysis

**Standard(s) Assessed:**
**3.1** Articulate the relationship between the expressed purposes and the characteristics of different forms of dramatic literature (e.g., comedy, tragedy, drama, dramatic monologue).
**3.3** Analyze interactions between main and subordinate characters in a literary text (e.g., internal and external conflicts, motivations, relationships, influences) and explain the way those interactions affect the plot.
**3.4** Determine characters' traits by what the characters say about themselves in narration, dialogue, dramatic monologue, and soliloquy.
**3.10** Identify and describe the function of dialogue, scene designs, soliloquies, asides, and character foils in dramatic literature.

**Task:**

Read the play —A Day in the Park," and answer the following questions.

1. What is the author's purpose for writing this play?

2. Why is this play considered a comedy?

3. How does Graciela influence what happens in the play?

4. How does Mrs. Garza demonstrate her sense of humor in the play?

5. How do Alberto and Ramiro react when Coach Cruz comes over and speaks to them?

6. What does Alberto realize about his sister at the end of the play?

7. Which of Graciela's lines from the play provides advice to her brothers?

8. What do Ramiro and Alberto think about Coach Cruz?

9. What is the MAIN purpose of the italics in the play?

10. How does the dialogue in the play contribute to the plot?

# CAHSEE ELA On-Demand Classroom Performance Writing Task
# Grade 10- Writing Strategies

**Standard(s) Assessed:**
**1.1** Establish a controlling impression or coherent thesis that conveys a clear and distinctive perspective on the subject and maintain a consistent tone and focus throughout the piece of writing.
**1.2** Use precise language, action verbs, sensory details, appropriate modifiers, and the active rather than the passive voice.
**1.4** Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, and definitions).
**1.5** Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, news sources, field studies, speeches, journals, technical documents).
**1.9** Revise writing to improve the logic and coherence of the organization and controlling perspective, the precision of word choice, and the tone by taking into consideration the audience, purpose, and formality of the context.

**Task:**

1. Read the paragraph below. Circle the word in each set of brackets [ ] that helps maintain the focus and tone of the paragraph.

(1) It has [ **came / come** ] to my attention that our school board recently banned a book from our school library. (2) While I [ **get / understand** ] the concern of some parents and teachers who want to [ **protect / guard** ] students, I disagree with the school board's action. (3) How does a person get to be on the school board anyway? (4) I strongly [ **contradict / oppose** ] censorship in the school. (5) Instead of banning books, why not let teachers lead discussions with students about [ **controversial / problem** ] issues in the classroom? (6) These discussions would help students form their own opinions about what they wish to read.

2. Which sentence should be deleted to maintain the focus of the paragraph? #_____

3. Which sentence best states the main idea of the paragraph? #_____

# CAHSEE ELA On-Demand Classroom Performance Writing Prompt
# Grade 10- Writing Applications

**Standard(s) Assessed:**
**2.3** Write expository compositions, including analytical essays and research reports.

**Task:**

Many schools have foreign-exchange students who attend school in America for a semester to learn about the American educational system. Your school is hosting a foreign-exchange student for the semester. Your teacher has asked you to be the guide to show this foreign-exchange student around your school. Think about places in and around your school that you would like to show this student.

Write an essay for your teacher describing the places in and around your school that you will show the foreign-exchange student. Describe why these places are important to you, other students at your school, and the foreign-exchange student. Use details and examples to support or explain how these places are special or important.

**Checklist for Your Writing**

**The following checklist will help you do your best work. Make sure you:**

- ❑ **Read the description of the task carefully.**
- ❑ **Organize your writing with a strong introduction, body, and conclusion.**
- ❑ **Use specific details and examples to fully support your ideas.**
- ❑ **Use words that are appropriate for your audience and purpose.**
- ❑ **Vary your sentences to make your writing interesting to read.**
- ❑ **Check for mistakes in grammar, spelling, punctuation, capitalization, and sentence formation.**

# CAHSEE ELA On-Demand Classroom Performance Writing Task
# Grade 10- Writing Conventions

**Standard(s) Assessed:**
**1.1** Identify and correctly use clauses (e.g., main and subordinate), phrases (e.g., gerund, infinitive, and participial), and mechanics of punctuation (e.g., semicolons, colons, ellipses, hyphens).

**Task:**

**Read the excerpt below. Circle the punctuation mark within each set of brackets [ ] to make the sentences correct.**

This morning after breakfast, Mom asked her son Jordan for help. She told him that she needed someone to wash her car; it was really dirty [ ; . ? ] Jordan agreed to help and began gathering the materials he would need [ - : , ] a bucket, some car wash soap, and a sponge. When Jordan finished washing the car [ ; . , ] it really began to shine. Jordan's older brother, Ahmed, saw the car and was very impressed. The car was absolutely gleaming [ ! , : ] ~~–~~Mom is not even going to recognize her own car now [ ? , : ]" Jordan boasted.

~~—~~You did a great job [ , - ; ] Jordan," agreed Ahmed. ~~–~~Thanks a lot! I think I'll ask Mom if I can take the car to the mall tonight!"

# APPENDIX G – MATHEMATICS CONTENT STANDARDS AND CODES ASSESSED ON THE CAHSEE

**Note: Strikethroughs within a standard indicate that this particular part of the standard is not to be assessed on the CAHSEE but is still part of the original standard.**

## Strand: Statistics, Data Analysis, and Probability

**6PS1.1** Compute the ~~range~~, mean, median, and mode of data sets.

**6PS2.5** Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims.

**6PS3.1** Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome.

**6PS3.3** Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if P is the probability of an event, 1 – P is the probability of an event not occurring.

**6PS3.5** Understand the difference between independent and dependent events.

**7PS1.1** Know various forms of display for data sets, ~~including a stem-and-leaf plot or box-and-whisker plot;~~ use the forms to display a single set of data or to compare two sets of data.

**7PS1.2** Represent two numerical variables on a scatterplot and informally describe how the data points are distributed and any apparent relationship that exists between the two variables (e.g., between time spent on homework and grade level).

## Strand: Number Sense

**7NS1.1** Read, write, and compare rational numbers in scientific notation (positive and negative powers of 10) with approximate numbers using scientific notation.

**7NS1.2** Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.

**7NS1.3** Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.

**7NS1.6** Calculate the percentage of increases and decreases of a quantity.

**7NS1.7** Solve problems that involve discounts, markups, commissions, and profit, and compute simple and compound interest.

**7NS2.1** Understand negative whole-number exponents. Multiply and divide expressions involving exponents with a common base.

**7NS2.2** Add and subtract fractions by using factoring to find common denominators.

**7NS2.3** Multiply, divide, and simplify rational numbers by using exponent rules.

**7NS2.4** Use the inverse relationship between raising to a power and extracting the root of a perfect square integer; for an integer that is not square, determine without a calculator the two integers between which its square root lies and explain why.

**7NS2.5** Understand the meaning of the absolute value of a number; interpret the absolute value as the distance of the number from zero on a number line; and determine the absolute value of real numbers.

**Strand: Algebra and Functions**

**7AF1.1** Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A).

**7AF1.2** Use the correct order of operations to evaluate algebraic expressions such as $3(2x + 5)^2$.

**7AF1.5** Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph.

**7AF2.1** Interpret positive whole-number powers as repeated multiplication and negative whole-number powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents.

**7AF2.2** Multiply and divide monomials; extend the process of taking powers and extracting roots to monomials when the latter results in a monomial with an integer exponent.

**7AF3.1** Graph functions of the form $y = nx^2$ and $y = nx^3$ and use in solving problems.

**7AF3.3** Graph linear functions, noting that the vertical change (change in *y*-value) per unit of horizontal change (change in *x*-value) is always the same and know that the ratio ("~~ris~~e over run") is called the slope of a graph.

**7AF3.4** Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of a line equals the quantities.

**7AF4.1** Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results.

**7AF4.2** Solve multistep problems involving rate, average speed, distance, and time or a direct variation.

**Strand: Measurement and Geometry**

**7MG1.1** Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters).

**7MG1.2** Construct and read drawings and models made to scale.

**7MG1.3** Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.

**7MG2.1** Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders.

**7MG2.2** Estimate and compute the area of more complex or irregular two- and three-dimensional figures by breaking the figures down into more basic geometric objects.

**7MG2.3** Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and volume is multiplied by the cube of the scale factor.

**7MG2.4** Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units (1 square foot = 144 square inches or [1 $ft^2$] = [144 $in^2$], 1 cubic inch is approximately 16.38 cubic centimeters or [1 $in^3$] = [16.38 $cm^3$]).

**7MG3.2** Understand and use coordinate graphs to plot simple figures, determine lengths and areas related to them, and determine their image under translations and reflections.

**7MG3.3** Know and understand the Pythagorean theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean theorem by direct measurement.

**7MG3.4** Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures.

**Strand: Mathematical Reasoning**

**7MR1.1** Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns.

**7MR1.2** Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.

**7MR2.1** Use estimation to verify the reasonableness of calculated results.

**7MR2.3** Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques.

**7MR2.4** Make and test conjectures by using both inductive and deductive reasoning.

**7MR3.3** Develop generalizations of the results obtained and the strategies used and apply them to new problem situations.

**Strand: Algebra I**

**1A2.0** Students understand and use such operations as taking the opposite, finding the reciprocal, and taking a root, ~~and raising to a fractional power~~. They understand and use the rules of exponents.

**1A3.0** Students solve equations and inequalities involving absolute values.

**1A4.0** Students simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x - 5) + 4(x - 2) = 12$.

**1A5.0** Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.

**1A6.0** Students graph a linear equation and compute the *x*- and *y*-intercepts (e.g., graph $2x + 6y = 4$). ~~They are also able to sketch the region defined by linear inequality (e.g., they sketch the region defined by $2x + 6y < 4$).~~

**1A7.0** Students verify that a point lies on a line, given an equation of the line. Students are able to derive linear equations. ~~by using the point-slope formula.~~

**1A8.0** Students understand the concepts of parallel lines ~~and perpendicular lines~~ and how their slopes are related. ~~Students are able to find the equation of a line perpendicular to a given line that passes through a given point.~~

**1A9.0** Students solve a system of two linear equations in two variables algebraically and are able to interpret the answer graphically. Students are able to solve a system of two linear inequalities in two variables and to sketch the solution sets.

**1A10.0** Students add, subtract, multiply, and divide monomials and polynomials. Students solve multistep problems, including word problems, by using these techniques.

**1A15.0** Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems.

# APPENDIX H – READING AND WRITING CONTENT STANDARDS AND CODES ASSESSED ON THE CAHSEE

### Strand: Reading – Word Analysis

**10RW1.1** Identify and use the literal and figurative meanings of words and understand word derivations.

**10RW1.2** Distinguish between the denotative and connotative meanings of words and interpret the connotative power of words.

### Strand: Reading Comprehension

**8RC2.1** Compare and contrast the features and elements of consumer materials to gain meaning from documents (e.g., warranties, contracts, product information, instruction manuals).

**10RC2.1** Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.

**10RC2.4** Synthesize the content from several sources or works by a single author dealing with a single issue; paraphrase the ideas and connect them to other sources and related topics to demonstrate comprehension.

**10RC2.5** Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.

**10RC2.7** Critique the logic of functional documents by examining the sequence of information and procedures in anticipation of possible reader misunderstandings.

**10RC2.8** Evaluate the credibility of an author's argument or defense of a claim by critiquing the relationships between generalizations and evidence, the comprehensiveness of evidence, and the way in which the author's intent affects the structure and tone of the text (e.g., in professional journals, editorials, political speeches, primary source material).

### Strand: Reading – Literary Response and Analysis

**10RL3.1** Articulate the relationship between the expressed purposes and the characteristics of different forms of dramatic literature (e.g., comedy, tragedy, drama, dramatic monologue).

**10RL3.3** Analyze interactions between main and subordinate characters in a literary text (e.g., internal and external conflicts, motivations, relationships, influences) and explain the way those interactions affect the plot.

**10RL3.4** Determine characters' traits by what the characters say about themselves in narration, dialogue, dramatic monologue, and soliloquy.

**10RL3.5** Compare works that express a universal theme and provide evidence to support the ideas expressed in each work.

**10RL3.6** Analyze and trace an author's development of time and sequence, including the use of complex literary devices (e.g., foreshadowing, flashbacks).

**10RL3.7** Recognize and understand the significance of various literary devices, including figurative language, imagery, allegory, and symbolism, and explain their appeal.

**10RL3.8** Interpret and evaluate the impact of ambiguities, subtleties, contradictions, ironies, and incongruities in a text.

**10RL3.9** Explain how voice, persona, and the choice of a narrator affect characterization and the tone, plot, and credibility of a text.

**10RL3.10** Identify and describe the function of dialogue, scene designs, soliloquies, asides, and character foils in dramatic literature.

**8RL3.7** Analyze a work of literature, showing how it reflects the heritage, traditions, attitudes, and beliefs of its author. (Biographical approach)

**10RL3.11** Evaluate the aesthetic qualities of style, including the impact of diction and figurative language, on tone, mood, and theme, using the terminology of literary criticism. (Aesthetic approach)

**10RL3.12** Analyze the way in which a work of literature is related to the themes and issues of its historical period. (Historical approach)

**Strand: Writing Strategies**

**10WS1.1** Establish a controlling impression or coherent thesis that conveys a clear and distinctive perspective on the subject and maintain a consistent tone and focus throughout the piece of writing.

**10WS1.2** Use precise language, action verbs, sensory details, appropriate modifiers, and the active rather than the passive voice.

**10WS1.4** Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions).

**10WS1.5** Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents).

**10WS1.9** Revise writing to improve the logic and coherence of the organization and controlling perspective, the precision of word choice, and the tone by taking into consideration the audience, purpose, and formality of the context.

**Strand: Writing Conventions**

**10WC1.1** Identify and correctly use clauses (e.g., main and subordinate), phrases (e.g., gerund, infinitive, and participial), and mechanics of punctuation (e.g., semicolons, colons, ellipses, hyphens).

**10WC1.2** Understand sentence construction (e.g., parallel structure, subordination, proper placement of modifiers) and proper English usage (e.g., consistency of verb tenses).

**10WC1.3** Demonstrate an understanding of proper English usage and control of grammar, paragraph and sentence structure, diction, and syntax.

**Strand: Writing Applications**

**10WA2.1** Write bibliographical narratives

**10WA2.3** Write expository compositions, including analytical essays and research reports

**10WA2.4** Write persuasive compositions

# APPENDIX I – PARENT CONSENT FORM

**PARENT CONSENT FORM**
**To Photograph and Audio/Videotape a Student**

**To Parents or Guardians:** Your student has been chosen to participate in the California High School Exit Examination (CAHSEE) Alternative Means Pilot Study. The purpose of this pilot study is to determine the feasibility of using a collection of evidence (work samples) as an alternative means to the CAHSEE for eligible students with disabilities (SWDs). This pilot study will ask eligible SWDs to submit a collection of evidence that demonstrate the same level of achievement in the English-language arts (ELA) and mathematics content standards that are required for passage of the CAHSEE. In addition, a limited number of students who do not meet these criteria will also participate.

**Please note: Participation in this pilot does not exempt your student from existing requirements for passing the CAHSEE.**

**Brief Description of the CAHSEE Alternative Means Pilot:** The pilot study provides an opportunity for students to submit work samples that include video and audio recordings and photographs. The intent of this Consent Form is to gain your permission to use your student's photograph, video and/or audio recordings for this pilot study only.

**Components of the CAHSEE Alternative Means Pilot:** Your student's collection of evidence may include some or all of the following:

- **Photographs, videotape, or audiotape:** Documentation of your child participating in classroom activities and assignments through video or audio recordings, or photography.
- **Performance tasks:** A recording of your child's participation in tasks and classroom activities related to the California Content Standards

**Confidentiality of Your Child's Student Records:** The information submitted as part of the CAHSEE Alternative Means Pilot constitutes student record material that is confidential. The people who review and score the information will be instructed regarding the confidentiality of the material. Your student's name and work will be identified only by a Secure Student Identification (SSID) number and not by name. This information will not be released to anyone other than those the California Department of Education has contracted for purposes of implementing the CAHSEE Alternative Means Pilot Study.

This *Consent Form* must be signed by at least one of the student's parents or guardians. Consent signifies agreement to your child being recorded on video, audio, or photography for purposes of the CAHSEE Alternative Means Pilot Study.

Within 5 days of receiving this form, please sign and return it to your student's teacher or principal.

**Statement of Consent:**

I have read and understand all of the information in this *Consent Form*. I knowingly and voluntarily allow my student's school to release information about my student:

(Student's name)

_____

(Name of school and address)

_____

_____

I will allow my child to be photographed, videotaped, or audiotaped for purposes of the CAHSEE Alternative Means Pilot and for my child's school to release recorded information about my child that is created and collected pursuant to the terms of this agreement.

Signature of Parent(s) or Guardian(s):

_____

Print name:

_____

Date: _____

# APPENDIX J – INCIDENTAL CONSENT FORM

## INCIDENTAL CONSENT FORM

### For Incidental Photographing and Audio/Video Recording of a Student

***To Parents or Guardians:***

This year, the California Department of Education will work with your son or daughter's school to conduct the CAHSEE Alternative Means Pilot Study. Your student's teacher will be among those who will participate in the CAHSEE Alternative Means Pilot Study with a small number of students. During this process, your student's teacher may find it necessary to use cameras and/or tape recorders to obtain educational information on these students in order to determine how well they perform certain activities. It may be necessary for your student's teacher to record the voice or image of the participating student when other students are present in the room. Therefore, there may be limited occasions during which your student may appear incidentally in videotapes and/or photographs or during which his or her voice may be recorded on audiotape. Your student will not be identified by name, nor would any student information or other materials be shared with others outside the school or district. We request your consent to allow your student to appear in videotapes and photographs in this limited way. Thank you very much.

Student's Name:

_____

School Name/School District:

_____

Teacher's Name:

_____

Signature of Parent or Guardian:

_____

Date: _____

**APPENDIX K – DO NOT DISTURB SIGN**

# Quiet

# PLEASE DO NOT DISTURB

# Academic Assessment Is Taking Place in This Room

## California High School Exit Examination
## Alternative Means Pilot Study

Educational Testing Service

# Alternative Means Pilot Study: Appendix C Orientation and Instruction to Evaluators

September 2011

# California High School Exit Examination (CAHSEE)

# Alternative Means Pilot Study Evaluation

## June 28 - July 1, 2011

Educational Testing Service

ETS

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## Presentation Overview

- Introductions and Logistics
- CAHSEE Alternative Means
- Alternative Means Pilot Study
- Evaluation of Student Work
- Focus Group Activities

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# Introductions and Logistics

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# CAHSEE Alternative Means

# CAHSEE Alternative Means

- Eligible students with disabilities (SWDs) shall demonstrate that they have ***achieved the same level of academic achievement*** in the content standards in English-language arts (ELA) or mathematics, or both, required for passage of the high school exit examination (*EC 60852.1a).*

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# CAHSEE Alternative Means

- Two-tiered approach:
  - **Tier I** consists of a state-level screening of eligible SWDs achieving a scale score of 300 on the California Standards Test (CST) in ELA Grade 10, or a scale score of 269 on the CST in Algebra I. Additional analyses will be performed on the California Modified Assessment (CMA) in ELA Grade 10 and Algebra I.
  - Eligible SWDs who do not achieve a minimum score in the Tier I screening would participate in the Tier II process.
  - **Tier II** requires that eligible SWDs submit a collection of evidence (COE) that would **demonstrate the same level of achievement** in the ELA and mathematics content standards that are required for passage of the CAHSEE.

# CAHSEE Alternative Means

- Eligible SWDs:
  - Student has an operative individualized education program (IEP) or Section 504 plan (*EC 60852.2a1*)
  - Student has not passed the high school exit examination (*EC 60852.2a2*)
  - Student has satisfied or will satisfy all other state and local graduation requirements (*EC 60852.2a3*)
  - Student has attempted to pass those sections not yet passed of the high school exit examination at least twice after grade 10, including at least once in grade 12 (*EC 60852.2a4*)

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# CAHSEE Alternative Means

- Current timeline:
  - Beginning last year, California *EC 60852.3* provided an exemption from meeting the CAHSEE requirement for SWDs who have an IEP or 504 plan and meet all other requirements for graduation.
  - This exemption will remain in place until the State Board of Education (SBE) makes a determination that alternative means are not feasible, or that alternative means are implemented.
  - SBE adopted regulations that extended the implementation date for CAHSEE alternative means to **July 1, 2012**.

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# CAHSEE Alternative Means

## Tentative Timeline

| | |
|---|---|
| March 2011 | • SBE approves Alternative Means Pilot Study<br>• ETS selected as vendor for Pilot Study |
| April 2011 | • ETS develops materials and procedures for Pilot<br>• ETS recruits districts to participate |
| May 2011 | • Pilot Study materials distributed to participating districts<br>• Districts collect evidence from SWDs |
| June 2011 | • Districts submit collections of evidence<br>• ETS evaluates evidence |
| July 2011 | • Pilot Study ends<br>• ETS drafts report |
| August 2011 | • ETS submits draft report to CDE for review<br>• Draft report finalized |
| Sept 2011 | • ETS to present Pilot Report to the California State Board of Education |

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# CAHSEE Alternative Means

## Tentative Timeline

| | |
|---|---|
| July 2012 | • July CAHSEE administration<br>• Alternative means implementation – Grade 12 SWDs screened for Tier I |
| Oct 2012 | • October CAHSEE administration<br>• Districts notified of Tier I results for Grade 12 SWDs tested in July |
| Nov 2012 | • November CAHSEE administration |
| Dec 2012 | • December CAHSEE administration<br>• Districts notified of Tier I results for Grade 12 SWDs tested in October |
| Jan 2013 | • Districts notified of Tier I results for SWDs tested in November<br>• Eligible Grade 12 SWDs participate in Tier II collection of evidence (COE) |
| March 2013 | • Districts submit COEs for evaluation |
| May 2013 | • Districts notified of Tier II results in time for graduation decisions |

# Alternative Means Pilot Study

## Alternative Means Pilot Study

- The purpose of the pilot is to determine the feasibility of using a collection of evidence (COE) as an alternative means to the CAHSEE for eligible SWDs in Tier II
- **Not** meant to produce an operational version COE
- Analyses designed to inform the CDE as to student work sample definitions, the relative response rates of different item types, success patterns of responding students, and variations across content strands.

# Alternative Means Pilot Study

- Although targeting Grade 12 SWDs who had not passed CAHSEE, participants in the Pilot Study were:
  - Students in grades 11 and 12
  - SWDs with either IEP or 504 plan
  - Students in general education
  - Students who have, or have not, met the CAHSEE requirement

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# Alternative Means Pilot Study

- Student **work samples** were defined as task-based representations of the student's mastery of the state content standards assessed on the CAHSEE
- Options for **work samples** included five item types:
  - On-demand writing prompt
  - On-demand classroom performance task
  - Classroom-prepared task
  - Computer presentation
  - Audio/Visual presentation

| Type of Work Sample | Definition | Options (aligned to a strand) |
|---|---|---|
| On-Demand Writing Prompt | A performance writing prompt provided by ETS and completed in the classroom under the supervision of the teacher/proctor | • Provided by ETS; refer to Appendix F |
| On-Demand Classroom Performance Task | A performance task provided by ETS and completed in the classroom under the supervision of the teacher/proctor | • Provided by ETS; refer to Appendixes E and F |

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| Type of Work Sample | Definition | Options (aligned to a strand) |
|---|---|---|
| Classroom-Prepared Task | An assignment, unit quiz, or chapter test completed in the classroom by the student under the supervision of the teacher/proctor | • Essay<br>• Student journal entry<br>• Class projects<br>• Poster board presentation<br>• Previously completed writing tasks<br>• Collection of data charts, graphs<br>• Assignment, unit quiz, or chapter test<br>• Worksheets<br>• Teacher-developed tests<br>• Critical analysis/research paper<br>• Character study<br>• PowerPoint slide presentation |
| Computer Presentation | An electronic presentation completed in the classroom by the student under the supervision of the teacher/proctor | |

| Type of Work Sample | Definition | Options (aligned to a strand) |
|---|---|---|
| Audio/Visual Presentation | A video or audio recording of a student demonstrating knowledge and skills | • Recordings of in-class dramatic interpretation<br>• Student response to literature<br>• Readings from student journal entries<br>• Verbal responses to teacher questions or discussion of pertinent topics<br>• Peer-teaching demonstrations<br>• Use of manipulatives<br>• Photos or video of a scale model |

# Alternative Means Pilot Study

- Participants were instructed to submit a maximum of three work samples for each student, including one each of the following task types:
  - On-demand writing prompt OR on-demand classroom performance task
  - Classroom-prepared task (current or previously completed work)
  - Computer presentation OR audio/visual presentation

# Alternative Means Pilot Study

- Recruitment efforts yielded **66 participating districts**
- Materials were distributed in early May, due back to ETS June 10, 2011
- Districts were assigned two CAHSEE content strands, one ELA and one math, according to a matrix sampling plan
- Expectations were that ETS would receive **between 4400 and 6500 student work samples** of varying types covering all the CAHSEE standards

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# Alternative Means Pilot Study

- ETS received **506 student work samples** in total
- Given the tight timeline for implementation of Alternative Means and the importance of the project, **it was decided to continue work on the pilot**, despite the low sample size.

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## CAHSEE Alternative Pilot Receiving Log

| | Task Type/Sample Grouping | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | | 3 | 4 | |
| Strand | ETS Assigned | Classroom Writing Task | Classroom Prepared | Computer Presentation | Audio/Video presentation | Total Strands |
| Word Analysis | 8 | 12 | 14 | 7 | 4 | **45** |
| Reading Comprehension | 49 | 28 | 60 | 7 | | **144** |
| Literary Response and Analysis | 5 | 19 | 3 | | 2 | **29** |
| Writing Strategies | 17 | 7 | 5 | 8 | | **37** |
| Writing Conventions | 57 | | 1 | | | **58** |
| Writing Applications | 2 | | 6 | | | **8** |
| Probability and Statistics | 36 | | 16 | 3 | | **55** |
| Number Sense | 49 | | | | | **49** |
| Algebra and Functions | 22 | | 17 | | | **39** |
| Measurement and Geometry | | | 2 | | | **2** |
| K. Algebra I | 25 | | 15 | | | **40** |
| **Total Task Types** | **270** | **66** | **139** | **25** | **6** | |

| | |
|---|---|
| Unknown - ELA | 16 |
| Unknown - Math | 10 |

**506**

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# Evaluation of Student Work

# Evaluation of Student Work

- Scoring Guides
- Anchor Papers
- Evaluation procedures



# Generic Scoring Guide

**Scoring Guide Points**

**3.** There is *adequate evidence* that the student has demonstrated skills and knowledge stated in the standard being addressed.

- Completes most or all of the task or approximately 70% or more completed.
- Demonstrates ability to master task; work attempted is displayed.
- Correct answer or correct logic, equations and assumptions, but may display minor errors.
- Displays consistent clarity and facility in the usage of language with minor grammatical errors

**2.** There is *some evidence* that the student has demonstrated the skills and knowledge stated in the standard being addressed.

- Partially completes task or approximately 50% or more completed.
- Demonstrates partial ability to master task; some attempt at work is displayed.
- May have correct answer with incorrect logic, equations or assumptions, or incorrect answer with correct logic, equations or assumptions; will display errors.
- Displays some facility in the usage of language and grammatical errors may or may not affect clarity or understanding

# Generic Scoring Guide

**1.** There is *little evidence* that the student has demonstrated the skills and knowledge stated in the standard being addressed.

- Incomplete task or approximately 25% or more completed.
- Demonstrates little ability to complete or master task and little or no attempt at work is displayed.
- May display a correct or incorrect answer without displaying little or any attempt at logic or equations or may display an incorrect attempt at work.
- Displays inadequate facility in the usage of language and grammatical errors affect clarity or understanding

***0.*** *No evidence* that the student has the skills and knowledge stated in the standard being addressed.

- N/S = non-scorable or not assessed
- BLANK
- NON RESPONSIVE
- ILLEGIBLE
- OTHER LANGUAGE
- NOT ALIGNED TO STANDARD

# ETS Developed On-Demand Scoring Guide

| **Strand:** | **Grade 7 – Measurement and Geometry** |
|---|---|
| Standard: | 7MG1.2 Construct and read drawings and models made to scale. |
| Standard: | 7MG2.1 Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms and cylinders. |
| Standard: | 7MG2.3 Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and volume is multiplied by the cube of the scale factor. |

**Possible Correct Responses:**

1. Use the scale 1 inch = 4 inches to draw and label a scale drawing of a rectangle with an actual width of 16 inches and an actual length of 12 inches. [1.2]

| | |
|---|---|
| 1 | A 1-point response provides a rectangle labeled with a width of 4 inches and a length of 3 inches with the scale of 1 inch = 4 inches given.<br><br>Top Score Response: Student draws a rectangle with a width of 4 inches and a length of 3 inches and labels the rectangle with dimensions 16 inches (width) and 12 inches (length). |

## ETS Developed On-Demand Scoring Guide

2. The scale drawing of the rectangle represents the base of a rectangular prism. The height of the scale prism is 5 inches. Use your scale drawing of the rectangle to construct the scale drawing of the prism and label the height of the prism. [1.2]

| | |
|---|---|
| 2 | A 1-point response uses the drawing of the rectangle to construct rectangular prism with a height of 5 inches with the scale factor given.<br><br>Top Score Response: Student uses the drawing of the rectangle to construct a rectangular prism with a height of 5 inches and labels the height as 20 inches. |

3. What is the volume, in cubic inches, of the scale prism? Show or explain how the volume of the scale prism was determined. [2.1]

| | |
|---|---|
| 3 | A 1-point response writes 60 cubic inches as the volume, but shows little work.<br><br>Top Score Response: Student writes 60 cubic inches as the volume of the scale prism, or equivalent, and shows work supporting the answer. |

4. What would be the volume, in cubic inches, of the actual prism? Show or explain how the volume of the scale prism was determined. [2.3]

| | |
|---|---|
| 4 | A 1-point response provides writes 3840 cubic inches as the volume of the actual prism, but shows little work.<br><br>Top Score Response: Student writes 3840 cubic inches as the volume of the actual prism, or equivalent, and shows work supporting the answer. |

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# Focus Group Activities

## Focus Group Activities

- Your feedback on the assessment and the process
- Feedback will inform CDE on the future direction of the CAHSEE Alternative Means
- Groups broken out by ELA and Math
- Facilitated discussions and written feedback
- As you score, feel free to take notes on areas where you would like to provide feedback.

## Focus Group Activities

- CAHSEE Alt Means Survey
- Rubrics/Evaluation Procedures
- Directions for Administration (DFA) – Submission Forms
- Operationalize Submission of Work Samples by Strand
  - ELA - Word Analysis and Reading Comprehension
  - ELA - Literary Response and Analysis
  - ELA - Writing Strategies and Writing Applications
  - Math - Number Sense and Statistics/Probability
  - Math - Measurement and Geometry
  - Math - Algebra and Functions and Algebra 1
- Other topics as time permits


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Break
Split into Subject Area Groups

Educational Testing Service

# Alternative Means Pilot Study: Appendix D Online Survey Form

September 2011

# CAHSEE Alternative Means Survey

**All instructional staff members are invited to complete this survey regarding the feasibility of using a collection of evidence as an alternative means to the California High School Exit Examination (CAHSEE) requirement for eligible students with disabilities. All responses are confidential.**

## Profile

*Select the most appropriate option from the pull-down list in response to each question.*

**What is your current job responsibility?** (Options: Classroom Teacher, Special Education Teacher, Curriculum Specialist, School Administrator, District Administrator, Other)

**What is the grade level of the majority of your students?** (Options: Grade 9, Grade 10, Grade 11, Grade 12, All HS Grades, Ungraded, Adult)

**What subject area do you currently teach?** (Options: English-language arts, Mathematics, Social Studies/ History, Science, ESL, Multiple subject areas, Other, NA)

**At the end of this school year, how many years of teaching experience will you have?** (Options: 1-2 years, 3-5 years, 6-10 years,11-15 years, 16-20 years, More than 20 years,NA)

Save Answers and Resume Later

Next »

Progress

## Experience with CAHSEE

*Read each statement and select the level with which you agree or disagree.*

**I am familiar with CAHSEE administration procedures.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**I am familiar with the content standards measured by CAHSEE.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**Students with disabilities in my school/district are administered the CAHSEE with appropriate accommodations and modifications.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**I am aware of students with disabilities in my school/district who are on a diploma track, and will likely meet all other graduation requirements, but may not pass CAHSEE.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

« Previous

Next »

Save Answers and Resume Later

Progress

# CAHSEE Alternative Means

**Note: "CAHSEE alternative means" is defined as a collection of student work samples that demonstrate a level of achievement in the content standards that is the same as the one required for passage of the examination.**

*Read each statement and select the level with which you agree or disagree.*

**I believe that students with disabilities who have not passed CAHSEE will be able to demonstrate high-school competency by alternative means.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**A collection of student work samples will accurately depict what students know and are able to do relative to the standards assessed on CAHSEE.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**During the school year, I collect student work samples (e.g. classroom quizzes, student essays, class projects) that target standards measured by CAHSEE and could be submitted as part of a collection of evidence for alternative means.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree ○ Not Applicable

**Providing an alternative means to meet the CAHSEE requirement would increase academic expectations for students with disabilities.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**Compiling a collection of evidence for CAHSEE alternative means will place an undue burden on the teachers of eligible students.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**Professional development will be required to successfully implement CAHSEE alternative means.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**Please provide any additional comments or suggestions you may have regarding CAHSEE alternative means:**

# Alternative Means Pilot Study

**Note: Complete this section ONLY IF you have participated in the CAHSEE Alternative Means Pilot Study.**

*Read each statement or question and select the appropriate response.*

**How satisfied were you with the information provided in each section of the Directions for Administration?**

| | Very Satisfied | Satisfied | Unsatisfied | Very Unsatisfied |
|---|---|---|---|---|
| Overall satisfaction | ○ | ○ | ○ | ○ |
| Identifying and compiling a collection of evidence | ○ | ○ | ○ | ○ |
| Student work sample submission form | ○ | ○ | ○ | ○ |
| Student information/signature form | ○ | ○ | ○ | ○ |
| Submission of documentation | ○ | ○ | ○ | ○ |
| On-demand performance tasks for mathematics | ○ | ○ | ○ | ○ |
| On-demand performance tasks for English-language arts | ○ | ○ | ○ | ○ |

**Please provide any feedback you may have regarding the Directions for Administration:**

**How easy or difficult was each work sample type to implement?**

| | Very Easy | Easy | Difficult | Very Difficult | Not Applicable |
|---|---|---|---|---|---|
| On-demand writing prompt | ○ | ○ | ○ | ○ | ○ |
| On-demand classroom performance task | ○ | ○ | ○ | ○ | ○ |
| Classroom prepared task | ○ | ○ | ○ | ○ | ○ |
| Computer presentation | ○ | ○ | ○ | ○ | ○ |
| Audio/visual presentation | ○ | ○ | ○ | ○ | ○ |

Note: Mark "Not Applicable" if you did not utilize a work sample type.

**About how many total hours did it take you to gather and submit evidence for a single student?**

**Based on my experience with the pilot study, I believe the collection of evidence process is an effective means of demonstrating academic achievement of the content standards assessed by CAHSEE.**

○ Strongly Agree ○ Agree ○ Disagree ○ Strongly Disagree

**Please provide any additional feedback you may have about the implementation of CAHSEE alternative means for students with disabilities:**