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Independent Evaluation of the California High School Exit Examination (CAHSEE): Analysis of the 2001 Administration

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Independent Evaluation of the California High School Exit Examination (CAHSEE): Analysis of the 2001 Administration

Executive Summary

Background

California has moved through the second year of its schedule for requiring a graduation exam in mathematics and English-language arts (ELA) beginning with the Class of 2004. As is the case in nearly half of the states in the country, California began this initiative in response to widespread support for high standards and for some mechanism that holds students to them. This component of California's testing program is intended to ensure that all students graduating from high school can demonstrate grade level competency in reading, writing, and mathematics. The California Education Code, Chapter 8, Section 60850, specifies requirements for the California High School Exit Examination (CAHSEE). Since January 2000, the California Department of Education (CDE) has worked with a development contractor, the American Institutes for Research (AIR), throughout the development and tryout of test items for use in the CAHSEE and to develop and implement procedures for operational administration, scoring, and reporting. The first operational administration to 9th graders on a volunteer basis was completed in March and May of 2001. Results from these administrations were released in August 2001.

The California legislation specifying the requirements for the new exam also called for an independent evaluation of the CAHSEE. CDE awarded a contract for this evaluation to the Human Resources Research Organization (HumRRO). HumRRO's efforts focus on analyses of data from the field test of items (test questions), annual administrations of the CAHSEE, and on trends in pupil performance and pupil retention, graduation, dropout, and college attendance rates. As specified in the legislation, reports from the evaluation will include recommendations for improving the quality, fairness, validity, and reliability of the examination. As required under EC 60854, an initial report of results from the field tryout of test questions was issued June 30, 2000. The current report describes subsequent evaluation activities through December 2001, summarizes the results of these activities, and offers recommendations based on conclusions drawn from these results. The primary focus of this report is on results from the first operational administrations of the CAHSEE in 2001.

A detailed discussion of the background for this report is provided in Chapter 1. That discussion includes a summary of the prior, Year 1 report (Wise et al., 2000a), which described activities and findings leading to a general recommendation to consider delaying implementation of the CAHSEE requirement to allow more time to prepare a high quality test and, more importantly, more time to prepare students to pass the test. The background section also includes a brief description of a survey of all high school districts conducted at the request of the State Board of Education (SBE) to assess awareness of the exam and its requirements, plans for preparing and assisting students to pass the exam, expectations for the impact of the exam, and baseline data on graduation, retention, and post graduation plans.

Summary of Activities and Results

The activities and results from evaluation efforts to date are described in four separate chapters of the report. These sections summarize review of test development, administration, scoring, and reporting; school plans and perceptions; student preparation, reactions, and plans; and results of the Spring 2001 CAHSEE administrations.

Test Development, Administration, Scoring, and Reporting

Our review of the preparation and administration of the test is described in Chapter 2 of this report. The review activities and our associated findings are summarized here.

Quality of the Test Questions. The process for developing and reviewing test questions was found to be thorough and to meet common standards for such processes. We found no problems with the quality of the test questions based on analyses of results from the second tryout of test questions and on results from the operational 2001 administrations.

Administration Procedures. We observed preparation of test administration manuals and workshops to prepare testing coordinators and also observed the operational administration itself. Efforts to prepare for the administration were extensive and there were no major problems that would have invalidated test results. Nonetheless, administration procedures could be improved in a number of areas in the future. Most notably, students needed more time to complete the ELA test and administrators required more information on allowable testing accommodations. Plans for 2002 call for administering the ELA test over a 2-day period. CDE and the SBE have subsequently prepared more extensive descriptions and regulations with regard to accommodations and CDE is planning more extensive training of testing coordinators for the 2002 administration.

Setting the Minimum Passing Score. We observed the process used by the SBE to develop recommended passing standards for each test and to arrive at decisions on passing levels for the Class of 2004. The panels convened to develop recommendations represented teachers, other educators, and the general public across the state. The process that they used to review the test and develop recommended passing scores was fully consistent with sound practice. We also endorse the recommendation by the State Superintendent of Public Instruction and the decision by the SBE to adopt more lenient standards (60% of total possible points for ELA and 55% for math), because current content standards had not been in place when these students were developing prerequisite skills.

Equating. Statistical analyses were required to place results from the March and May 2001 test forms on the same scale. We reviewed the approach taken by AIR to develop the overall reporting scale and equate the two test forms, and we replicated their findings to within round-off error. No problems were found with the final tables used to map the number of correct responses onto the constant reporting scale.

Reporting. Reporting plans had to be significantly redrafted after the failure of SB 84, which would have made the 2001 administrations for practice only. The reports issued provided some diagnostic information on performance on different sections of each test along with the overall score and passing information. Aggregate reports provided information on the performance of different demographic groups on the test as a whole and also on each

section. Both reports lacked information on the accuracy of the scores reported (based on measurement error) as required by current professional standards. In addition, there are errors in assigning students to language fluency categories in the aggregate reports. The development contractor is now correcting these errors. We also would like to have seen greater caution in interpreting the aggregate reports in light of the voluntary nature of the samples of students from each school who were tested.

School Plans and Perceptions

Chapter 3 describes our review of school plans and perceptions associated with the first administration of the CAHSEE based primarily on our Spring 2001 survey of principals and teachers. Findings from the first round of this longitudinal survey (Wise et al., 2000) resulted in our identification of several primary issues: awareness, planning and preparation, alignment, expectations, and potential outcomes. Each administration brings more clarity to these issues, and allows us to refine our questions. For consistency, however, we have continued to use the topics to guide the longitudinal surveys as well as interim surveys such as the census survey of all high school districts in Fall 2000 (Sipes et al., 2001). Surveys were administered following the Spring 2001 CAHSEE administrations but prior to results being provided to the schools. The findings are reported by *background, knowledge, preparation thus far, future plans, expectations, and standards taught*.

Background. Survey results indicated that most teachers are certified in their primary subject area. Comments revealed that principals view their schools' academic atmosphere as becoming increasingly rigorous. Principals and teachers agreed that inadequate preparation of students is the biggest challenge they face in meeting the CAHSEE requirements. They also agree that student motivation and alignment of curriculum are the biggest benefits they associate with the CAHSEE.

Knowledge. Survey results indicated that both principals' and teachers' familiarity with the CAHSEE increased markedly between 2000 and 2201. Similarly, principals' ratings of student and parent familiarity with the CAHSEE increased from 2000 to 2001.

Preparation Thus Far. Most principals indicated movement toward alignment with state content standards but with more to do. There was an increase from 2000 to 2001 in principals initiating activities to prepare students, and half to two thirds reported undertaking activities to prepare faculty/staff for the CAHSEE administration. The majority of teachers indicated that almost all of the standards are covered by their school's curriculum. Comments by ELA teachers revealed a fairly even split in judgment in describing as excellent/good or fair/poor their students' level of preparation in English for proficiency on the CAHSEE. Mathematics teachers, however, perceived twice as many of their students as having fair/poor preparation.

Future Plans. Compared to "Preparation Thus Far," the plans reported by principals for remediation of students who do not pass the CAHSEE included more concrete actions such as using results to change instruction and providing tutoring.

Expectations. HumRRO assessed the potential consequences of the CAHSEE by examining predicted pass rates, impact on student motivation and parental involvement, and impact on instructional practices. Predicted pass rates, collected before the discussion of

passing levels by the State Board, were similar to last year's predictions and, on average, were reasonably comparable to actual results. Teachers and administrators predicted a slightly more positive impact on student motivation and parental involvement prior to the first administration than they did upon receiving pass/fail results from the first attempt. Predictions of the impact of the CAHSEE on student retention and dropout rates were generally similar in 2000 and 2001, although principals' predicted impact on student dropout rates were slightly more negative this year. Principals and teachers continue to expect the CAHSEE to have a positive impact on instruction, and they generally expect that impact to grow increasingly positive over time. Principals' estimates of the percentage of students in subgroup populations who have had instruction in the ELA or mathematics content standards of the CAHSEE were less optimistic than for all students as a group.

Standards Taught. Most mathematics teachers responded that the standards asked about in the survey are covered in Beginning or Intermediate Algebra and Plane Geometry. Both ELA and mathematics teachers indicated that some of the more difficult standards included in our survey were not typically taught until 10th grade or later.

Student Preparation, Reactions, and Plans

At the end of the CAHSEE exams, students completed a brief questionnaire on their reactions to the test and their plans for high school and beyond. Chapter 4 summarizes their reactions. In general, student responses to the post-examination questionnaire indicated that the vast majority recognized the importance of the test. Many had not prepared extensively for the test, but they may have had reason to believe it would only be a practice test. Students who passed the test on this first, early try were confident that they would graduate from high school. A larger proportion of disadvantaged groups (i.e., economically disadvantaged, English learners, and exceptional needs students) were unsure of graduation. Those who did not pass the test reported, for the most part, that graduation would be harder if they have to pass a test like this. Students with exceptional needs, EL students, and to a lesser extent, economically disadvantaged students were more inclined to see graduation as harder to achieve because of the test.

Post-high-school plans were queried to establish a baseline for this ongoing evaluation. Responses to this question will be monitored carefully in subsequent test administrations to determine whether the CAHSEE may affect expected graduation and post-high-school plans.

In terms of curricular coverage of test content, the mathematics test seemed to present more unfamiliar materials than the ELA test as indicated by reasons given for low performance. One possible mitigating factor is that Spring 2001 examinees were 9th graders and thus may not yet have encountered some math concepts; responses to this item by 10th graders in Spring 2002 will be revealing. A slightly higher proportion of exceptional needs students reported encountering untaught topics than average, whereas a lower proportion of EL students did so.

Results of the Spring 2001 Administrations

Analyses of results from the 2001 administrations are described in Chapter 5 of this report. Overall, 64% of the students taking the ELA test passed and 44% of the students

taking the mathematics test passed. We estimate that 42% of the students taking both exams passed both, although there is a small amount of uncertainty about this number due to problems in matching students' ELA and mathematics results. Passing rates were considerably lower for economically disadvantaged students (22.7% overall) and particularly for English learners and students with disabilities (11.9% and 10.3% respectively passed both parts). Overall we estimate that about 30% of the Class of 2004 took and passed both parts of the CAHSEE. Only about 6 to 8% of the EL and SD students have completed the requirements as fewer of these students took the exam and fewer of those who took it passed.

Two factors were significantly related to the passing rates. For the ELA test, students who had been English learners but were reclassified as proficient in English passed the exam at relatively high rates in comparison to students still classified as English learners. Again, there is a small amount of uncertainty about these estimates due to data coding problems that are being corrected by AIR and CDE. For the mathematics test, completing an Algebra I course was significantly correlated to the passing rates. We also examined the consistency between scores on the essay and multiple-choice portions of the ELA test and found that relatively few students passed who did not have moderate to high scores on both parts.

We also analyzed the accuracy of the test scores. We found that a modest number of students were too near the cutoff to classify accurately. For students significantly below or above the cutoff, classification was quite accurate. The zone of uncertainty was modest for the ELA test and slightly narrower for the mathematics test.

Key Findings and Recommendations

Chapter 6 describes our key findings and recommendations. In our earlier evaluation reports, we expressed concern with the time line for implementing the new graduation requirement. Our concern was based on two key questions:

(1) Would the exam be ready for the students?

(2) Would students be ready for the exam?

The first question was asked with regard to the risk of problems in the assembling and printing of test forms, with the administration of the test, and with the reporting of results. Based on evaluation activities to date, we offer the following general findings:

General Finding 1: Progress in developing the exam has been noteworthy. We found no significant problems with the exams administered in March and May 2001 or with the scoring of these exams.

Given low initial passing rates, there may be a tendency to question the validity of the exam. Our analyses of data from the Spring 2001 administration, however, showed that all test questions performed as expected. The operational test forms were printed correctly and on time and delivered to districts with few difficulties. Administration of the exam presented a number of significant challenges to schools in finding times and spaces in which to schedule students to take the exam. Even though the spring administration was not a practice test, as it appeared for a while that it might be, it provided a good opportunity to identify

logistical and administrative issues to be addressed further in future administrations. The 2002 administrations will be the first time students who have completed much of the 10th grade curriculum will take the exam. Lessons learned from the 2001 administrations should be helpful in improving the process for 2002.

General Finding 2: The process used to establish minimum passing scores was well designed and executed and the resulting passing standards appear reasonable.

There was some concern that the passing scores for the two exams could not be set until data from a census testing of 10th graders were available. With the failure of the urgency legislation (SB 84), the SBE was required to set minimum passing scores without normative information on 10th graders. Many experts disagree with the use of normative information and, where it is used, it rarely has much impact on the recommendations of the standard setting process. CDE and AIR used a systematic process for identifying panels of teachers and others who were very familiar with California standards and students and were broadly representative of the state. The SBE appropriately considered the passing standards as provisional, recognizing concerns that results for students completing the 10th grade curriculum are not yet available.

General Finding 3: Administrative and reporting procedures could be strengthened in several areas in future administrations of the CAHSEE.

Schools and districts faced difficult logistical challenges in scheduling and locating the testing and in planning activities for other students who were not scheduled to take the test. Uncertainty, up to the last minute, as to whether the test would count added to planning difficulties. For the most part, administration was handled remarkably well and we are not aware of significant administration problems. Nonetheless, procedures could be improved for future administrations in a number of areas ranging from the precoding of student information to decisions about appropriate accommodations for students with disabilities and improvements to the score reports.

General Finding 4: Progress on providing all students adequate opportunity to learn the material covered by the CAHSEE has been good, but it is too soon to tell whether there will be significant problems in preparing students in the Class of 2004 to pass the exam.

Our earlier reports expressed concern as to whether all schools could provide the Class of 2004 adequate opportunity to master the standards tested by the CAHSEE. Awareness of the exam has increased and recent survey results indicate that schools are taking the content seriously and progressing in plans to provide all students with opportunities to meet these standards. New legislation now requires that all students take algebra. In addition, changes to the Academic Performance Index are planned that will hold schools accountable for seeing that students have opportunities to learn the material required to pass the test.

The fact that significant numbers of 9th graders have not yet mastered the standards covered by the CAHSEE is not surprising. Results from our Spring 2001 survey suggest that

many of the standards are covered by courses most students do not take until the 10th grade. Members of the standard-setting panels were generally optimistic about schools' capacity for bringing students up to standard.

Recommendations

Based on information available to date, as summarized in our four general findings, we offer two main recommendations at this time:

General Recommendation 1: Stay the course. The legislature and Board should continue to require students in the Class of 2004 to pass the exam, but monitor schools' progress in helping most or all of their students to master the required standards.

Notwithstanding earlier recommendations, we think it best not to alter the current schedule for implementing the CAHSEE requirements at this time. As expected, initial passing rates are low, indicating that many 9th grade students have not yet had the opportunity to learn the material covered by the CAHSEE. Continuing with the current requirement means demanding that schools, teachers, and even parents not give up on the Class of 2004 just because their education to this point may not have been as comprehensive as we would like it to be. Most educators with whom we have spoken are optimistic regarding the potential for most students to master the required content standards given more years of instruction and targeted assistance. Schools and districts have expended considerable effort in improving the curriculum to increase coverage of the state content standards, particularly those covered by the CAHSEE. A decision to delay the requirement at this point could be seen as undercutting these efforts.

While we think the state should move ahead, we continue to have concerns as to whether all students in the Class of 2004 will have adequate opportunity to learn the material covered by the CAHSEE by the time they complete the 12th grade. This cannot be determined from the results of the 2001 administration to 9th graders. ***The best evidence that a school system is providing its students adequate opportunity to learn the required material is whether most students do, in fact, learn the material.*** Our evaluation will continue to monitor passing rates by school as an indicator of the extent to which students in these schools have had effective opportunities to learn the required knowledge and skills. A critical factor will be whether schools with the most difficult challenges, as evidenced by low initial passing rates, will be given the guidance and resources needed to bring their students up to required levels.

Whether implementation is deferred or not, it will be very important to give the CAHSEE requirement time to work. The history of state assessment programs shows a lack of stability over any prolonged period of time. For students to achieve the skills embedded in California's content standards, success may take a sustained effort over an extended period of time. "Staying the course" will be required to allow this to happen.

General Recommendation 2: The legislature and SBE should continue to consider options for students with disabilities and English learners.

There is significant tension between the desire to have high expectations for all students, including students with disabilities and English learners, and the need to be realistic about what some students can accomplish. Initial low passing rates for both of these groups suggest particular concern with the time it may take to help these students master the required standards. Options to be considered range from more liberal use of accommodations, to some form of alternative diploma for students who cannot reasonably be expected to develop or demonstrate the required skills, and also to deferring the graduation requirement for these students.

Other Specific Findings and Recommendations

A number of more specific recommendations are also described in Chapter 6. These include:

1. **More technical oversight is needed.**
2. **For future classes, testing should be delayed until the 10th grade.**
3. **A practice test of released CAHSEE items should be constructed and given to districts and schools to use with 9th graders to identify students at risk of failing the CAHSEE**
4. **More extensive monitoring of test administration and a system for identifying and resolving issues is needed.**
5. **The state needs a more comprehensive information system that will allow it to monitor individual student progress.**
6. **The legislature should specify in more detail how students in special circumstances will be treated by the CAHSEE requirements.**

More detailed explanations and rationales for each of these recommendations are presented in the full text of the report.

Independent Evaluation of the California High School Exit Examination (CAHSEE): Analysis of the 2001 Administration
Table of Contents

BACKGROUND I
SUMMARY OF ACTIVITIES AND RESULTS II
Test Development, Administration, Scoring, and Reporting ..... *ii*
School Plans and Perceptions ..... *iii*
Student Preparation, Reactions, and Plans ..... *iv*
Results of the Spring 2001 Administrations ..... *iv*
KEY FINDINGS AND RECOMMENDATIONS V
Recommendations ..... *vii*
Other Specific Findings and Recommendations ..... *viii*

LIST OF TABLES XI

LIST OF FIGURES XII

CHAPTER 1: INTRODUCTION 1

BACKGROUND 1
Mandate for this Report *2*
Summary of the Year 1 Report *2*
District Baseline Survey Resulting from Year 1 Activities *4*
KEY DEVELOPMENTS CONCERNING THE CAHSEE 5
THE YEAR 2 EVALUATION REPORT 6
ORGANIZATION AND CONTENTS OF THIS REPORT OF THE 2001 ADMINISTRATION 6

CHAPTER 2: TEST DEVELOPMENT, ADMINISTRATION, SCORING, AND REPORTING 9

INTRODUCTION 9
QUALITY OF THE TEST QUESTIONS 9
Content, Editorial, and Sensitivity Reviews of the CAHSEE Test Questions *10*
Statistical Analyses of the Test Questions *11*
ADMINISTERING CAHSEE 13
Sources of Information *13*
Observations on Test Administration *14*
Subsequent Actions by CDE *18*
REVIEW OF ESSAY SCORING PROCEDURES 20
SETTING THE MINIMUM PASSING SCORE 21
The Raw Score Scale *21*
Standard Setting Panels *21*
The Final Decision *23*
Lack of Complete Information on the Class of 2004 ..... *23*
EQUATING SCORES FROM THE MARCH AND MAY TEST FORMS 24
REPORTING 27
SUMMARY 28

Table of Contents (Continued)

CHAPTER 3: SCHOOL PLANS AND PERCEPTIONS **29**

INTRODUCTION 29
SURVEY DEVELOPMENT 29
SAMPLING AND ADMINISTRATION 30
FINDINGS 31
Background *32*
Knowledge *33*
Preparation Thus Far *34*
Future Plans *41*
Expectations *42*
Standards Taught *50*
Other *50*
SUMMARY 52

CHAPTER 4. STUDENT PREPARATION, REACTIONS, AND PLANS **55**

INTRODUCTION 55
STUDENT QUESTIONNAIRE 55
SUMMARY 76

CHAPTER 5. RESULTS OF THE SPRING 2001 ADMINISTRATIONS **77**

INTRODUCTION 77
STUDENT RESULT DATA FILES 78
WHO PASSED? 80
WHO HAS COMPLETED THE CAHSEE GRADUATION REQUIREMENT? 81
MULTIPLE-CHOICE VERSUS ESSAYS 82
SCHOOL LEVEL PASSING RATES 84
TEST SCORE ACCURACY 85
SUMMARY 88

CHAPTER 6. FINDINGS AND RECOMMENDATIONS **89**

GENERAL FINDINGS 89
RECOMMENDATIONS 92
OTHER SPECIFIC FINDINGS AND RECOMMENDATIONS 94

REFERENCES **97**

APPENDIX A SAMPLE PARENT AND DISTRICT SCORE REPORTS **A-1**

APPENDIX B PRINCIPAL AND TEACHER SURVEYS—SPRING 2001 ..... **B-1**

APPENDIX C CAHSEE SCHOOL SITE TESTING COORDINATOR SURVEY—SPRING 2001 ..... **C-1**

List of Tables

TABLE 2.1 Comparison of Spring and Fall Performance on Linking Items....12
TABLE 2.2 Characteristics of Schools Observed....14
*TABLE 2.3 Accommodation for Students With Disabilities by School Size **....17
TABLE 2.4 Accommodations Reported for All Students Testing in March 2001....18
TABLE 2.5 Scoring Agreement for the Essay....20
TABLE 2.6. Conversion from Weighted Raw Scores to Standard Scale Scores For the 2001 CAHSEE ELA Forms....25
TABLE 2.7. Conversion from Number Correct to Standard Scale Scores For the 2001 CAHSEE Mathematics Forms....26

TABLE 3.1 Teachers' Comments on Classroom Practices....33
TABLE 3.2 Percentage of Principals and Teachers Familiar with CAHSEE and State Content Standards....34
TABLE 3.3 Percentage of Principals Estimating Levels of Student and Parent Familiarity with CAHSEE....34
TABLE 3.4 Percentage of Principals Reporting Preparations for Alignment with State Content Standards....35
TABLE 3.5 Percentage of Principals Reporting Similarity between District and State Standards....35
TABLE 3.6 Percentage of Teachers Indicating Coverage of Standards by Curriculum....35
TABLE 3.7 Teacher's Estimates of Student Preparation....37
TABLE 3.8 Principals' and Teachers' Predicted Impact of CAHSEE on Student Retention and Dropout Rates....46
TABLE 3.9 Percentage of Principals Indicating Actions to Promote Student Learning....51

TABLE 4.1 Number of Students Who Took Each Test and Number Who Responded to Questionnaire Items....55
TABLE 4.2 Responses to Survey Question 1 by ELA Test Result....58
TABLE 4.3 Responses to Survey Question 1 by Mathematics Test Result....59
TABLE 4.4 Responses to Survey Question 2 by ELA Test Result....60
TABLE 4.5 Responses to Survey Question 2 by Mathematics Test Result....61
TABLE 4.6 Responses to Survey Question 3 by ELA Test Result....62
TABLE 4.7 Responses to Survey Question 3 by Mathematics Test Outcome....63
TABLE 4.8 Responses to Survey Question 4 by ELA Test Result....64
TABLE 4.9 Responses to Survey Question 4 by Mathematics Test Result....65
TABLE 4.10 Responses to Survey Question 5 by ELA Test Result....66
TABLE 4.11 Responses to Survey Question 5 by Mathematics Test Result....67
TABLE 4.12 Responses to Survey Question 6 by ELA Test Result....69
TABLE 4.13 Responses to Survey Question 6 by Mathematics Test Result....70
TABLE 4.14 Responses to Survey Question 7 by ELA Test Result....71
TABLE 4.15 Responses to Survey Question 7 by Mathematics Test Result....72
TABLE 4.16 Responses to Survey Question 8 by ELA Test Result....74
TABLE 4.17 Responses to Survey Question 8 by Mathematics Test Result....75

TABLE 5.1 Passing Rates by Demographic Group....80
TABLE 5.2 CAHSEE Completion Rates by 9th Grade Enrollment....82
TABLE 5.3 Percent Passing the ELA Test by Total Essay Score....83
TABLE 5.4 Number and Percent of Students Passing the ELA test by Total Multiple-Choice Score....83
TABLE 5.5 CAHSEE Math Passing Rate by Math Courses Taken....84
TABLE 5.6 Number and Percent of Schools with Low and High Passing Rates By Number of Students Tested—ELA....85
TABLE 5.7 Number and Percent of Schools with Low and High Passing Rates By Number of Students Tested—Mathematics....85
TABLE 5.8 Estimated Classification Error Rates for the March 2001 Forms....87
TABLE 5.9 Estimated Classification Error Rates for the May 2001 Forms....87

List of Figures

Figure 3.1a. *Percentage of principals reporting activities undertaken in preparation for the Spring 2001 administration of the CAHSEE.....36*
Figure 3.1b. *Percentage of teachers reporting activities undertaken in preparation for the Spring 2001 administration of the CAHSEE.....37*
Figure 3.2. *Percentage of principals reporting plans for remediation of students who do not pass the CAHSEE. 42*
Figure 3.3a. *Principals' predicted impact of the CAHSEE on student motivation and parental involvement of students who pass the exam on the first attempt.....43*
Figure 3.3b. *Teachers' predicted impact of the CAHSEE on student motivation and parental involvement of students who pass the exam on the first attempt.....43*
Figure 3.4a. *Principals' predicted impact of the CAHSEE on student motivation and parental involvement of students who fail the exam on the first attempt.....44*
Figure 3.4b. *Teachers' predicted impact of the CAHSEE on student motivation and parental involvement of students who fail the exam on the first attempt.....44*
Figure 3.5a. *Principals' predicted impact of the CAHSEE on student retention and dropout rates.....45*
Figure 3.5b. *Teachers' predicted impact of the CAHSEE on student retention and dropout rates.....46*
Figure 3.6a. *Principals' prediction of influence of the CAHSEE on instructional practices over time.....47*
Figure 3.6b. *Teachers' prediction of influence of the CAHSEE on instructional practices over time. 48*
Figure 3.7a. *Principals' estimates of the percentage of students who have had instruction in ELA content standards.....49*
Figure 3.7b. *Principals' estimates of the percentage of students who have had instruction in Mathematics content standards.....49*
Figure 3.8. *Percentage of principals indicating the percentage of teachers who understand the difference between "teaching to the test" and "aligning the curriculum and instruction to the standards." .51*

CHAPTER 1: INTRODUCTION

Background

California has moved into the second year of its schedule of requiring students to pass a graduation exam in mathematics and English-language arts (ELA) beginning with the Class of 2004. Like nearly half of the states in the country, California began this initiative in response to widespread support for high standards and the corresponding need for some mechanism that holds students to those standards. As a component of California's testing program, the exit examination is intended to ensure that all students graduating from high school demonstrate grade level competency in reading, writing, and mathematics. The California Education Code, Chapter 8, Section 60850, specifies requirements for the California High School Exit Examination (CAHSEE)[1]. Since January 2000, the California Department of Education (CDE) has worked with a development contractor, the American Institutes for Research (AIR), throughout the development and field-testing of items used in the CAHSEE and the operational tests administered to 9th graders (on a voluntary basis) in March and May of 2001.

The legislation specifying the requirements for the new exam also called for an independent evaluation of the CAHSEE. CDE awarded a contract for this evaluation to the Human Resources Research Organization (HumRRO). HumRRO's efforts focus on analyses of data from the field test of items (test questions), the field administration of the examination, and the annual administrations of the CAHSEE, and report on trends in pupil performance and retention, graduation, dropout, and college attendance rates. As specified in the legislation, the evaluation reporting will include recommendations for improving the quality, fairness, validity, and reliability of the examination.

The key question to be addressed in the evaluation is whether the benefits or positive consequences from the CAHSEE requirements outweigh the costs or negative consequences. Negative consequences are primarily associated with the likelihood that some students who might otherwise have graduated will be denied diplomas. Additionally, focus on the new requirement might have a narrowing or negative impact on the curriculum provided to students who do graduate. At this point, it is too early to provide any estimate of how many students might be affected or to gauge the impact that the new requirement will have on the curriculum in different schools.

The primary benefit that is likely to result from the new requirement is that students, with increased help from parents, teachers, and schools, will work harder to achieve essential verbal and quantitative skills. It is also too early to tell to what extent the new requirements will affect the dropout rate. If the program works as intended the number of students ultimately denied a diploma will be quite small and the increase in the number of students who reach essential minimal levels of achievement will be quite significant. Only implementation will tell whether the new testing program will achieve its intended results.

[1] As specified in the Education Code, the CAHSEE consists of two separately timed and scored sections, referred to in this report as the ELA test and the mathematics test.

Mandate for this Report

The present report is required under Section 60855 of the California Education Code. That section lists the requirements for an evaluation of California's high school exit examination and specifies dates for reporting results of the evaluation. The full text of this section is as follows:

> ***60855(a)*** *By January 15, 2000, the Superintendent of Public Instruction shall contract for a multiyear independent evaluation of the high school exit examination that is established pursuant to this chapter. The evaluation shall be based upon information gathered in field testing and annual administrations of the examination and shall include all of the following:*
>
> *(1) Analysis of pupil performance, broken down by grade level, gender, race or ethnicity, and subject matter of the examination, including any trends that become apparent over time.*
>
> *(2) Analysis of the exit examination's effects, if any, on college attendance, pupil retention, graduation, and dropout rates, including analysis of these effects on the population subgroups described in subdivision (b).*
>
> *(3) Analysis of whether the exit examination is likely to have, or has, differential effects, whether beneficial or detrimental, on population subgroups described in subdivision (b).*
>
> ***60855(b)*** *Evaluations conducted pursuant to this section shall separately consider test results for each of the following population subgroups, provided that information concerning individuals shall not be gathered or disclosed in the process of preparing this evaluation.*
>
> *(1) English language learners and non-English language learners.*
>
> *(2) Individuals with exceptional needs and individuals without exceptional needs.*
>
> *(3) Pupils that qualify for free or reduced price meals and are enrolled in schools that qualify for assistance under Title 1 of the Improving America's Schools Act of 1994 (P.L. 103-382) and pupils that do not qualify for free or reduced price meals and are not enrolled in schools that qualify for assistance under Title 1 of the Improving America's Schools Act of 1994 (P.L. 103-382).*
>
> *(4) Any group of pupils that has been determined by the independent evaluator to be differentially affected by the exit examination established pursuant to this chapter.*
>
> ***60855(c)*** *Evaluation reports shall include recommendations to improve the quality, fairness, validity, and reliability of the examination. The independent evaluator may also make recommendations for revisions in design, administration, scoring, processing, or use of the examination.*
>
> ***60855(d)*** *The independent evaluator shall report to the Governor, the Office of the Legislative Analyst, the Superintendent of Public Instruction, the State Board of Education, the Secretary for Education, and the chairs of the education policy committees in both houses of the Legislature, in accordance with the following schedule:*
>
> *(1) Preliminary report on field testing by July 1, 2000.*
>
> *(2) First annual report by February 1, 2002.*
>
> (3) *Regular biennial reports by February 1 of even-numbered years following 2002.*

Summary of the Year 1 Report

Plans for conducting the evaluation have been updated each year in response to new and evolving information about plans for developing and implementing the CAHSEE (Wise, Hoffman, & Harris, 2000; Wise, Harris, Sipes, Hoffman, & Ford, 2000a; Wise, Sipes, Harris, Collins, Hoffman, & Ford (2000b); Wise, Sipes, George, Ford, & Harris, 2001). These plans are summarized briefly here to provide a context for the continuing evaluation activities.

The Year 1 evaluation activities involved reviewing and analyzing three types of information:

1. *Review of Test Questions and Test Developer Plans and Reports.* We convened a panel of teachers familiar with the California Content Standards and led them through a review of a sample of test questions. No formal reports were available during the first year; thus, we attended meetings and listened to presentations by the development contractor (AIR) and by CDE. We also monitored various presentations to the High School Exit Examination (HSEE) Standards Panel and to the State Board of Education (SBE) and had direct conversations with members of each of these groups.

2. *Analysis of Pilot Test and Other Statewide Data.* An initial source of information for our evaluation was data from the CAHSEE pilot administration. We also examined 1999 Standardized Testing and Reporting (STAR; for details see http://star.cde.ca.gov/) results with plans to monitor trends in STAR results over the course of the evaluation.

3. *Survey of Principals and Teachers.* We selected a representative sample of 24 districts and approximately 90 of their high schools to establish a longitudinal group for study. The baseline surveys, which were administered to principals and ELA and mathematics teachers, provided an initial look at schools' perspectives on the impact of CAHSEE on their programs. We also recruited teachers and curriculum experts from these schools and their districts to review test items and tell us whether the questions tested knowledge and skills not covered for all students in their current curriculum.

After completing these activities, we concluded that test development efforts to that point were highly successful. The quality of the test questions was high and development efforts were generally on track. Nonetheless, a great deal of work remained before operational administration could begin, including approval by the SBE of specific test content, development and testing of additional questions, determining the minimum passing score, determining appropriate accommodations for students with disabilities and English learners, and developing score reports. We also noted that available evidence from the field tryout and from reviews and surveys of teachers suggested that students might not be well prepared to meet the standards proposed for the assessment.

The findings suggested concerns both for whether a high quality test could be developed in the available time and, more importantly, whether students in the Class of 2004 would be adequately prepared to pass the CAHSEE. We offered the following general recommendation in our Year 1 Report:

> *General Recommendation. The State Board of Education, Legislature and Governor should give serious consideration to postponing full implementation of the CAHSEE requirement by 1 or 2 years.*

We also provided several more specific recommendations for improving the test and its use. These included:

> *Specific Recommendation 1. The Department and the Board need to work together to clarify the relationships and differences among the different high school testing programs, most notably the HSEE, the standards-based STAR assessment, and the Golden State Examinations.*
>
> *Specific Recommendation 2. The Department and Board should establish, expand, or accelerate processes for communicating with local districts about the HSEE and supporting their preparation for its implementation.*
>
> *Specific Recommendation 3. The Department and development contractor need to gather, review, and discuss more information on the appropriateness and effectiveness of testing accommodations for special needs students and English-language learners.*

Complete details of the Year 1 effort, including supplemental analyses of additional data from the field test, are presented in our primary and a supplemental reports describing evaluation activities, findings, and recommendations (Wise et al., 2000a; Wise et al., 2000b). Those two evaluation reports emphasized positive aspects of the results, as indicated by several measures of the quality of the test questions, as well as the amount of work remaining to be done before operational administration of the CAHSEE. The major apprehension noted in these reports was educators' concern that students were at that time not well prepared to pass the exam.

District Baseline Survey Resulting from Year 1 Activities

The results of the baseline survey of teachers and principals in the longitudinal sample of high schools indicated concern with the degree to which students were being provided sufficient opportunities to learn the material covered by the CAHSEE. After reviewing these concerns, the SBE and CDE requested an additional survey of all public high school and unified districts in California. Shortly after SBE adoption of the CAHSEE and its content, HumRRO developed and sent out the CAHSEE District Baseline Survey, which was required prior to October 1, 2000. The survey covered plans for changes in curriculum and other programs to help students pass the examination. We asked that each district have the survey completed by an Assistant Superintendent or Director of Curriculum and Instruction, or the individual at the district level who was most knowledgeable about CAHSEE.

The survey, which built on and benefited from the results of the longitudinal sample survey, addressed five critical topics:

1. *Awareness* of the CAHSEE, its content, administration plans, and requirements for student participation.

2. *Alignment* of the district's curriculum to statewide content standards, particularly those to be covered by the CAHSEE.

3. *Plans and Preparation* to increase opportunities for all students to learn the material covered by the CAHSEE and to help students who do not initially pass the examination.

4. *Expectations* for passing rates and for the effect of the CAHSEE on instruction and the status of specific programs offered in the district.

5. *Outcome baselines,* including retention and graduation rates and students' postgraduation plans.

The following general conclusions were drawn from results of the district survey:

- *General awareness* of the CAHSEE is high, but more information is needed, particularly for students and parents, about (a) the knowledge and skills covered by the CAHSEE and (b) plans for administering and reporting on the test.
- *Districts report high degrees of alignment* of their own content standards to the state content standards. The survey addressed this question at a general level; more work is needed to assess and document the degree to which each district's curriculum covers the content standards tested by the CAHSEE and the degree of student access to courses that offer such coverage.
- *Districts have implemented or are planning* a number of programs to prepare students and teachers for the CAHSEE and to assist students who do not initially pass. The most frequently planned activities include more summer school, tutoring, and matching student needs to specific courses.
- *Districts believe the CAHSEE will have a positive impact* on curriculum and instruction. Most expect at least half of their students to pass the CAHSEE on their first attempt.

Complete details of the district-wide survey effort are presented in a final technical report describing evaluation activities, findings, and recommendations (Sipes, Harris, Wise, & Gribben, 2001).

Key Developments Concerning the CAHSEE

A number of key events have occurred since our first legislatively mandated report. These include:

1. The HSEE Standards Panel recommended the content to be covered by the CAHSEE (July 2000).

2. The SBE adopted the examination and approved, with some modification, the content recommendations of the HSEE Standards Panel. Specifically, the Board accepted the Department's recommendation that initial coverage of algebra in the mathematics test be somewhat limited.

3. Regulations describing appropriate test accommodations for students with disabilities were developed and continue to evolve.

4. Legislation (SB 84) that would have made the 2001 administration a practice test failed two days before the March administration.

5. In Spring 2001, CDE issued a request for proposals (RFP) for the continued development and administration of the CAHSEE. The initial contract with AIR extended only through the development, processing, and reporting of the 2001 administration. The RFP was subsequently redrawn due to a protest and reissued in July 2001. A second protest delayed an award based on responses to the second RFP. The protest was subsequently withdrawn and an award was made to Educational Testing Services (ETS) for continued development, processing, and reporting of theCAHSEE administrations beginning with 2002.

6. Legislation eliminating 9th grade testing for future Classes (AB 1609) passed and was signed by the Governor (October 10, 2001). This legislation also called for a special study of "whether the test development process and the implementation of standards-based instruction meet the required standards for a test of this nature." The legislation authorizes the SBE to review the report of this study and decide, by August 2003, whether to defer the CAHSEE requirement to a later class.

7. A lawsuit was filed on behalf of students with disabilities to prohibit or defer the graduation test requirement (Juleus Chapman et al. v. California Department of Education et al., 2001) (see http://www.dralegal.org/cases/).

The Year 2 Evaluation Report

Our contract with the Department of Education requires an annual report at the end of each contract year. The second annual report (Wise et al., 2001), submitted June 30, 2001, covered preliminary analyses of the March 2001 administration along with other 2000/2001 contract activities. The current report replaces these preliminary analyses with complete results that include final scoring for both the March and May 2001 administrations of CAHSEE. Findings and recommendations included in our Year 2 report have been updated here to reflect the revised analyses. The current report is intended to add to the findings and recommendations in our first legislatively mandated report issued July 1, 2000. In a few instances, we will refer to technical details in the Year 2 report to reduce redundancy.

Organization and Contents of this Report of the 2001 Administration

This report covers activities performed on the independent evaluation through December 31, 2001. Chapters 2–4 report the preparation and administration of the exam itself, schools' perceptions and plans concerning the exam, and student perceptions and plans respectively. Our analyses of results from the 2001 administrations are presented in Chapter 5. The final chapter summarizes the main findings from the evaluation and presents our recommendations based on these findings.

At this time, we are able to address in detail only the first requirement under EC60855(a), analysis of pupil performance. So far, CAHSEE has been administered to 9th graders on a volunteer basis. While over 70 percent of students in the Class of 2004 took the exam as 9th graders, not all of them had completed course work that would be expected to prepare them for the exam, and we do not yet know what actions they, their parents, teachers, and schools will take in response to the results. More specific information on the potential effects of the exam will be available after the 2002 administration. At that point, all students in the Class of 2004 should have taken the exam at least once. Further, that test will provide information on how much students who did not pass the CAHSEE in 2001 were able to improve their performance

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CHAPTER 2: TEST DEVELOPMENT, ADMINISTRATION, SCORING, AND REPORTING

Introduction

A major concern raised in our first evaluation report was whether it was feasible to develop a high quality exam within the time constraints specified in the legislation. In this chapter, we describe our review of the quality of the test forms that were administered in 2001 and also document our review of administration, scoring, and reporting procedures used for that administration.

The quality of the two test forms used in the 2001 administration is a direct result of the procedures used in developing and reviewing test questions and in selecting questions for inclusion in the first operational exam forms. We describe our review of these procedures and also discuss statistical indicators of the quality of the test questions based on data from field tests of these questions and from the operational administrations.

Once the first forms of the exam were developed, they had to be administered. For a time, it appeared that the 2001 administration would be a practice test for the students, also providing schools an opportunity to try out procedures for administering and scoring the tests. Administration of the CAHSEE created significant logistical issues for many schools. These logistical issues could, in turn, affect the quality of the examination. We provide a description of our observation of how the test was administered and some suggestions for making this process run more smoothly in the future.

A third set of issues potentially affecting test quality concerned the processing, scoring, and scaling of the tests. Issues included the care with which answer sheets were checked at the test sites and upon receipt at the scanning site, the accuracy and/or consistency of the hand scoring of the essay responses for the ELA test, and how the total scores were placed on the score scale. In May, there was the additional problem of achieving near equivalency of reported scores to those from the March administration, even though the May exam used a large number of different test questions.

The final quality issue discussed in this chapter is the reporting of the test results, both for individual students and for aggregations by school, district, county, and the state as a whole. The failure of SB 84 significantly affected the reporting of results. Initially, reports were designed for a practice test where results from each test question could be released, but passing standards would not be set so students would not be told whether they had passed or failed each test. On very short notice, the score reports had to be redesigned to include passing information. In addition, some questions had to be held secure for use in equating alternate forms, so information at the test question level was considerably more limited.

Quality of the Test Questions

The CAHSEE mathematics (math) examination consists of 80 multiple-choice questions. The English-language arts (ELA) exam consists of 58 multiple-choice reading questions, 24 multiple-choice writing questions, and 2 essay questions used to assess writing skills. Each

test question was designed to assess mastery of a specific content standard recommended by the HSEE Standards Panel and adopted by the SBE for coverage by the exam.

Professional and legal standards (e.g., those set by the American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 1999) require that tests, particularly those used in making important or high stakes decisions about people, be both valid and reliable. In this context, the CAHSEE is valid if it assesses the targeted content as completely as possible and does not require knowledge or skills beyond those specified in the content standards for the exam. A test is said to be reliable if it gives accurate or consistent estimates of the trait(s) being measured. One test of reliability would be, for example, if students took two (parallel) forms of the exam and achieved similar scores on both. A test cannot be valid if it gives inconsistent results, indicating it is not reliable in providing an accurate measure of the intended content. On the other hand, a test could be quite reliable, but still be invalid if it measured the wrong content. In evaluating tests, validity is the primary concern, followed by reliability as the issue next in importance.

Another key issue in professional and legal standards is fairness. Here fairness is primarily a question of whether the exam measures the targeted content in the same way for all groups of students. Note that groups may differ in mastery of the target content; in such cases, a fair test will neither overstate nor understate the extent of such differences. A test or an individual test question is “unfair” if it requires knowledge or skills beyond the targeted content that are differentially available or familiar to some groups of examinees compared with others. Test questions that are not fair by this definition are almost always also not valid because of the requirement of extraneous skills. Thus, validity as the primary concern is once again demonstrated.

The test development contractor performed a number of steps to assess all potential CAHSEE test questions for validity, reliability, and fairness. We describe these steps briefly here along with our own efforts to assess the validity, reliability, and fairness of the two forms of the exam used in the 2001 administrations.

Content, Editorial, and Sensitivity Reviews of the CAHSEE Test Questions

Each question developed or identified for use in the CAHSEE was subjected to extensive review before being tried out in a field test. Specific reviews included:

1. Editorial and content review by experienced editors on the AIR staff.

2. Content review by panels of teachers and educators familiar with the content standards.

3. Content and sensitivity reviews by subcommittees of the HSEE Standards Panel that had initially identified the targeted content standards.

4. Sensitivity review by expert panels including representation of key demographic groups.

5. Final review by CDE and SBE staff and by Board members themselves.

At each review, test questions could be flagged for revision or eliminated altogether from further consideration. We were able to observe some reviews performed by the HSEE Standards Panel and outside educators, and found them to be conducted very thoroughly. For the most part, relatively few problems were identified, suggesting that initial development and internal review processes were effective.

During the first year of our evaluation, we assembled panels of California educators and conducted an independent review of a sample of test questions. The primary question asked of each panelist was whether each test question was a fair and effective measure of mastery of the targeted content standard. Detailed results from that review were described in our Year 1 Report (Wise et al, 2000a). The general conclusion was that relatively few issues were identified and that the questions were generally of good quality. While we reviewed only a sample of CAHSEE test questions, the results suggested that the process used by CDE and the test developers to review all of the test questions was effective. This conclusion was further reinforced by the results of statistical analyses of the test questions described below.

As noted, all of the questions included in the 2001 administrations were developed by AIR and subjected to one of two tryouts or field tests. A new test contractor, the Educational Testing Service (ETS) was selected for development and administration of the CAHSEE beginning with the 2002 administration. As part of our independent evaluation, we plan to conduct a second independent review of test question quality in Spring 2002 as a check on any revisions to the development and review processes.

Statistical Analyses of the Test Questions

Test questions that had been developed or adapted during the first half of 2000 were included in the Spring 2000 Field Test. AIR reported results from that field test in August of 2000 (American Institutes for Research, 2000).

We reported our own analyses of the Spring 2000 Field Test in our June 30 and August 25 reports of that year (Wise et al., 2000a; Wise et al., 2000b). Included in those reports was an examination of the difficulty of each question (defined in terms of percent of students answering correctly). We flagged questions if they appeared to be inappropriately difficult or easy relative to other questions measuring the same standard. We also looked at whether performance on each question was consistent with performance on all of the other questions in the test (item-total correlation). This provided an indication of whether the question was effective in differentiating between high and low levels of mastery of the targeted standards. For the multiple-choice questions, we also looked at whether any of the incorrect options were selected by a significant number of high performing students as an indicator that the question might be incorrectly keyed or have multiple correct answers. For the essay questions, we examined the consistency with which independent readers scored them. We also examined a common indicator of “differential item functioning” to identify any items that were disproportionately difficult for various groups of students.

The results of the Spring 2000 Field Test indicated that a very high proportion of the questions had acceptable statistical properties and could be used in operational CAHSEE

examination forms. Nonetheless, additional test questions were needed to cover particular content standards and to support the assembly of multiple test forms.

Additional test questions were developed by AIR and included in a second field test conducted in Fall 2000. Results of that field test were reported by AIR. We have not yet had an opportunity to review AIR's documentation of the second field test, but we reported our own analyses of results from this field test in our Year 2 Report (Wise et al., 2001a). Again, relatively few questions were flagged in the review of statistical properties. More than 84% of the ELA questions and 72% of the math questions had no statistical flags at all.

Pages 14–24 of our Year 2 report (Wise et al., 2001a) show the number of test questions developed per content standard and the average percentage of students who answered these questions correctly. After reviewing the data in these tables, we concluded that there were a sufficient number of test questions to assemble at least two distinct exam forms that each covered the content standards as specified in the test plan recommended by the HSEE Standards Panel and approved by the SBE.

Our analysis of the difficulty of questions for different content standards indicated that questions assessing many of the algebra standards were disproportionately difficult (Wise et al., 2000b). Based on this finding, the CDE recommended and the SBE subsequently approved reduced coverage of algebra for the Class of 2004, while indicating an intention to increase coverage at a later time.

In comparing results from the two field tests, one interesting finding emerged that bears reporting here. In order to be able to compare statistical results from the Spring and Fall 2000 field tests, AIR included a common set of 20 multiple-choice questions in each of the four different ELA forms used in the fall field test and another common set of 20 math items in each of the four different math forms. Each of these common questions had been included in the spring field test, making it possible to compare the relative performance of students in the spring field test who were tested toward the end of 10th grade with the performance of students in the fall field test who were tested at the beginning of the 10th grade.

Table 2.1 shows the average percent of correct responses to the 20 linking items for the students in the fall field test and for students in the spring field test. For ELA, the students at the beginning of 10th grade in the fall field test actually did slightly better than the students from the spring field test who were at the end of the 10th grade. This might reflect a difference between the Class of 2002 who participated in the spring field test and the Class of 2003 included in the fall field test. The Class of 2003 may have benefited from additional instruction since the adoption of the California Content Standards.

TABLE 2.1 Comparison of Spring and Fall Performance on Linking Items

	ELA	Mathematics
Number of Linking Items	20	20
Passing Rates in Fall 2000 Field Test	Percent Correct	Percent Correct
Fall 2000 Avg. (beginning of 10th Grade)	62.8	53.0
Spring 2000 Avg. (end of 10th Grade)	61.7	57.5
Difference	-1.1	+4.5

The data in Table 2.1 show the opposite finding for mathematics. The sample of students at the beginning of 10th grade had lower rates of correct responses than the sample of students at the end of 10th grade by about 4.5 percentage points. The implication is that 10th grade course work improves student performance on the mathematics test, suggesting that many 9th graders may not yet be ready to take this exam.

We also conducted statistical analyses of student responses to the questions in the March and May 2001 operational test forms. Analyses of operational test results closely paralleled our analyses of the field test data. We examined the difficulty of each question, item-total correlations, incorrect option selection for the multiple-choice questions, consistency across scorers for the essay questions, and indicators of differential item functioning (DIF) for various examinee groups. Given the much larger sample size in the operational administration relative to the field test, we were able to examine differential functioning with much greater precision for a larger number of groups. In particular, while the number of African American students in the field test was too small to detect differential function with much precision, in the operational test data we were able to examine possible DIF for this group with much greater precision.

Preliminary results of our analyses of responses to the operational questions were reported in our Year 2 report (Wise et al., 2001). Subsequent analyses were entirely consistent with the conclusions stated in that report. A few questions were flagged for further review based on analyses of responses to the operational forms. Some simply turned out to be difficult questions and others included incorrect options that were attractive to students with partial knowledge. In no case was there any suggestion of problems that might warrant excluding the question from operational scoring.

Administering CAHSEE

The plan for administration of a practice test in Spring 2001 would also have allowed an opportunity for a dry run of test administration procedures. As described below, the joint demands of fairness and test security placed a number of difficult constraints on the administration of the CAHSEE. These constraints impacted schools and districts differently depending on the number of students tested, how student time is normally scheduled, the availability of testing space, and other factors. In this section, we describe our observations of the Spring 2001 administration and offer some suggestions for consideration in future administrations of the CAHSEE.

Sources of Information

HumRRO collected information on administration of CAHSEE from three sources:

1. Observing three schools as they administered CAHSEE

2. Monitoring training workshops for school and district personnel responsible for test coordination before the March administration and a focus group of district test coordinators after the March administration

3. Surveying a modest sample of school test coordinators

Characteristics of the test sessions observed are shown in Table 2.2. The HumRRO observer watched students take the test—attending to the pace of progress, test security, and level of distraction—and interviewed the test coordinators. While the schools varied in the ways they administered the CAHSEE, school staffs were well-prepared and provided good testing conditions. The most striking overall feature was how seriously students took the test.

TABLE 2.2 Characteristics of Schools Observed

School	Subject	School Type	Approximate Number Tested	Environment	Accommodations
A	ELA (March)	Urban	850	Classrooms	None
B	Math (March)	Rural	275	Auditorium	None
C	ELA (May)	Suburban	575	Classrooms	Special Education (Separation)

Our Spring 2001 survey of teachers and principals in the longitudinal sample of high schools included a brief survey of site coordinators. The site-coordinator survey (see Appendix C) asked for feedback on guidance received, students tested, the general approach to administering the test, and changes planned for future administrations of CAHSEE. Coordinators for 42 schools returned the survey. About half of the respondents had the title of test coordinator and another third were assistant principals.

CDE conducted a focus group with about 40 district testing coordinators between the March and May test dates to collect feedback on test logistics. The coordinators rotated through four stations to discuss issues with administering CAHSEE: (a) testing manuals, workshops, and staff development; (b) logistics, scheduling, and security; (c) test administration support; and (d) accommodation and regulations. The discussion of results from all three sources is organized by those topics.

Observations on Test Administration

Testing Manuals, Workshops, and Staff Development

The test developer and its subcontractor for processing and reporting (NCS Pearson) conducted five workshops with district and school test coordinators (HumRRO observed one of the workshops). The workshops focused on the importance of CAHSEE and the necessity for coordinators to get immersed quickly and take seriously procedures for the administration of the tests. Topics included session length, test security, and score reports. Speakers walked coordinators through the demanding requirements for receiving materials, preparing answer documents, and returning materials.

About 60% of the surveyed coordinators had read at least one of the coordinator manuals, but only half reported reading Directions for Administration. Most thought that the information in the manuals was clear, but several suggested changes, including: (a) Combine the coordinator manuals to eliminate overlap, (b) reduce restrictions on distribution of Directions for Administration, and (c) clarify the instructions for filling out the answer documents.

Feedback on workshops was also obtained via the survey delivered to the sample of high schools. About 25% of the school site coordinators in the survey had attended one of the

workshops. Although they generally felt frustrated by the uncertainties of whether the test was practice only or would count in fulfilling the new graduation requirement, the only negative comment about the content of the workshop was that not enough of it was about logistics, especially what to do with students who were not being tested.

While coordinators who attended the focus group also thought that the Directions for Administration were confusing, especially regarding the completion of background information in cases where the school had taken advantage of the precode option, they were positive about the workshops. They said that the workshops should be conducted earlier, at more sites, and with fewer people per session. One response to a question about plans for the next administration was, "Going to the conference was extremely helpful. Other site coordinators from my district did not go and they were confused. I recommended to them that they go to the meeting next time!"

CDE supported staff development through presenter workshops and teacher guides. Comments from the focus group about those efforts were strongly positive, especially for the option to access information via the Internet.

Logistics, Scheduling, and Security

Workshop participants provided feedback on issues including extended test-taking time, breaks, the length of the ELA test, and options for students not taking the test. Further consideration of these issues would be helpful.

The main logistics problem in the observed schools was balancing the option of extended time for students who needed it with test security and test conditions. Observers noted that School A did not provide extended time but had very good test security. At the end of both sessions, proctors alerted students that time was almost up and they should finish the test; they did not mention that additional time was available. Everyone took a break between the two main sections of the test. Because this school allotted more than 2 hours for each session, all students appeared to finish by the scheduled time, but some students in each session clearly rushed to complete their essays.

School B provided extended time and preserved testing conditions but did so at the cost of test security. This school tested students in an auditorium with lapboards and allowed about 3 hours for testing. (Because the school did not precode answer documents, completion of the background section took 30 minutes.) Students ignored the section breaks, moving directly to Section 2 as soon as they completed Section 1. After an hour, all students took a 13-minute break regardless of their progress on the test. After students finished Section 2, they left the auditorium. This approach traded security (students had a chance to get information on past or upcoming items during the break) for improved test conditions (by minimizing disruptions for more deliberate students). About 5% of the students had not finished by the time lunch started. They were released for lunch and told to report to a classroom to complete the test. Although this model was not typical of the schools in the survey, it was not unique: Two other schools disregarded the sections (and another plans to do so next time); five allowed students to finish the first section after the break; and six had students finish the exam after lunch.

School C tested students in classrooms but had not given proctors guidance on extended time because feedback from schools that had tested in March indicated that time was adequate. As a result proctors gave a variety of options to students who needed more time. In some classes, such students were sent to the library. In another class, students were told they could work through the break but no longer. Some students who needed time for Section 2 continued through lunch and received compensatory time for lunch. A survey respondent wrote: "When students need more time, it is a logistical nightmare."

A consistent comment from all sources was that the ELA test was too long. For example, a district coordinator commented that "kids max at 2 ½hr," and a pr octor at an observed school said, "These kids are fried." Approximately 5% of the students reported that they did not have enough time and about 9% did not attempt the final question, which was an essay. (Student response seems to contradict coordinators.) Note that plans for the 2002 administration now call for administering the ELA test over two separate days. This should ease the test length problem, but may increase security issues and also create logistical problems due to student absences on the second day.

The length of the mathematics test was not cited as a problem. Approximately 2% of the students reported lack of time as a problem and only about 1% of the students failed to answer the last question on the test. Nevertheless, district coordinators cautioned that the apparently comfortable time requirements might have been because many students who lacked algebra skills did not do those calculations.

Schools also were concerned about what to do with other students during testing. School A held a school-wide writing activity, which freed up classrooms and teachers, and gave flexibility for the lunch schedule, but also resulted in significant absenteeism. Two other schools had special school-wide activities. Focus-group coordinators reported that other schools scheduled field trips and minimum days. Most of the surveyed schools followed the regular class schedule for other students; about 25% conducted regular classes with a revised schedule. Only seven schools reported lower attendance than normal by other grades.

Focus-group discussions after 2001 testing indicate that providing meaningful instruction for classes with a mix of grades (e.g., 9, 10, and 11) continues to be a major problem. School and district coordinators have requested options such as using noninstructional days for testing, relief from instructional hour limits, and allowing testing on Saturday. The last request persists despite CDE explanations that the California Education Code does not allow schools to mandate Saturday attendance.

Test Administration Support

Test administration support included the option of precoding identification on answer documents, delivery of materials, and hotline support from AIR and NCS. Comments from all sources were overwhelmingly positive. About 75% of the respondents to our survey reported taking advantage of precoded answer documents, and the same number said they would use the option again. One school coordinator considered CAHSEE the easiest to administer of all statewide tests the school conducts (excluding logistics).

Accommodations and Regulations

Two of the observed schools did not provide any accommodations for English learners (EL) or students with disabilities. One of those two schools encouraged special education students to opt out of CAHSEE, and the other tested all students without regard to status. The only school that gave some type of accommodation to special education students grouped the students with their regular classes in their regular rooms, which allowed the proctor to give special attention to instructions. The special education students did not need extra time; in fact, their biggest problem seemed to be maintaining effort through the session. After 1 hour, most had finished and all but one had finished after 1 hour and 15 minutes. In contrast, fewer than 10% of students in a regular session were finished after 1 hour, and most took more than 90 minutes.

Although two of the observed schools had high populations of Spanish speaking students, neither school offered the option of using glossaries. In fact, there were no official glossaries for the 2001 administration since the regulations permitting glossaries had not been finalized. There was a place on the answer sheet to indicate that glossaries were provided and apparently some form of glossary was provided to a few students (as indicated by the survey). Similarly, regulations regarding calculators were not yet finalized. There was no place on the answer sheet to indicate that calculators were provided, but seven testing coordinators responding to our survey indicated calculator use.

The surveys also reflected a low frequency of accommodation. School site coordinators reported 16 cases in which special education students took advantage of calculators, glossaries, readers, or large-format materials. Because some district coordinators in the focus group raised the possibility that students in large schools might have more access to accommodation than others, the distribution of accommodations by school size is shown in Table 2.3. Although the number of accommodations is too small for any final conclusion, the percentage of schools offering some accommodation in the sample is virtually the same for small schools (45%) as for large schools (47%).

TABLE 2.3 Accommodation for Students With Disabilities by School Size *

Accommodation	Enrollment:	501+	100-500	1-99	Total
	Number of Schools:	17	14	11	42
Calculator		4	0	3	7
Glossary		0	1**	0	1
Reader		3**	2	2	7
Large Format		1	0	0	1

* Based on our Spring 2001 survey of 42 test coordinators in our longitudinal study sample. Note that policy regarding allowable accommodations was changed significantly subsequent to the 2001 administration.
** Also for EL (English learners)

Table 2.4 shows the number of students who were provided various accommodations according to information recorded on the student answer sheets. *Scheduling* accommodations generally indicated additional breaks, since all students were to be allowed almost unlimited time. This was clearly the most frequent accommodation. *Presentation,* the next most frequent accommodation, generally indicated large format text.

Accommodations for EL were even less frequent. As shown in Table 2.3 above, only one school in the survey offered glossaries to EL students and one provided the option of a reader. Coordinators were asked to identify other accommodations. These included separate rooms (two special education; one EL), extended time (three special education), and a bilingual aide (EL).

TABLE 2.4 Accommodations Reported for All Students Testing in March 2001

	ELA		Mathematics	
Accommodation	Number	Percent	Number	Percent
Scheduling	6,712	1.92	6,403	1.85
Presentation	1,530	0.44	880	0.25
Braille	108	0.03	40	0.01
Response	924	0.26	1102	0.32
Glossary	403	0.12	118	0.03
Test Read Aloud	N/A	N/A	1564	0.45

The relatively low level of accommodation was no doubt affected by uncertainty about whether results would count for graduation, which may have led to reduced participation of special education and EL students. About 40% of the surveyed coordinators reported that they tested fewer than half of the eligible students with disabilities and about 30% of EL students. In addition, coordinators in the focus group reported confusion about which means of accommodation were available. Consistent with those reports, about 40% of the school coordinators expected more accommodation in 2002.

Clearly, it would be highly desirable to ensure greater consistency in the provision of testing accommodations in future administrations. As noted below, there has been considerable discussion of accommodation policies by the SBE and CDE has conducted workshops for district test coordinators on test accommodation.

Subsequent Actions by CDE

A number of steps to further improve administration procedures have been taken since the 2001 administration. The transition to a new test developer in 2001 has included substantial coordination to improve the already high quality of workshops and test administration support. In addition, CDE has implemented policies that should ensure adequate time for administration of the ELA section and enable more comprehensive provision of accommodations. A summary of some of the more salient changes is provided here.

Adequate Time for ELA

One reason that ELA time requirements were so severe was that the ratio of items to reading passages was low, in some cases requiring students to read several paragraphs to answer just two questions. ETS recommended that additional items be developed for use in the 2002 tests, including additional items for each reading comprehension passage that had already been field-tested. ETS staff wrote the items and conducted content review and bias review panels on them. Besides reducing the time for ELA, the reviews included extensive editing of the passages, with the goal of improving their quality and enhancing the educators'

support for the ELA test. The revised passages and associated items and writing prompts will be assessed in field tests in January 2002.

The major decision in addressing ELA time requirements was to require that schools conduct the ELA part of CAHSEE over two adjacent days. Students will answer half of the multiple-choice questions and write one essay on each day. This change should greatly reduce fatigue for all students and ensure that additional time is available on the test day for students who need it. It is an aggressive, appropriate response to feedback from the field.

Although the 2-day ELA should solve fatigue problems, it could have additional unintended consequences. We are concerned that the way the decision is implemented may have an undesired impact by identifying students as "not passed" who might better be classified as "not tested" due to absence on one of the two testing days. Students who take only half of the ELA items cannot pass. Students who are absent for the first day will probably not be tested on the second day and can be readily scheduled for the next testing session about two months later. The problem is with students who take the first half of the test but are absent for the second day. If these students are considered to have “taken” the test, they may be forced to wait until test results are returned before scheduling a make-up session. This will likely cause them to miss the next testing opportunity. Besides the overriding consideration of fairness to the affected students, treating half a test as a complete test will also distort data for tracking performance for any evaluation, including potential inclusion in the Academic Performance Index. This issue is currently under review by the CDE.

Accommodations

Staff from CDE has devoted substantial resources to developing and publicizing guidance on the scope of allowed accommodations. The approved regulations identify categories of allowed accommodations, if they are specified in the student's IEP or 504 Plan. Four categories of accommodations are allowed: presentation (e.g., large print); response (e.g., transcriber); setting (e.g., individual carrel); and timing/scheduling (e.g., more frequent breaks).

The regulations also identify accommodations that are not allowed: calculators on the math portion and audio or oral presentation on the ELA portion. For some students, schools may administer the test using "not-allowed" accommodations, in which case the aid becomes a modification that invalidates the test results. However, if the student receives a score equivalent to passing the relevant part of the test with a modification, the district may petition to waive the CAHSEE requirement. Although the "waiver" process is covered in the training materials, schools are likely be confused about the policy, because allowing a test to be administrated with an invalidating modification is not a common practice.

CDE conducted workshops for special education coordinators. Because of the impact on test logistics, CDE also conducted three regional workshops for district test coordinators and special education lead coordinators. Part of the workshop included time to discuss logistical requirements. HumRRO observed the staff of a large urban district as it went through the process of identifying other teachers who needed to be included in the decisions, established a tentative date for the orientation, and developed a rough agenda for the orientation. After

the workshops, CDE distributed an extensive CAHSEE Accommodations Training Manual through district and county superintendents to each school site.

The work on finalizing and distributing regulations means that 2002 will provide the first opportunity to observe the impact of accommodations on test administration and test results. It will be important that the specific accommodations provided to a student be recorded accurately, together with the conditions justifying these accommodations, so that results can be analyzed appropriately. Further, it will be critical to identify any modifications that invalidate the test results and to flag score reports clearly if such modifications are used.

Review of Essay Scoring Procedures

HumRRO staff observed training of the table leaders and then the individual judges who rated the responses to each of the two essay questions. Briefly, the scoring process worked as follows:

- Two different judges independently scored each essay on a 0 to 4 scale. Blank or unreadable responses were flagged as unscorable.

- If the judges both agreed that the paper was unscorable or if they both gave scores and these scores did not differ by more than 1 point then the final score was the average of the two judges' ratings (or 0 if they both agreed the response was unscorable). Differences of 1 point were expected for papers near the boundary of the scoring levels ("fence sitters").

- If the judges disagreed as to whether the response was scorable, or if they gave scores that differed by 2 or more points, the paper was read and scored by a third judge (usually the table leader). If the third judge agreed with one of the first two judges, then that rating was the final score.

- In a few instances the third judge gave a different rating than either of the first two judges, usually a rating falling between the ratings of the first two judges. In this case, a fourth judge (who was generally more experienced in the scoring process) read the paper. The fourth judge's rating, which always agreed with the ratings of one of the first three judges, was taken as the final score for the essay.

Table 2.5 shows the frequency of agreement between the first two judges and the frequency of different ways in which initial disagreements were resolved based on the essays in the March 2001 test form.

TABLE 2.5 Scoring Agreement for the Essay

	First Essay Question		Second Essay Question	
Result	Frequency	Percent	Frequency	Percent
Absolute Agreement	260,381	74.4%	226,831	64.8%
Difference of 1 Point	85,586	24.5%	115,214	32.9%
Disagreement Over Scorability	669	0.2%	508	0.2%
Scorable, but Difference > 1	2,202	0.6%	4,182	1.2%

As indicated in the above table, disagreements by 2 points or more were quite rare. The first two judges reached sufficient agreement approximately 99% of the time for the first essay and roughly 98% of the time for the second essay. Where disagreements did occur, there was a reasonable process for their resolution.

Setting the Minimum Passing Score

The Raw Score Scale

Efforts to determine the minimum performance required for passing each test focused on a student's total points, or raw score, for the form of each test used in the March 2001 administration. The primary question was how many of the maximum possible raw score points a student must obtain to pass the exam.

At the first stage of scoring, a "raw score" is computed for each student. *For mathematics*, the raw score is simply the number of questions answered correctly. *For ELA*, the raw score is a weighted combination of the number of correct answers to the multiple-choice questions and the student's scores on each of the two essays. The exact equation for ELA was:

Weighted Raw Score = .7683 * MC + 3.3750 * CR

where MC is the number of multiple-choice items (out of 82) answered correctly and CR (constructed response) is the sum of the two essay scores, each of which ranges from 0 to 4 in half-point increments (except that it is not possible to get a score of 0.5). For ELA, the weighted raw scores are rounded to whole numbers. For mathematics, the raw scores range from 0 to 80. For ELA, the maximum possible raw score is:

Maximum Raw Score = .7683 * 82 + 3.3750*8 = 90.

As with most testing programs, scores were ultimately reported on a standardized scale. Raw scores are not exactly comparable across test forms due to minor differences in the difficulty and information value of the questions in each test form. Scores on this standardized scale will be comparable across different test forms. A separate translation will be developed for each different test form mapping the raw scores into scale scores. The CAHSEE standardized score scale was a linear translation of the Rasch (one-parameter) IRT scale (see for example, van der Linden & Hambleton, 1997) developed from the March administration. It ranged from 250 to 450 with the passing level mapped onto 350. The equating procedures used to map raw scores from the May form onto this same scale are described later in this chapter.

Standard Setting Panels

The test developer negotiated a subcontract with Howard Mitzel of Pacific Metrics to conduct a standards-setting workshop using the bookmark procedure explained below. The workshop was conducted May 18–20, 2001. Two HumRRO observers attended the workshop.

CDE had arranged for 90 workshop participants, 45 each for ELA and mathematics. Most participants were classroom teachers or content specialists who had been nominated by their districts. In addition, the roster included university faculty, school and district administrators, parents, and business people. About 10 had been on the HSEE Standards Panel or Technical Advisory Committee. Almost all panelists participated in all sessions relevant to their subject matter on both days. As a whole, the panels were broadly representative of the state and, because of the nomination process, knowledgeable about the California content standards and high school curriculum. Individually, the level of commitment and effort was high.

The bookmark procedure was appropriate for the purpose of identifying a minimum passing score and was implemented faithfully. The process began with a general orientation and an opportunity for each participant to take an abbreviated form of the exam. At the orientation, Mitzel stressed the need to make decisions based on test content. He described the ordered-item booklets, one each for mathematics and ELA, which listed the test questions in order of difficulty based on the March administration. For each question, participants were to discuss what made the question more difficult than the preceding questions, with particular attention to other questions from the same content standard.

Participants next moved to rooms for their content area, where they worked in groups (tables) of five or six participants, one of whom had been trained to be a table leader. Each table appeared to follow the directed procedure for discussing the knowledge and skills required by each question. A list showing the specific content standard assessed by each item was given to the math group and several tables noted that there were easy and difficult questions for each of the content standards into which the standards are organized.

After each table had discussed each of the test questions, the entire group reconvened for training on how to place a bookmark. Each participant was to place a marker to divide two item sets: items covering material each student should know and items covering material that is "maybe not needed" to get a diploma. Mitzel emphasized the differences between the bookmark placement and number-correct scores. After the training, participants worked individually to place the marker in their ordered-item booklets.

The next day, each table received a summary of individual bookmarks for the table showing the lowest, highest, and median bookmark placement. Table members discussed the rationale for their initial bookmark placements. Following this discussion, each panelist provided a revised bookmark placement. After lunch, the revised results were presented, showing the median bookmark and range for each table, along with what the pass rate would be for the median for the room. For math, many, but not all, were surprised by how low the projected pass rates were. The rate for ELA seemed to be what most participants expected. A representative from each table then described the rationale(s) for the table. Most were optimistic about the potential for students to improve during the 10th and possibly 11th grades. The median ratings did not change based on the impact information. One change that might be considered in future workshops would be to report the passing rates associated with the minimum and maximum bookmark placements in addition to reporting the passing rate for the median bookmark placement. That information would give participants a better understanding of the level of consensus they had achieved.

In the end, both panels recommended that the minimum passing score be set at 70% of the total possible points on each test. Though that is suspiciously close to traditional passing grades, we heard no evidence either that participants considered any criterion besides content or collaborated between content areas.

The Final Decision

CDE staff reviewed the panel's recommendations and discussed them with the superintendent. The superintendent stated that the recommendations of the standards-setting panel should be considered a long-term goal. She recommended that the provisional passing rates for initial implementation of the CAHSEE be somewhat more lenient. The specific recommendation, 60% of total possible points for ELA and 55% for math, reflected the fact that the current content standards had not been in place when members of the Class of 2004 were developing prerequisite skills. She also recommended that the State Board of Education should reexamine the test scores after students in the Class of 2004 are well into the 10th grade curriculum to determine whether students are passing in sufficient numbers to demonstrate that adequate opportunities to learn are being provided. On June 7, 2001 the SBE adopted the passing standards recommended by the superintendent.

Lack of Complete Information on the Class of 2004

The passing standard for an exam such as the CAHSEE reflects a judgment about what students *should* know and be able to do. The percentage of students who currently meet the passing standard is not a primary concern. It is customary, however, to provide standard setting panels with some information on the consequences of their recommended passing levels, specifically the expected passing rate. Anticipated passing rates are also used by the body making a final decision on the passing standards as a means of determining the reasonableness of the recommended standards.

Information on passing rates for the CAHSEE was limited for two reasons. First, students participated in the March administration on a voluntary basis and data for the students testing in May was not yet available. In addition, no information was yet available on passing rates for 10th grade students, more of whom would have completed the required curriculum. Nonetheless, the law required that 9th graders be afforded the opportunity to take and pass the exam and a substantial proportion of 9th graders (more than 70%) did choose to participate. Thus passing rates for 9th graders was a relevant statistic and, under the law, there was no opportunity to wait for 10th graders to take the exam or to obtain census testing on 9th graders.

The lack of complete census data is not a fatal flaw for the passing standards that were set. Passing information is not provided to standard setting panels until after they make initial recommendations and rarely, if ever, do they change their recommendations significantly on the basis of this information. In reaching a final decision about the recommended passing standards, CDE and the SBE had to set a policy as to who would be targeted for additional assistance and required to take the exam again. The available information on 9th grade test takers was entirely appropriate for checking the reasonableness of this policy decision.

Equating Scores from the March and May Test Forms

For a variety of reasons, it was important that students taking the CAHSEE in May be given a different test form (set of questions) than was used in the March administration. Test security was the primary reason. Even if there were no explicit compromise of test materials, test questions are frequently memorable for some students and they are likely to talk about them after the exam. Using mostly new questions on the next exam eliminates potential advantages to students who talked with those taking the first exam. In addition, the CDE wanted to release as many of the test questions as possible to illustrate the content of the exam. Using distinct test forms meant that there were more questions that could be released.

In constructing alternate forms of a test, developers always try to make each form equally difficult, as well as ensuring that each form adheres to content coverage targets and other aspects of a test blueprint. Notwithstanding their best efforts, minor differences in test difficulty are inevitably observed after each new form is administered. A whole science of test equating (see Kolen and Brennan, 1995) has evolved to control for these minor differences in test difficulty. A procedure known as an "embedded anchor" approach was used to equate scores from the May forms to the score scale based on results from the administration of the March test forms. An anchor test of 20 questions was created by reusing 20 questions from each of the March (ELA and math) tests in the May test forms.

The most important consideration in equating the May and March test forms was to estimate the expected raw score (number correct or weighted composite) on the May form for students who were right at the minimum passing level on the March form. This expected raw score was then mapped to the minimum passing point (350) on the standardized score scale. Researchers also wanted to know how students at other points on the March score scale would have performed on the May tests so that the meaning of other points, some fixed distance above or below the minimum passing level, could be maintained. We have not yet had an opportunity to review AIR's documentation of their equating analyses. Our own independent analyses are reported here.

We performed our own analyses of the test results to identify the appropriate raw-to-scale score conversion tables for the May forms. We used somewhat different statistical models, but ended up with the same results obtained by AIR to within round-off error.

As a result of the equating analyses, it was determined that a student who answered 44 of the 80 (55%) math questions correctly on the March form would be expected to answer 46 of the questions on the May form correctly. The May form of the mathematics test is slightly easier. Consequently a raw score of 46 on the May mathematics test was mapped onto a scale score of 350, the minimum passing level. The two forms of the ELA test were even more similar. A student who scored 54, the minimum for passing, on the March form would also be most likely to score 54 on the May form of the ELA test. Tables 2.6 and 2.7 show the final conversions from raw scores to the standard scale scores used for reporting for each of the 2001 ELA and mathematics test forms. These tables are based on our analyses of the final data files provided by AIR.

TABLE 2.6. Conversion from Weighted Raw Scores to Standard Scale Scores For the 2001 CAHSEE ELA Forms

	Wtd. Raw Score		Scale Score		Wtd. Raw Score		Scale Score	Wtd. Raw Score		Scale Score
	March	May			March	May		March	May	
F	0-7	0-7	250		29	30	310		59	361
A	8		254		30		311	60	60	363
I		8	256		31	313	312	61	61	365
L	9		259		32	32	314	62	62	367
		9	261		33	33	315	63	63	370
	10		264			34	316	64	64	372
		10	266		34		317	65	65	375
	11		268		35	35	318	66	66	377
		11	270			36	319	67	67	380
	12		272		36		320	68	68	383
		12	273		37	37	321	69	69	385
	13		276			38	322	70	70	388
		13	277		38		323	71	71	391
	14		279		39	39	324		72	394
		14	280			40	325	72		395
	15	15	282		40		326	73	73	398
	16	16	285		41	41	327	74	74	401
					42	42	329	75	75	405
	17	17	287		43	43	330		76	408
	18	18	290		44	44	332	76		408
	19	19	292		45	45	333		77	412
	20	20	294		46	46	335	77		413
	21	21	296		47	47	337		78	416
		22	297		48		338	78		417
	22		298			48	339		79	420
		23	299		49	49	340	79		421
	23		300		50	50	342		80	425
		24	301		51	51	344	80		426
	24		302		52	52	346		81	430
		25	303		53	53	348	81		431
	25	26	304	P	**54**	**54**	**350***		82	435
	26		305	A	55	55	352	82		437
		27	306	S	56	56	354		83	441
	27	28	307	S	57	57	356	83		443
	28		308		58	58	358		84	448
		29	309		59		360	84-90	85-90	450

* Scores of 350 and higher are passing scores.

TABLE 2.7. Conversion from Number Correct to Standard Scale Scores For the 2001 CAHSEE Mathematics Forms

	Raw Score		Scale Score		Raw Score		Scale Score		Raw Score		Scale Score
	March	May			March	May			March	May	
F	0-6	0-7	250		27	29	316			58	376
A	7		254		28	30	318		57	59	378
I		8	255		29	31	320		58	60	380
L	8	9	260		30	32	322		59		382
	9	10	264		31	33	324			61	383
		11	268			34	326		60		385
	19		269		32		327			62	386
		12	272			35	328		61	63	388
	11		273		33		329		62		390
		13	276		34	36	330			64	391
	12		277		35	37	332		63		393
		14	279		36	38	334			65	394
	13		280			39	336		64		396
		15	282		37		337			66	398
	14		283		38	40	338		65		399
		16	285		39	41	340			67	401
	15		287		40	42	342		66		402
		17	288		41	43	344			68	404
	16		289		42	44	346		67		406
		18	291		43	45	348			69	408
	17		292	P	**44**	**46**	**350***		68		409
		19	293	A	45	47	352			70	412
	18		295	S	46	48	354		69		413
		20	296	S	47	49	356		70	71	417
	19	21	298		48	50	358			72	421
	20		300		49	51	360		71		422
		22	301		50	52	362		72	73	427
	21	23	303		51	53	364		73		432
	22	24	305			54	366			74	433
	23		307		52		367		74		438
		25	308		53	55	369			75	440
	24	26	310		54	56	371		75		445
	25	27	312		55	57	373			76	448
	26	28	314		56		375		76-80	77- 80	450

* Scores of 350 and higher are passing scores.

Reporting

Results from the 2001 administration were reported at several levels. Individual score reports were provided to the students who took one or both of the tests. These reports were distributed by the schools to the students themselves and possibly also to their parents and teachers. These reports showed the student's overall scale score in comparison to the passing level of 350 and also the number and percent of questions answered correctly for each of the major content strands. For mathematics, the strands were: probability and statistics, number sense, algebra and functions, measurement and geometry, and Algebra 1. For ELA, the Reading strands were: word analysis, reading comprehension, and literary responses and analysis. The writing strands were: writing strategies and writing conventions. For ELA, the student's score on each of the two essays was shown under writing applications. A sample student report is included in Appendix A.

Aggregate reports were created for each school, district, and county, and for the state as a whole. These reports show results for all students and separately by grade, gender, race/ethnicity, language fluency, economic status, and special education program participation. For each category, the report indicates the number of students tested, the number and percent passing and failing, the average scale score, and the average percent correct for questions in each of the content strands. The ELA reports also show the average score on each of the two essays. These reports are available to the public on the CDE Web site: http://www.cde.ca.gov/ta/tg/hs/ A sample copy of a district level report is included in Appendix A.

The results by content strand in both the individual and aggregate reports provide some useful diagnostic information. Students can note areas where they have the greatest opportunity to improve and schools and districts can identify strands where their student may need more instruction. The questions for one strand may be easier or more difficult than questions for other strands, so the percent passing alone could give misleading information about a student's standing relative to other students in that area. The state-level reports do provide a basis for comparing student or school results within each strand. Appropriate comparisons to state-level results would be facilitated if the state-level results were provided on the student reports themselves.

One item that is missing from both the student and aggregate reports is any indication of measurement error. The *Standards for educational and psychological testing (AERA, APA, NCME, 1999)* include standards for score reporting. Specifically, Standard 5.10 (page 65) states:

> *Standard 5.10. When test score information is released to students, parents, legal representatives, teachers, clients, or the media, those responsible for testing programs should provide appropriate interpretations. The interpretations should describe in simple language what the test covers, what scores mean, the precision of the scores, common misinterpretations of test scores, and how scores will be used.*

The discussion under this standard suggests "Score precision might be depicted by error bands, or likely score ranges, showing the standard error of measurement."

Interpretive information was provided on the back of the student reports that described in general terms what the tests covered and how the scores will be used. A reference to the CDE web site for more information on test content and sample questions is provided. Neither the interpretive information nor the Web site currently provide any clear information on score accuracy or measurement error.

With the possible exception of the breakout by grade, the aggregate reports provide a wide range of information about the performance of different groups of students. We note in Chapter 5 that the initial reporting by language fluency category contains some errors that are now being corrected by CDE and the development contractor. Although the reports facilitate comparisons across categories within a particular school or district, within category comparison to statewide results require users to also access the state results. Current reports could be enhanced by making it easier to compare school and district results to statewide averages.

The aggregate reports invited comparisons across schools and districts. Due to the voluntary nature of the samples of students tested in each school, results may not have been equally representative of all 9th graders in some schools. We would like to have seen a caution against inappropriate comparisons displayed more prominently in the aggregate reports.

Summary

We observed test development, administration, scoring, equating, and reporting efforts conducted by the test developer and performed our own independent analyses at several points. We did not have any significant issues with the development processes and have few suggestions for their improvement. As might be expected, given that schools and administrators received relatively short notice that these administrations of the test would count, there were several areas where test administration might be improved in future, but on the whole the process was highly successful. Similarly, the scoring and equating processes worked reasonably well and we had only minor suggestions for their improvement. Suggestions for improving the score reports include providing information about measurement error and making it easier to compare individual and aggregate results to statewide results.

CHAPTER 3: SCHOOL PLANS AND PERCEPTIONS

Introduction

Educational reform efforts such as California's high school exit examination will exert an impact beyond just the receipt of a standards-based diploma. By providing feedback about student performance, the reform will serve as a catalyst for change throughout districts and schools. In addition to the performance information, the assessment can be a tool to influence and improve teaching and learning. Consequently, a key research issue is the ongoing relationship between the exit exam and teaching practices advocated by reform standards. One purpose of a thorough evaluation, then, is to monitor perceptions from the educator's perspective, over time, as well as plans that emerge in response to the exam.

Surveys are one component of the evaluation method to examine such consequences and assess the impact of the CAHSEE. In order to identify trends over time, HumRRO established a longitudinal sampling base. We selected this representative sample of 92 high schools from 27 districts to be surveyed each spring. We collected Year 1 data from this sample in Spring 2000 (Wise et al. 2000a; Wise et al., 2000b) and fielded similar surveys to the sample in Spring 2001 (Wise et al., 2001). Two surveys were administered to capture Year 2 data: one for principals and another for teachers in the same schools. The principal survey requested demographic and background information about the school, students, and parents and inquired about issues such as familiarity with, planning for, and expected impact of the CAHSEE. The teacher survey emphasized classroom practices as well as issues regarding familiarity with, planning for, and the predicted impact of the CAHSEE. Because we administered these surveys early in the CAHSEE development and implementation process, we included in both the principal and teacher surveys several open-ended questions to allow respondents to clarify their responses and to inform HumRRO of any misunderstandings or omissions we might have about the operation of California schools and their relationship to district and state operations.

In addition to annual spring surveys of a longitudinal sample of principals and teachers, HumRRO also conducted a census survey of all high school districts in Fall 2000. This District Baseline Survey was completed by over 90% of districts and addressed awareness, alignment, plans and preparation, and expectations (Sipes et al., 2001). Most surveys were completed by an Assistant Superintendent for Curriculum or an equivalent staff member.

Survey Development

The following are the main questions addressed in these surveys:

1. What is the extent and type of current preparation for the CAHSEE?
2. What degree of familiarity do schools currently have with the CAHSEE?
3. How familiar are schools with the State Content Standards?
4. How familiar are schools with the CAHSEE score report?

5. What activities have schools undertaken to prepare students for the first administration of the CAHSEE?
6. How do schools anticipate addressing failures on the CAHSEE?
7. What are schools' predictions for first administration pass rates?
8. What are schools' predictions for the impact of the CAHSEE?
9. What are schools' predictions for influence of the CAHSEE on instructional practices?
10. What are schools' estimates of the percentage of students, by various student subgroups, who have had instruction in each of the content standards?
11. In what courses are the standards being taught, at what level are they being taught, and to whom are they being taught?

To the extent possible, survey items on the Spring 2001 surveys were identical to those on the Spring 2000 surveys. This matching served to maximize comparability across years, so that trends could be inferred. However, some items that addressed the "upcoming" test needed to be reworded to reflect the fact that the first administration had already occurred.

In addition, we had gained experience from the Fall 2000 District Baseline Survey that informed survey development. This survey was not part of the longitudinal survey program at the schoolhouse level, but rather was a one-time census survey of high school district officials. The California Department of Education (CDE) and HumRRO personnel expended considerable effort to ensure the highest possible quality and clarity of the survey items. Therefore, when developing the Spring 2001 surveys, we included some new items, as well as some items from the Fall 2000 instrument that had been improved from their earlier versions in the Spring 2000 survey.

Finally, some items were omitted from and a few new items were added to the Spring 2001 version of the longitudinal surveys. A notable addition was the request that teachers identify specific courses in which standards are covered.

Sampling and Administration

The goal for the sampling plan was to select districts for inclusion in the CAHSEE evaluation data collection efforts that would be as representative as possible. A complete description of the sampling procedure is presented in Wise et al. (2000a). In short, a representative sample of 27 districts was selected in Spring 2000 for intensive study over the course of the CAHSEE evaluation. Replacements were identified for each district (except for Los Angeles, which is irreplaceable) in case the targeted district could not participate. In each original and replacement district, we selected 1–15 high schools, depending on district size, to create a representative sample of 92 schools. Where possible, we identified replacements for each selected school. In small districts containing only one or two high schools, all schools were in the original sample. Sampling ratios were established so that each school would represent approximately the same number of 10th grade students. In this way simple averages across the schools in the sample would provide estimates for all 10th grade students in the state.

The principals and teachers of these schools were surveyed in Spring 2000; results are reported in Wise et al. (2000a). Schools from all but three districts participated at that time. In Spring 2001, all of the previously participating districts as well as two of the previously nonparticipating districts indicated a willingness to participate. One nonparticipating district was replaced.

The resulting sample for the principal and teacher surveys still comprised 27 districts. Principal and teacher survey packets were shipped in mid-May 2001 to 92 schools to the attention of the principal or point of contact (POC). A copy of the survey instruments is included in Appendix B.

We asked principals to complete their questionnaires or to designate someone to do so. We also asked principals to identify one teacher of Algebra 1, or other appropriate mathematics course, and one 9th or 10th grade English-language arts (ELA) teacher to complete the teacher surveys (if faculty size was sufficient). We did not select the specific teachers to be surveyed, but instead, instructed principals, "If possible, select teachers who completed the survey last spring, or select teachers who have several years of experience in their subject area." Due to the nature of this distribution process, it is likely that the teachers who completed the surveys were more familiar with the CAHSEE than the wider teacher population. While this familiarity is desirable when asking teachers to predict test results, one disadvantage is that the teachers' estimates of their own familiarity with the CAHSEE may not be representative of all California high school teachers. The reader is cautioned to bear this in mind when reading the following survey results.

We requested that evaluation materials be returned by the end of May. Follow-up telephone calls were initiated the first full week of June to schools that had not responded, to encourage completion of their evaluation materials.

Findings

Forty-five high school principals and 80 teachers, representing 48 schools across 22 districts, completed surveys. Results are reported in the following areas:

- Background
- Knowledge
- Preparation thus far
- Future plans
- Expectations
- Standards taught
- Other

Detailed results are presented in Wise et al. (2001). A summary of these results is presented here. As appropriate, we compare responses to the Spring 2001 survey with responses to a comparable question on the Spring 2000 surveys; this provides information regarding trends and stability of responses over time. Note that these comparisons are

presented at a summary level; that is, changes in responses from individual schools or districts are not presented.

Background

Principals and teachers were asked to provide demographic information on themselves. The large majority of principals reported education beyond a bachelor's degree (85% master's degrees, 13% doctoral degrees), as did teachers (34% some graduate school, 53% master's degrees, 5% doctoral degrees). Eighty-nine percent of teachers indicated that they are certified in their primary subject area.

Principals were asked to provide background information on their schools as well as estimates of specialty education programs and various aspects of schooling. Details of responses to quantitative items are reported in Wise et al. (2001). The principals also responded to a number of open-ended items, which are summarized here.

- The most frequently mentioned factor in "changes in student demographics or academic environment" was addition of Advanced Placement courses (10 comments from 45 respondents), more remedial/tutorial programs (7 comments), and lower socioeconomic levels of school population (6).
- In "describing the academic atmosphere," principals' responses could be summarized in four categories: "rigorous" (12 comments), "increasingly more rigorous" (15), "basic or core" (6), and "not rigorous" or "resistant to change" (3).
- Regarding "plans/strategies to prepare for individualized education program (IEP) or 504 Plan (Section 504 of the Rehabilitation Act of 1973) changes" and "to help EL succeed with CAHSEE," apart from noting that they are "following all applicable laws," most comments referred to waiting/longing for state direction/leadership.
- The most frequently mentioned "challenges faced in meeting CAHSEE requirements" were students who enter the school with deficient preparation (10 comments); lack of algebra (specifically noted by 3), the time requirements or too many tests generally (5), and viewing CAHSEE as mainly "political" (3).
- The most frequently mentioned "benefits associated with CAHSEE" were improved student motivation (7 comments), alignment of curriculum (6), and common standards for a diploma (5).
- It is interesting that three items, which asked for "estimates of most recent school information" about graduation and mobility rates, "seniors' postgraduation plans," and "parents' education levels," revealed an absence of such data collection—"not tracked at site level," "not accurate at this time." Some did note plans to begin gathering the information.

The ELA and mathematics teachers responded to open-ended items that focused more on their classroom practices.

TABLE 3.1 Teachers' Comments on Classroom Practices

	ELA Teachers	Mathematics Teachers
In describing "changes to instructional practices based on anticipated influences from the CAHSEE":	Increased reading/ comprehension/vocabulary (8 comments from 40 respondents), writing/essays (7), practice tests (6), grammar/ spelling/punctuation (5), and test taking techniques (5)	Nothing—based on conflicting and minimal amount of information about the CAHSEE (10 comments from 40 respondents), increased mathematics instruction/courses (5), practice items (3), and test taking techniques (3)
The most frequently mentioned "challenges faced in meeting the CAHSEE requirements":	Students with inadequate preparation (7 comments, plus 4 who noted low reading skills specifically), length of the test and logistics of testing environment (6)	Students with inadequate preparation (7 comments plus 3 who noted ESL and special needs students specifically), inadequate teacher preparation (3), low parental involvement (2)
The most frequently mentioned "benefits associated with the CAHSEE":	Alignment of curriculum (8 comments), elevated expectations/accountability (6), improved student motivation (4), and "none" (4)	Alignment of curriculum/uniform standards (7 comments), elevated expectations/accountability (6), "none" (4), and increased academic rigor (3)
Under "other general comments":	Concerns about low basic skills, lack of English language proficiency, too much testing overall, inadequate accommodation of year-round school schedules, and low level of CAHSEE coverage of the framework	Concerns about low levels of parental involvement, transience, low math skills, massive amount of testing, and lack of student motivation

Knowledge

Principals and teachers were asked to report their familiarity with the CAHSEE and state content standards. The comparison of familiarity with the CAHSEE and state content standards data between 2000 and 2001 can be found in Table 3.2. Familiarity with the CAHSEE increased markedly from the first year for both groups.

TABLE 3.2 Percentage of Principals and Teachers Familiar with CAHSEE and State Content Standards

	Principals		Teachers	
Familiarity	2000	2001	2000	2001
CAHSEE				
Very familiar	22	87	22	75
Had general information	76	13	66	24
No familiarity	2	0	11	1
State Content Standards				
Very familiar	67	71	65	61
Had general information	31	29	29	39
No familiarity	0	0	3	0

Principals were also asked to estimate how aware their students and parents were of the CAHSEE. Table 3.3 provides a comparison of these data between 2001 and 2000, although the 2000 survey question asked about both students and parents in a single question. Estimates of familiarity increased noticeably in 2001.

TABLE 3.3 Percentage of Principals Estimating Levels of Student and Parent Familiarity with CAHSEE

	2000	2001	
Familiarity	Students/Parents	Students	Parents
Familiar—Very familiar (advanced knowledge)	2	31	18
Had general information	60	67	76
No familiarity	38	2	4

Preparation Thus Far

The Spring 2001 survey asked about preparation that has already been initiated. One precursor to a successful program is to align school curricula with the state content standards to ensure that students are being taught what will be tested. Thus respondents were queried about alignment with state content standards. In short, most principals indicated that they are already moving in the direction of alignment, but still have a way to go. Table 3.4 presents comparison data of responses given in 2000 and 2001 regarding preparations made to align curricula with state content standards. Surprisingly, these estimates decreased over time; this may be a result of a slightly different group responding to the survey, or may reflect a deeper understanding of the effort required. This question will be repeated in the Spring 2002 survey and responses will be monitored carefully.

Principals were asked to compare their district standards and the state content standards. In regard to ELA, most principals (67%) responded that their districts have adopted the state standards, and 29% reported that their district standards include more than the state content standards. Thus, a total of 96% indicated that their district standards encompass all state standards. In regard to mathematics, most principals (71%) responded that their districts have adopted the state standards; another 22% reported that their district standards include more

than the state content standards. Thus, a total of 93% indicated that their district standards encompass all state standards. Table 3.5 presents comparison data on the similarity between district and state standards for years 2000 and 2001. As expected, alignment between district and state standards increased over time.

TABLE 3.4 Percentage of Principals Reporting Preparations for Alignment with State Content Standards

Preparation	2000	2001
Districts/schools encourage the use of content standards	100	91
In process of aligning curricula with standards	81	56
Have plans to ensure all high school students receive instruction in each of the content standards	52	40
Textbooks align well with content standards	74	56
Cover all content standards with a mix of textbooks and supplemental materials	38	44

TABLE 3.5 Percentage of Principals Reporting Similarity between District and State Standards

	2000	2001	
Similarity between standards		ELA	Math
District adopted state standards	69	67	71
District standards include more than state standards	19	29	22
State standards include more than district standards	7	2	5
District has no official set of standards	0	2	2

Along similar lines, teachers were asked at what level their school's current curriculum covers the standards tested by the CAHSEE. Although a majority of teachers indicated that almost all of the standards are covered by their school's curriculum, the picture is considerably less optimistic than that of principals. Table 3.6 indicates that a substantial percentage of teachers indicated that half or fewer of the standards were covered by their curriculum (17% for Math, 21% for ELA), and a small percentage indicated no knowledge of the standards.

TABLE 3.6 Percentage of Teachers Indicating Coverage of Standards by Curriculum

Coverage of Standards	ELA	Mathematics
Almost all	60	57
About ¾	20	14
About ¼ - ½	11	16
Less than ¼	6	5
No knowledge of standards	3	8

When teachers were asked what plans their school or district had to increase coverage of the state content standards, nearly half (50% of ELA and 43% of mathematics teachers) indicated they were aware of in-service training to modify instructional practices. Eighteen percent of ELA teachers and 28% of mathematics teachers indicated that there were no plans to increase coverage of the standards because the standards were already fully covered.

Respondents were asked to identify the specific activities they have undertaken to prepare students for the Spring 2001 administration of the CAHSEE. Most principals reported initiating some activities; only 7%, as compared to 17% last year, indicated that they have implemented none. Figure 3.1a indicates the percentage of principals who reported implementing each activity, in descending order of endorsement; Figure 3.1b indicates teachers' responses.

Principals were also asked to indicate the types of activities their school undertook to prepare faculty/staff for the Spring 2001 administration of the CAHSEE. Seventy-one percent of principals indicated the administrators had participated in February test administration workshops, 58% delivered local workshops on test administration, 36% delivered local workshops on the CAHSEE content, 42% provided test-taking strategies, and 7% indicated "other". Nine percent of all principals indicated there was no special preparation for the faculty/staff prior to the Spring 2001 administration of the CAHSEE.

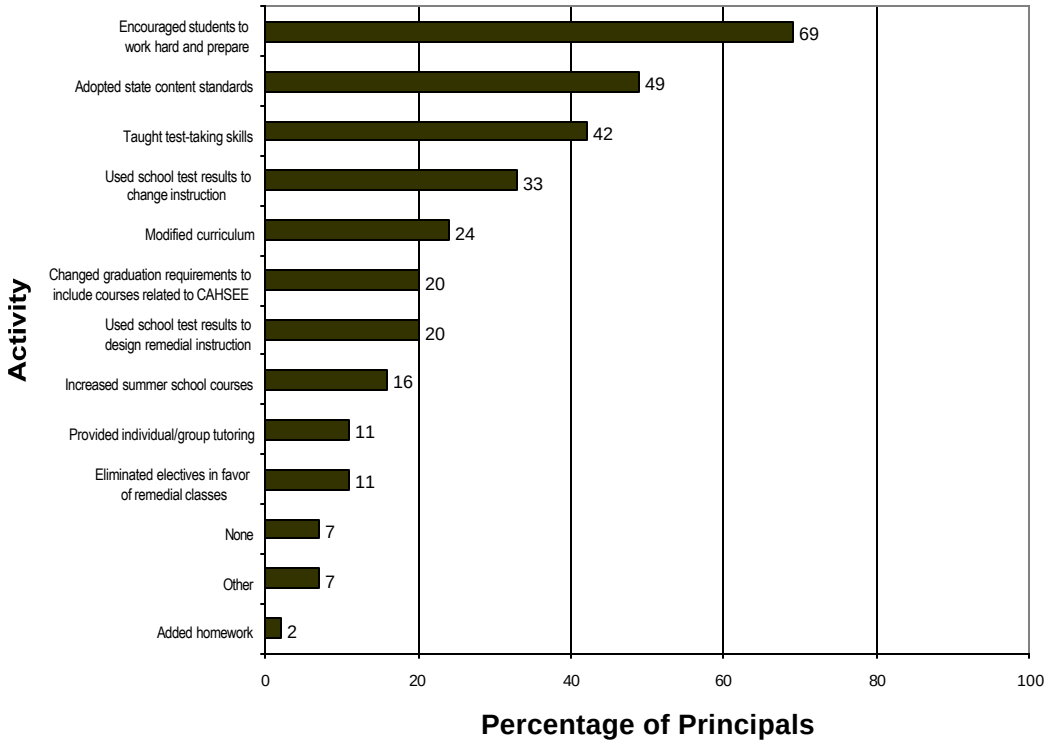


Figure 3.1a. Percentage of principals reporting activities undertaken in preparation for the Spring 2001 administration of the CAHSEE.

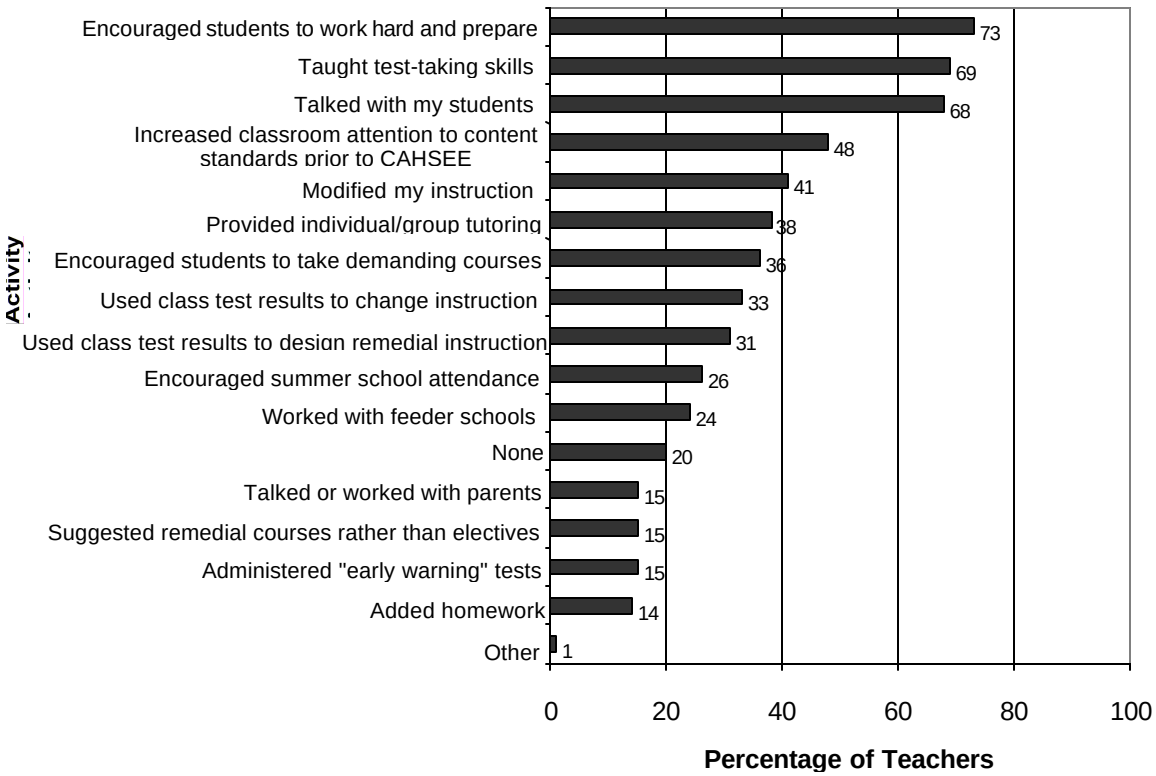


Figure 3.1b. Percentage of teachers reporting activities undertaken in preparation for the Spring 2001 administration of the CAHSEE.

In responses to open-ended items, teachers were asked to "Think about the level of preparation that students in your classes have in your subject area (English or math) for proficiency on the CAHSEE, and estimate the overall average percentage of students with excellent, good, fair, and poor preparation." Table 3.7 summarizes the teachers' estimates:

TABLE 3.7 Teacher's Estimates of Student Preparation

	60–100% Students Have Excellent or Good (English/Math) Preparation	60–100% Students Have Fair or Poor (English/Math) Preparation
ELA Teachers (40)* †	16	15
Mathematics Teachers (40)* †	8	19

* Indicated student preparation was evenly split between these two categories: ELA=8; Math=12
† No response: ELA=2; Math=2

The open-ended items on the survey also asked teachers to provide "comments specific to the ELA content standards and CAHSEE." The following comments provide good representation of teachers' input:

- "…there is too much information to cover. We also do not have any textbook that covers such a variety of information. Our department has not come up with a comprehensive plan to cover every single standard. There really has not been time or

money to gather, first, the resources we need, and secondly, the lessons to address the standards."

- "Writing needs to become a cross-curricular responsibility as do test-taking skills and reading."
- "Our site is an alternative school. Our student population changes on a weekly basis. This makes it very difficult for me to build on lessons from previous weeks."
- "As the Internet program is more developed it will be helpful. Some of the standards seem to be unreachable for the majority of the kids. Lack of motivation, weak skills and an aversion to diligence seems to be too large an obstacle. Possibly a motivation to graduate by way of the test will help, but our students do not respond well to mandatory testing, not taking it seriously. Teachers need to be more persistent in making the learning relevant and applicable."
- "Standards provide benchmarks to set goals for each grade level. These help to align curriculum so that instruction at any level is also aligned. Having these standards allows for a streamlined methodology to have certain expectations from both the students and the instructors. CAHSEE is one benchmark of achievement. Writing portfolios with level requirements also allow for alignment with the California English Standards. Portfolios allow for vertical and horizontal alignment with the school and hopefully with the District.
- "Information from the State takes too long to trickle down to the teachers…."
- "Articulation time with colleagues is crucial and [needs to be] built-in the work day. Curriculum time is a necessary challenge that we must prioritize. This will allow for a clearer understanding and provide for a cohesive development of aligned curricula."

Under "comments specific to the mathematics content standards and CAHSEE," the following quotes provide a good representation of teachers' input:

- "It is very difficult to get students ready for the CAHSEE when the requirements and policies for the exam are changing monthly if not weekly."
- "Not a bad idea, but we need to consider the idea of certifications of certain tests passed. That way a post-high school employer could look for specific skills in an individual and we would not be punishing those who choose to not take algebra, etc."
- "We have many teachers who are not themselves well prepared in mathematics, especially long-term subs who have difficulty teaching all the necessary concepts at the high school level. It is particularly difficult when many of our students are coming from elementary and middle schools without good arithmetic skills. We also have students coming to us from Mexico who have very little formal schooling before they arrive and are not well prepared. We also have students who are okay in math, but whose English skills limit their ability to read instructions and/or read word problems so that they can demonstrate their knowledge."
- "The content identified in the standards and tested by the [CA]HSEE matters. It's worth teaching. The content standards are ambitious with respect to many students I

teach. For the best students, the mathematics portion is quite easy. Unless the bar for passing is set quite high, they will pass as 9th graders."

During the Spring 2001 survey of teachers and principals in the longitudinal sample of schools, we also included a brief survey of site coordinators. (Detailed results are presented in Wise et al. (2001).) The site-coordinator survey asked for feedback on guidance received, students tested, the general approach to conducting the test, and changes planned for future administrations of CAHSEE. Coordinators for 42 schools returned the survey. About half had the title of test coordinator and another third were assistant principals. The following capture the primary responses to the open-ended items.

When asked if "any of the information received about CAHSEE was confusing" they responded:

- "Yes. The on-again-off-again if the test would count caused confusion among parents and students."
- "Yes. The late notice that the CAHSEE was not practice but did indeed count. Letters had already been sent to parents and students indicating it was a "practice test." At the last minute, students had to be told that it would count is they passed."
- "Yes. If test counted or not. What standards were being tested."
- "Yes. Students had many questions about the test—whether it would count, whether it was required, how it would be scored, when we would know results, etc.—Questions I could not answer. I needed more information earlier to share with students."
- "Yes. Must students stop and start at the same time if the test is untimed?"
- "No. Not confusing, just frustrating—the logistics for a school of 2,100 is a nightmare!"

When asked whether "any of the information received about CAHSEE was unrealistic" most comments are reflected in the following:

- "Yes. The length of the test is too long."
- "Yes. I think the test is much too long. The total testing time is approximately 9 hours. I think both the English and mathematics tests should be halved in length."
- "Yes. The concept that the test is timed, yet the student has an unlimited amount of time to finish (realistically), is not a fair situation for the school. When students need more time, it is a logistical nightmare."
- "Yes. It is unrealistic to test 9th grade students and expect 10th, 11th, and 12th to follow another schedule. We made a schedule for everyone and those not testing met with their classes—very confusing because most classes are mixed grade levels."
- "Yes. Administering a test of this magnitude several times a year unfairly impacts large high schools that were not designed as "testing centers." Turn-around times are also unrealistic and impose themselves at a test-heavy time amidst multiple other testing deadlines. (Ex: SAT-9, Golden State Exams, AP Exams...)."

- "Yes. We are an alternative educational school and run out of 8 satellite sites throughout the district. The time element was too constricting. We needed a larger window."

Regarding "facing any problems that were not covered in the information received" the most frequent responses are captured by the following comments:

- "Yes. Scheduling the entire school when only 1/3 of the school was testing. Impractical."
- "Yes. What do you do with the students who are not testing for 5 hours? What do you do with students who just arrived from CYA or community school or any other school?"
- "Yes. Expecting the tests to be returned within 24 hours is absurd. Almost impossible to process and return 1000+ answer sheets. Will be worse next year with the addition of another grade. Supervising grades 10–12 was also a problem."
- "Yes. What to do with students that finished a test in ½ hour and then became disruptive. Also, what to do with test, or what would make a test invalid."
- "Yes. Proctors needed to be able to read instructions for administering prior to test day. We did not receive estimated times for administration until one week before administration."
- "No. We dealt with whatever we needed to do, [but it was] very stressful."

When asked, "What will you do differently for the next CAHSEE administration?" the test coordinators were very responsive and provided numerous comments that are reflected in the following examples:

- "Yes. The length of the test is too long."
- "Two suggestions: 1) Find a better way to test the students—testing "part" of the school was a nightmare; 2) Give better instructions for filling in the answer sheets."
- "Will do differently: 1) Separate magnet from non-magnet students; 2) Have fewer students at a table; and 3) Let students work directly from section 1 to 2."
- "Will do differently: 1) Revise scheduling to allow more time for those who need it; and 2) Try and test on a minimum day so other grades are not impacted."
- "Will do differently: 1) Test all students; and 2) Rent space off campus for testing if possible."
- "Next year's administration will be significantly different due to the testing of 10th graders instead of 9th graders. This will virtually eliminate testing for our largest program. We will begin to consider acquiring test prep materials and evaluate the needs of our students next year. Feedback on individual and overall performance will be critical to conducting a valid needs assessment. As far as the actual administration of the test, procedures will not be significantly different."
- "We had very good testing participation, but the students in grades 10–12 felt slighted and did not attend school for 2 days. There has to be another way to

administer the test to a school whose population is roughly 1/2 freshmen. By the time SAT-9 came around, the students were frustrated and I am sure we will see a drop in our API due to this. I am not sure how we will address this issue. It is a district-wide concern because our high schools are at around 2,800 students each. Where can we house that many students for such an extended period of time without penalizing the remainder of the student body? If is a very challenging task; one that does not appear very student-friendly."

- "We received our testing dates and it appears that we will be able to address what to do with the non-testing students. The ELA will be split in two parts and over two days and the math will follow the next day. This will allow us to look at ways to address logistics."
- "Experience will help. Hope this will be given on Saturday so school won't be affected. I'm unclear about who will take the test from here on out. Lots of time for instruction was lost. Unrealistic expectations of giving it; disrupting the whole school—need practice tests or practice information—need to see how well it follows the curriculum. It feels like an experiment and clearly too many tests are being given. These are KIDS who need time to learn—not being tested to death. Well organized for giving and returning it [CAHSEE], though. Good job there."
- "The CAHSEE went very well in the school. Students knew where to go and teachers knew what to do. I'd like to have testing during Saturday or have them take it during a minimum day in their own classrooms."
- "Because students and staff had reached the saturation point in adjusting the school day for SAT-9, we decided to do large group testing in the gym. I believe we will do the classroom (20-40) students with proctors/monitors for each classroom next time. We realized the large group setting was not ideal, but we wanted to review the results before dislocating the school day as we did for SAT-9 testing. This changed the schedule for 7 days. The students were engaged in the test but the time limits were far too long for most of our students. One problem was that the scheduled time—5 hours and 4 hours—created a logistics problem. We will go to an individual classroom clock schedule and those students who need extra time will either stay in the classroom or be moved to another testing area to provide extra time."
- "I was very pleased with our test administration schedule for March 7th and March 13th. We had the 9th grade testing while the rest of the school continued with regular classes. I would not change any of the arrangements for next year."
- "Nothing. The administration went well. Directions were very clear. Going to the conference was extremely helpful. Other site coordinators from my district did not go and they were confused. I recommended that they go to the meeting next time!"

Future Plans

In addition to any preparatory steps taken thus far, the surveys inquired about future plans to deal with this new requirement. In particular, efforts to prepare teachers and others for the exam and remediation plans subsequent to the first exam administration were probed. Principals were provided a list of possible remedial practices for students who do not pass the

CAHSEE and asked which they planned to implement. Figure 3.2 lists the percentage of principals who endorsed each activity (in descending order of endorsement).

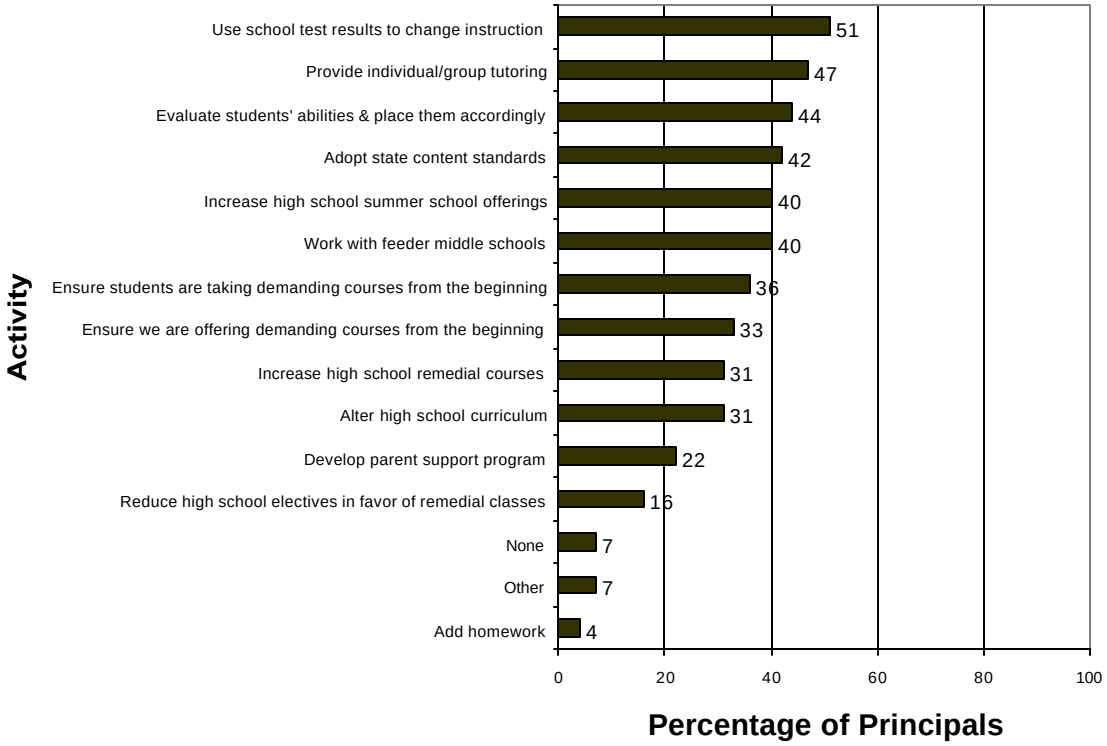


Figure 3.2. Percentage of principals reporting plans for remediation of students who do not pass the CAHSEE.

Expectations

Several survey questions queried the respondent's expectations for the exam: anticipated pass rates, impact of the exam on student motivation and parental involvement, and so on. Principals and teachers were asked to predict the impact of the CAHSEE on student motivation and parental involvement, under various circumstances.

One concern with milestones such as the CAHSEE is that students who successfully passed the CAHSEE early in their high school careers might lose motivation. Principals and teachers were asked to predict student motivation and parental involvement for those students who pass the exam on their first attempt. The predictions for this group were positive. As Figures 3.3a and 3.3b depict, most principals and teachers expected that student motivation and parental involvement would either be unaffected or improved after students cleared the hurdle of the CAHSEE.

For those students who fail the exam on the first try, the predictions were quite different. Figures 3.4a and 3.4b illustrate response patterns for principals and teachers, respectively. Both groups were split on whether the impact of failing the exam would have a negative or positive effect on student motivation. Predictions for parental involvement were very similar.

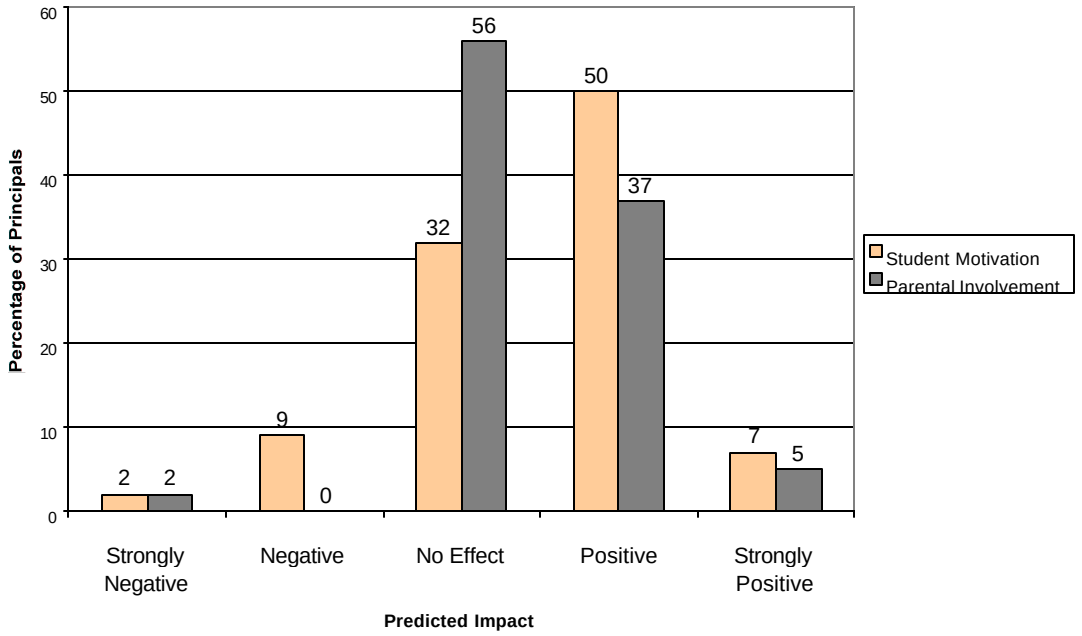


Figure 3.3a. Principals' predicted impact of the CAHSEE on student motivation and parental involvement of students who pass the exam on the first attempt

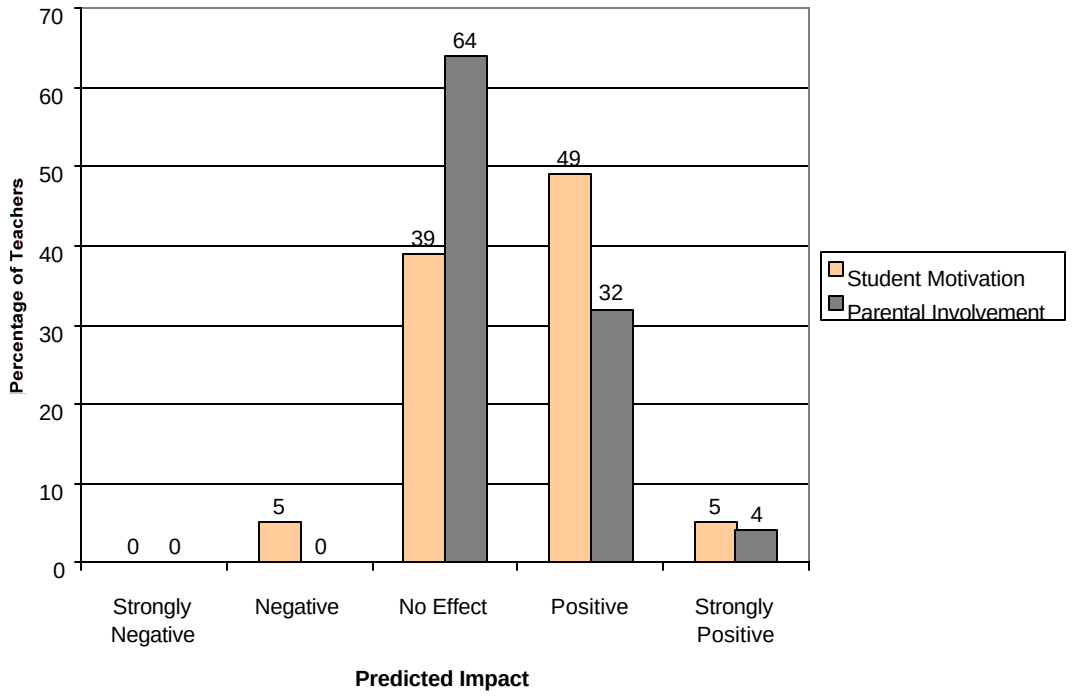


Figure 3.3b. Teachers' predicted impact of the CAHSEE on student motivation and parental involvement of students who pass the exam on the first attempt.

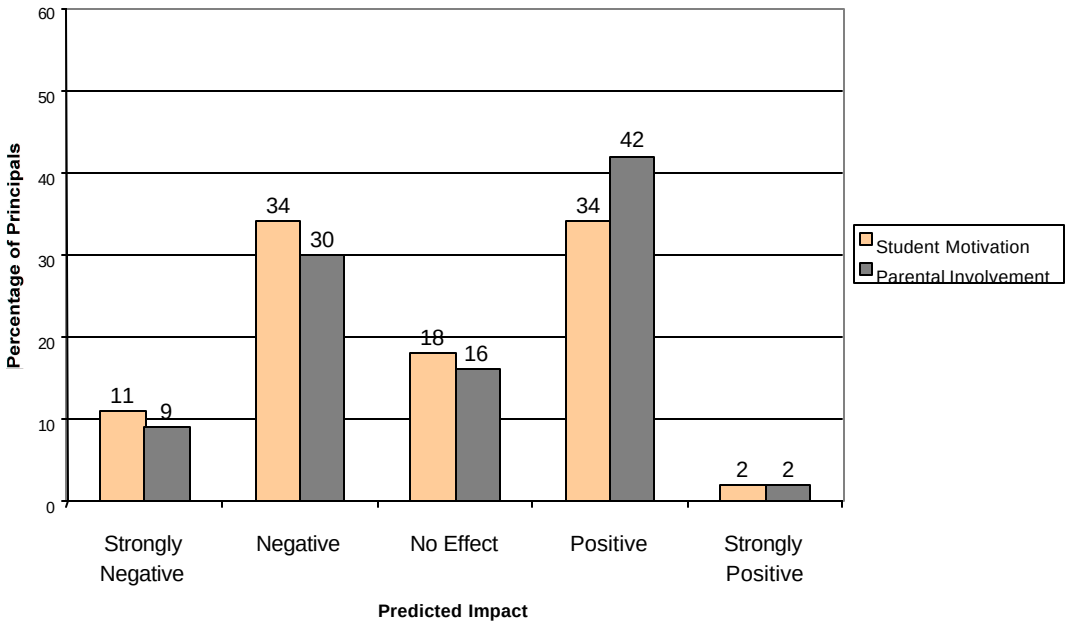


Figure 3.4a. Principals' predicted impact of the CAHSEE on student motivation and parental involvement of students who fail the exam on the first attempt.

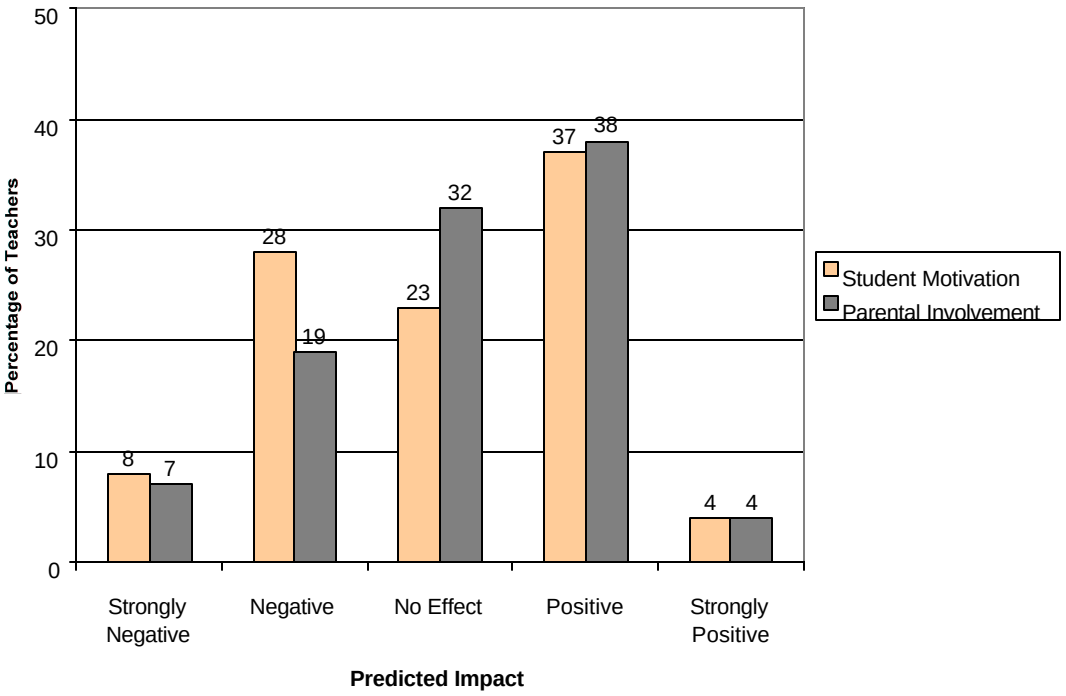


Figure 3.4b. Teachers' predicted impact of the CAHSEE on student motivation and parental involvement of students who fail the exam on the first attempt.

Principals and teachers were also asked to predict the impact of the CAHSEE on student retention and dropout rates. Responses were somewhat negative overall. Figures 3.5a and 3.5b reveal that principals' predictions were more negative than teachers'. Fifty-five percent of principals (vs. 32% of teachers) anticipated a strongly negative or negative impact on student retention rates; 80% of principals (vs. 61% of teachers) predicted a strongly negative or negative impact on student dropout rates.

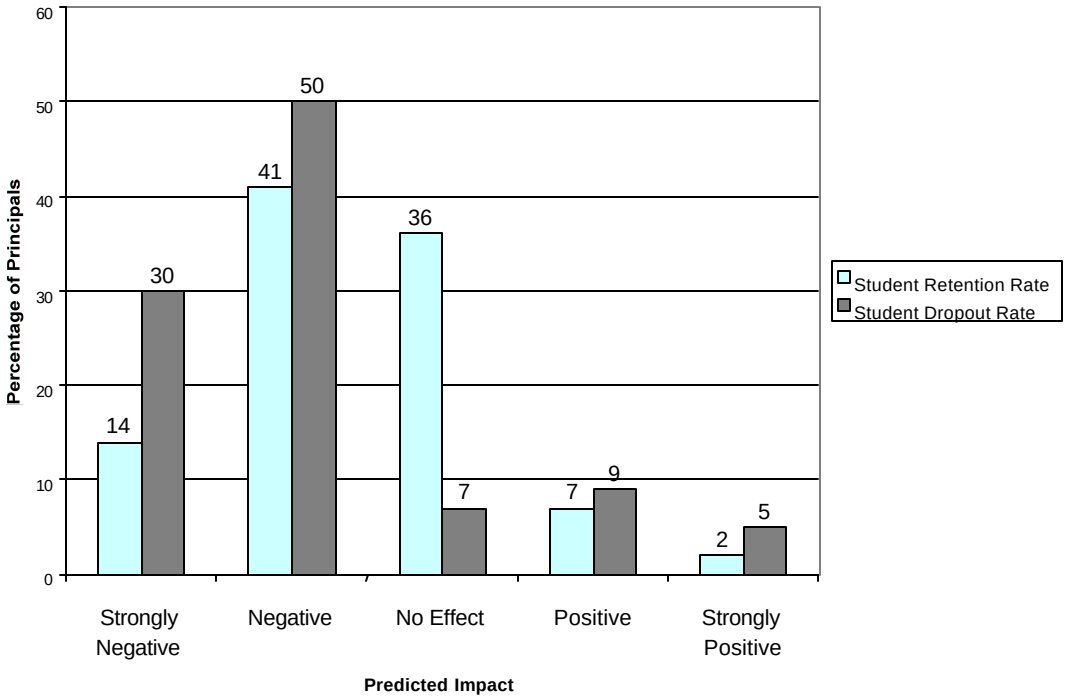


Figure 3.5a. Principals' predicted impact of the CAHSEE on student retention and dropout rates.

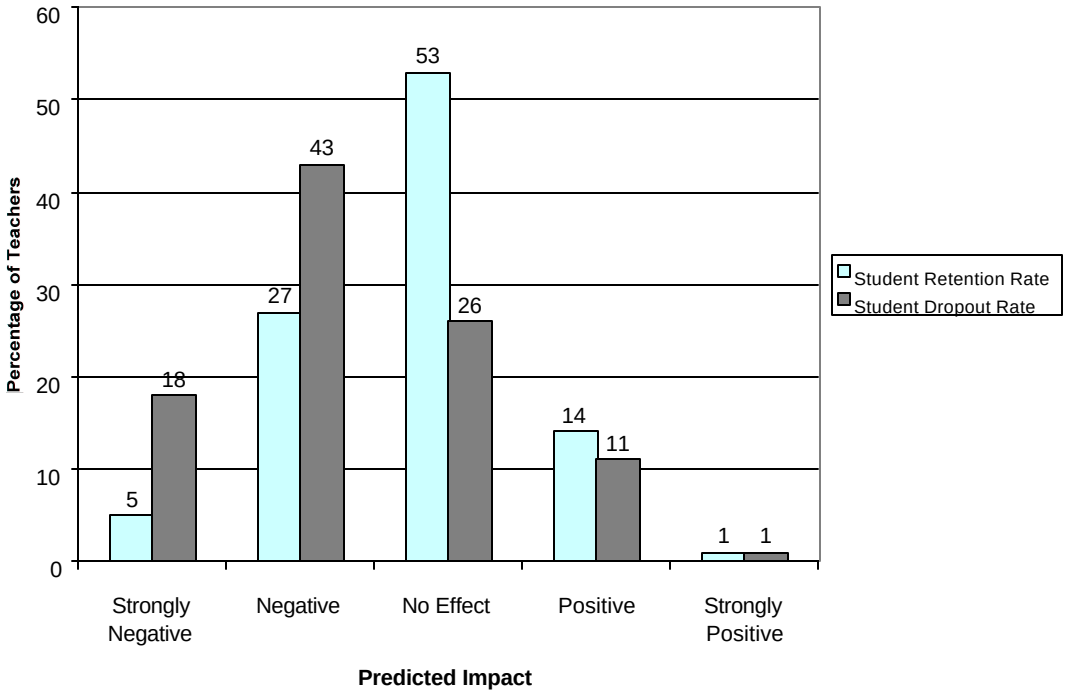


Figure 3.5b. Teachers' predicted impact of the CAHSEE on student retention and dropout rates.

The comparison of the predictions by principals and teachers of the CAHSEE on student retention and dropout rates from this year to last year is presented in Table 3.8. Results were similar between years, although principals' predictions of the impact on student dropout rates were slightly more negative this year and teachers' prediction of the impact on student retention were more neutral.

TABLE 3.8 Principals' and Teachers' Predicted Impact of CAHSEE on Student Retention and Dropout Rates

	Percentage of Principals			
	Student Retention		Student Dropout	
Impact	2000	2001	2000	2001
Strongly positive	2	2	2	5
Positive	14	7	12	9
No effect	29	36	21	7
Negative	41	41	41	50
Strongly negative	14	14	24	30
	Percentage of Teachers			
Strongly positive	0	1	1	1
Positive	11	14	9	11
No effect	20	53	20	26
Negative	44	27	44	43
Strongly negative	12	5	14	18

Principals were asked to predict, based on what they knew about their schools, the influence of the CAHSEE on classroom instructional practices over time. Figure 3.6a provides the predictions for school years 2001–2002, 2003–2004, and 2005–2006. Responses to the influence of CAHSEE for next year (2001–2002) ranged from moderately optimistic to neutral, and grew more optimistic over time.

Teachers were asked the same question about the influence of the CAHSEE on instructional practices for the 3 school years. Figure 3.6b provides the responses for all 3 years. The pattern of responses indicates that teachers expect the CAHSEE to have a positive impact on instruction, and they generally expected that impact to grow increasingly positive over time. Responses were similar in 2000 and 2001.

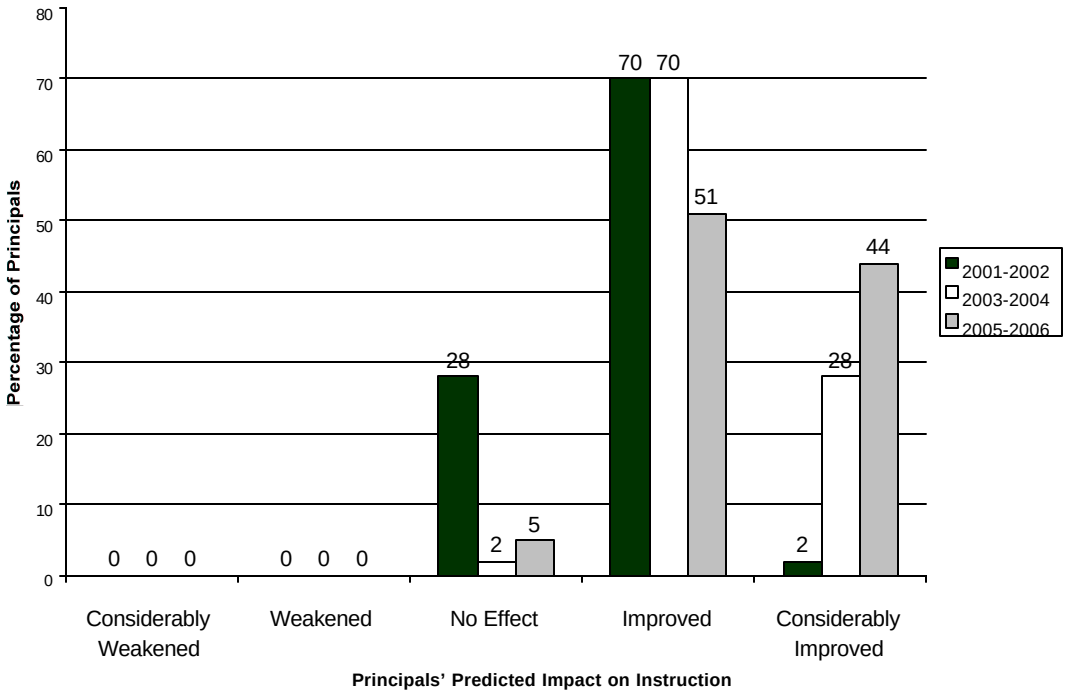


Figure 3.6a. Principals' prediction of influence of the CAHSEE on instructional practices over time.

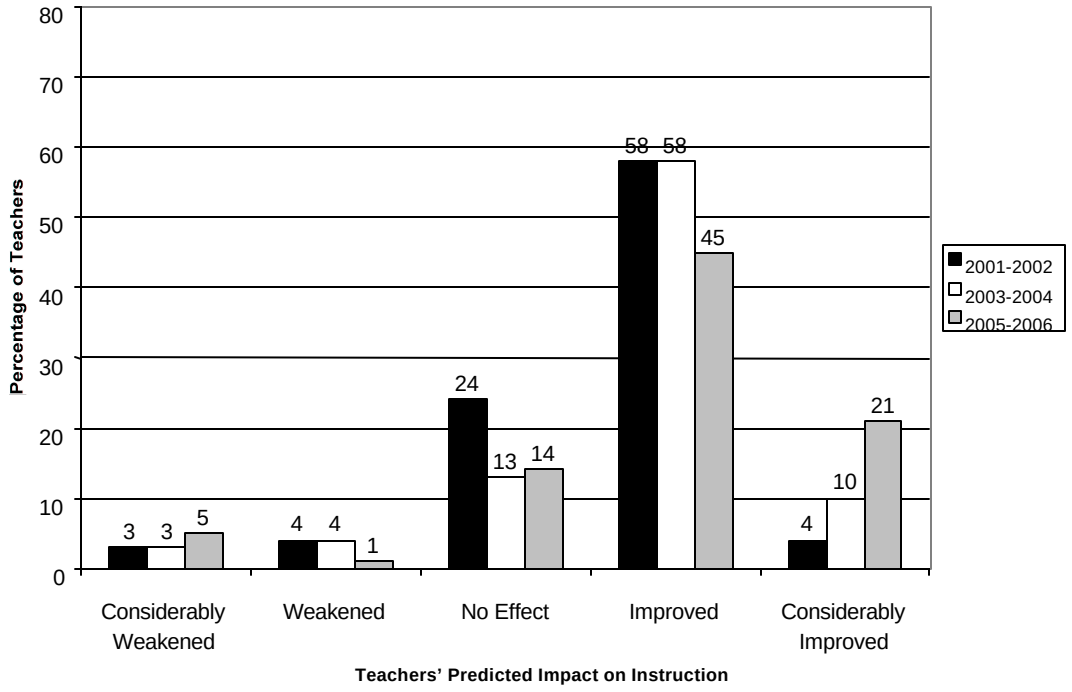


Figure 3.6b. Teachers' prediction of influence of the CAHSEE on instructional practices over time.

One of the concerns when implementing a new exam is whether there is a differential impact on various subgroup populations. We asked principals to estimate the percent of 10th grade students who have had instruction in the ELA and mathematics standards for the total student population, as well as for specific subgroups: students with disabilities, EL students, economically disadvantaged students, and minority students. Figures 3.7a and 3.7b present the results for ELA and mathematics, respectively. For the various student subgroups, responses were less optimistic, especially for the more than 50% who are estimated not to have had instruction in the content standards.

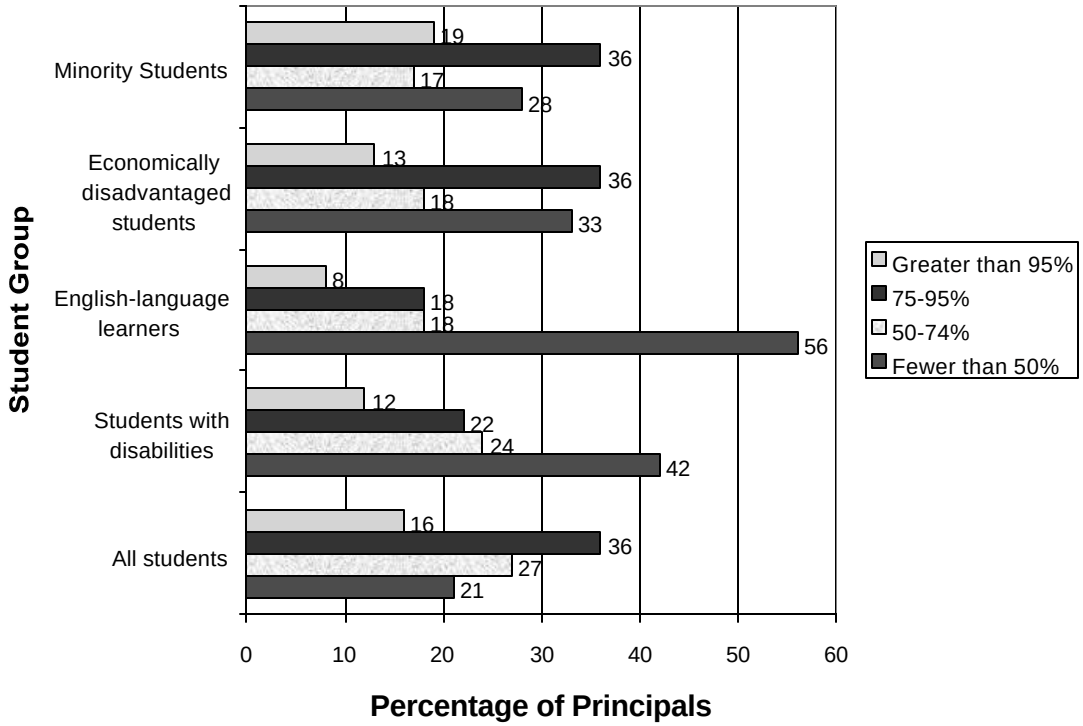


Figure 3.7a. Principals' estimates of the percentage of students who have had instruction in ELA content standards.

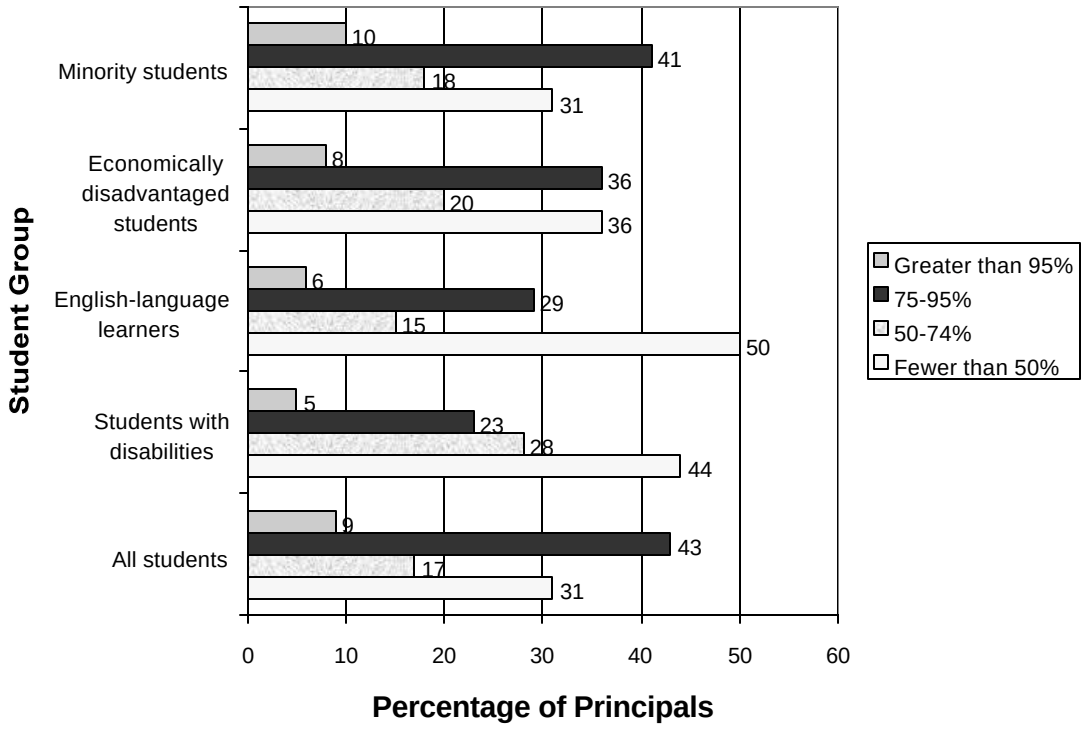


Figure 3.7b. Principals' estimates of the percentage of students who have had instruction in Mathematics content standards.

Standards Taught

For the mathematics standards included in our survey, most of the teachers responding said that these standards were covered in Beginning Algebra, Intermediate Algebra, and Plane Geometry. For Beginning Algebra, just over half of the respondents said that the course was taken by most students. Where an integrated math course was offered, 72% of respondents indicated that most students took the first level of this course. For all other courses, fewer than half of the respondents indicated that most students took the course. Wise et al. (2001) includes tables that show the specific courses listed for each of the content standards included in our survey.

In general, for both mathematics and ELA, very few respondents indicated that the more difficult standards included in our survey were not taught. In many cases, however, they indicated courses that are typically not taken until 10th grade or later.[2] Further, particularly for mathematics, respondents frequently indicated that only some of their students took the courses in which the standards were covered.

Other

Principals were asked to indicate what actions the school plans to take or has implemented to promote learning for all students. The results are presented in Table 3.9. Principals' responses indicate that while many actions have already been undertaken to promote student learning, in many cases these actions have been only partially implemented.

Principals were asked what percentage of their teachers they thought understood the difference between "teaching to the test" and "aligning the curriculum and instruction to the standards". The results are displayed in Figure 3.8 and indicate some room for improvement.

[2] This should be kept in mind when drawing inferences from the fact that many 9th graders have not mastered these standards. It may be the case that these students will be sufficiently prepared to pass the exam by spring of their 10th grade year.

TABLE 3.9 Percentage of Principals Indicating Actions to Promote Student Learning

Action	Plan to Implement		Already Implemented (Stage)	
	No	Yes	Partially	Fully
School, teacher, and student access to appropriate instructional materials	0	9	37	54
Encouragement of all students to take Algebra I	0	16	28	56
Individual student assistance	0	12	61	27
Teacher and school support services	2	16	58	24
Student and parent support services	10	34	39	17
Teacher access to in-service training on content standards	0	12	38	50
Teacher access to in-service training on instructional techniques	2	14	37	47
Administrator and teacher access to in-service training for working with diverse student populations and different learning styles	2	23	42	33

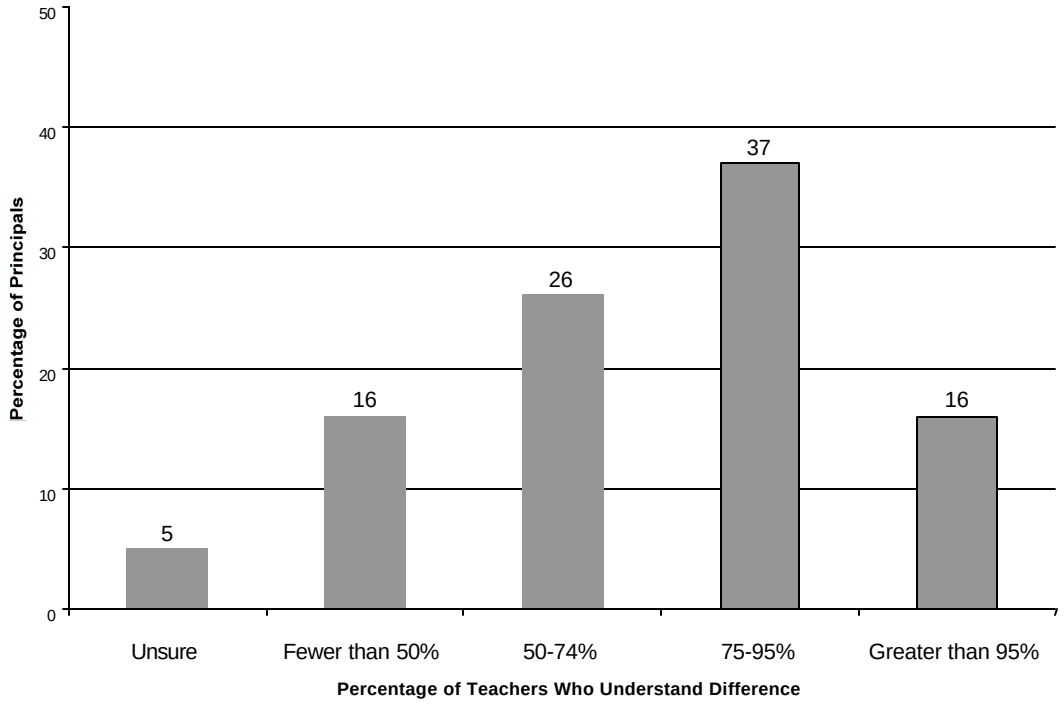


Figure 3.8. Percentage of principals indicating the percentage of teachers who understand the difference between "teaching to the test" and "aligning the curriculum and instruction to the standards."

Summary

Principals and teachers reported significant familiarity with the CAHSEE and the state content standards. While last year principals and teachers indicated they were more familiar with the state content standards than the CAHSEE, this year they reported familiarity with the CAHSEE to be greater than familiarity with the state content standards. Comparable to last year, principals rated themselves as more familiar with the CAHSEE and the state content standards than teachers rated themselves. However, principals' ratings of student and parent familiarity with the CAHSEE increased from last year.

Only a small percentage of teachers reported that they had no source of information on the CAHSEE. Most principals relied primarily upon official channels such as state and district sources and the California Department of Education Web site; teachers reported a greater reliance upon newspaper accounts than did principals.

Preparatory activities continue. For example, nearly all principals reported that districts encourage the use of content standards and approximately one third indicated that their district has adopted the state content standards. The types of activities that were endorsed by approximately half of the principals in preparation for the Spring 2001 administration of the CAHSEE included encouraging students to work hard to prepare for the test, and adoption by their schools of the state content standards. Teachers' preparations included encouraging students to work hard and prepare, teaching test-taking skills, talking with their students, and increasing classroom attention to content standards prior to the CAHSEE.

In addition to adopting the state content standards in preparation for the CAHSEE, most principals reported emphasizing the importance of preparing staff through such efforts as having administrators participate in the February test administration workshops and delivering local workshops on test administration. Nearly half of the teachers were aware of in-service training to modify instructional practices to increase coverage of the content standards.

Teacher and principal estimates of student preparedness were mildly pessimistic. Estimates of the percentages of students likely to meet the CAHSEE standards were very similar this year to last year. However, comparison of 2000 and 2001 responses revealed a slight increase in the estimated preparedness level of students in 9th grade from 2000 to 2001 and a larger increase in the estimated preparedness level of students in 10th grade.

Teachers and principals were again in basic agreement about the impact of the test in various situations. For both years of data collection, principals predicted the CAHSEE would have a neutral to mildly positive impact on student motivation and parental involvement. Principals had predicted slightly more positive impact for students and parents prior to the first administration than they did upon receiving pass/fail results from the first attempt. Teachers' predictions of the impact of the CAHSEE on student motivation and parental involvement were slightly more positive this year. For those students who fail on the first attempt, however, expectations are different and less positive. Further, relatively few principals predicted that failure would have a neutral effect on student motivation, and again two camps emerged: Nearly the same number of principals expected a negative or strongly

negative impact as predicted a positive impact. Principals and teachers remained very consistent in their prediction that the effects of the CAHSEE upon student retention rates and student dropout rates will be negative. The comparison of principals' and teachers' predicted impact of the CAHSEE on student retention and dropout rates across 2000 and 2001 indicated generally similar results, although principals' predictions of the impact on student dropout rates had grown slightly more negative this year.

Despite these concerns about the effects on student motivation and parental involvement, principals and teachers continued to expect that the impact of the CAHSEE on instructional practices would be positive. Further, we asked teachers to estimate effects next year and in 3 and 5 years; they predicted greater improvement with time.

Respondents continued to expect differential impacts for certain student subgroups. They estimated that a much lower percentage of EL and students with disabilities, as compared to all students, would receive instruction in the content standards. Fewer respondents believed that such great differences would be seen with minority and economically disadvantaged students.

With regard to the teaching of the state content standards, very few teachers indicated that the more difficult standards included in our survey were not taught. In many cases, however, they indicated standards were taught in courses that are typically not taken until 10th grade or later. Further, particularly for mathematics, respondents frequently indicated that only some of their students took the courses in which the standards were covered.

In short, the principal and teacher survey responses indicate:

- Increased awareness of the CAHSEE and the state content standards from last year
- Concerns about student preparedness
- Mixed predictions about the impact of the exam on student motivation
- Concern about the impact of the exam on retention rates and dropout rates
- Concern about the success of disadvantaged groups, especially EL students and students with disabilities
- Positive expectations of the impact of the CAHSEE on instructional practices
- Indication that the more difficult standards are taught in most schools, some of the courses are not typically taken until the 10th grade or later, and not by all students.

CHAPTER 4. STUDENT PREPARATION, REACTIONS, AND PLANS

Introduction

One important aspect of this evaluation is how students prepare for the CAHSEE and also its impact on student attitudes, plans and preparation for high school completion and subsequent activities. To this end, we will be examining changes in student preparation, reactions, and plans over time.

In the Spring 2000 test administrations, participating students were 9th graders, many of whom were just learning about the requirement to pass both the ELA and mathematics portions of the CAHSEE in order to earn a high school diploma. We surveyed participating students at the end of each test to assess their immediate reactions and also to obtain information on their current plans for completing high school and going to college or seeking employment. These mini-surveys will be repeated in future administrations so that longitudinal trends can be identified and evaluated.

Student Questionnaire

At the end of each test, students completed a brief questionnaire on their reactions to the test and their plans for high school and beyond. We examined the responses to these questions by gender, race, and disadvantagement[3], separately for students who did or did not pass each of the two tests. Tables 4.2 through 4.17 show the results.

One difference between the ELA and mathematics questionnaire respondents bears noting. As depicted in Table 4.1, a greater proportion of mathematics examinees responded to the questionnaire than did ELA examinees (86% versus 73%, respectively). This may be due, in part, to the length of the ELA test. Some students did not complete the second constructed response item on the ELA test, and therefore may not have reached the questionnaire items that followed. Not surprisingly, students who passed ELA were more likely to have completed the test than those who did not pass. Therefore, the ELA response patterns may be somewhat skewed due to missing data.

TABLE 4.1 Number of Students Who Took Each Test and Number Who Responded to Questionnaire Items

Test	Number of Students Responding to Questionnaire*	Number of Students Taking Test	Percentage of Examinees Responding
ELA	269,843	369,387	73%
Mathematics	312,597	364,664	86%

* These counts were based on number of responses to the first questionnaire item.

[3] El students were identified by the language fluency indicator in the data file provided by the scoring company. Although we reclassified some students from "English learner" to "English fluent" for analyses in Chapter 5, the students were not reclassified for the analyses in this chapter as questionnaire responses for the reclassified students had not been matched to responses from students originally designated as EL.

Preparation. Question 1 asked the student to indicate steps taken to prepare for the test. The most common response was that a teacher or counselor told the student about the purpose and importance of the test. Table 4.2 reveals that, overall, 42% of ELA respondents indicated that a teacher or counselor had told them about the test. Within each demographic group, a larger proportion of those who passed the test than those who failed the test indicated this notice. Less than 9% of respondents reported taking a practice test. Slightly more students who failed the test indicated this option than students who passed the test. Approximately a quarter of respondents (24%) reported that a teacher had spent class time in test preparation. Over a third of respondents (38%) indicated they had done nothing to prepare for the test.

Responses to this question on the math portion of the test followed a similar pattern, as shown in Table 4.3. In general, preparation was slightly lower for the mathematics test than for the ELA test. A third of respondents (34%) indicated that a teacher or counselor had informed the student of the purpose of the test. Nine percent had taken a practice test; here, too, a slightly larger percentage of students who failed the test had practiced on a sample (9% versus 8%). A fifth of respondents (21%) had prepared in a class and 44% had done nothing to prepare for the mathematics test.

Importance. The next item asked students about the importance of the test to themselves, personally. Most students indicated that the test was at least somewhat important. Only 5% of ELA respondents (Table 4.4) and mathematics respondents (Table 4.5) indicated that the test was not important. Response patterns were similar across demographic groups, although EL students and economically-disadvantaged students were more inclined than other groups to rate the ELA test as very important. In general, students who failed each test were more likely than students who passed the test to rate it as very important.

Expectations for Graduation. Survey Question 3 asked students whether they thought they would graduate from high school. Most students (86% on ELA, 85% on math) responded that they would graduate. Thirteen percent on each test indicated they were not sure and 1–2% responded that they did not think they would graduate (Tables 4.6 and 4.7). Across demographic groups, students who passed the test were more optimistic than those who failed the test about their graduation prospects. On both tests, disadvantaged groups (i.e., economically disadvantaged, English learners, and exceptional needs students) were more inclined to indicate they were not sure (20–28%).

Along a similar line, examinees were asked whether it would be harder to graduate if the student had to pass a test like this. Tables 4.8 and 4.9 report responses from the ELA and mathematics tests, respectively. In general, approximately 28% indicated graduation would be a lot harder; 39%, somewhat harder; 22%, not much harder at all; and 9–11% indicated they did not know. Not surprisingly, individuals who failed the test were more likely to indicate that it would be much harder to graduate than did student who passed the test on their first try. Students with exceptional needs and EL students were more inclined to see graduation as harder to achieve, as were economically disadvantaged students, though to a lesser extent.

Post-High School Plans. Students were provided a list of options and asked to indicate which best reflected their post-high-school plans. Responses are reported in Tables

4.10 and 4.11.The most common response, across gender and racial/ethnic demographic groups and performance on this test, was to attend a 4-year college or university (approximately 60% overall). A greater proportion of students who passed the test than those who failed the test aspired to this option. However, although this option was still the most common choice, it was lower among the disadvantaged groups: near 50% for economically disadvantaged students and under 50% for EL and exceptional needs students.

TABLE 4.2 Responses to Survey Question 1 by ELA Test Result

Question 1: How did you prepare for this test? (Check all that apply)

A. A teacher or Counselor told me about the purpose and importance of the test.
B. I practiced on a sample of the test.
C. A teacher spent time in class getting me ready to take the test.
D. I did not do anything to prepare for this test.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question			
				A	B	C	D
Gender	Female	Pass	101,166	47.60	8.09	25.45	35.10
		Fail	33,700	37.82	9.36	26.53	32.39
		Total	134,866	45.20	8.41	25.72	34.43
	Male	Pass	84,847	39.53	7.91	23.58	43.39
		Fail	49,861	36.23	10.09	22.85	36.76
		Total	134,708	38.31	8.71	23.31	40.93
Race	Asian	Pass	18,724	46.54	8.05	21.06	40.06
		Fail	4,839	39.93	10.42	26.16	28.62
		Total	23,563	45.18	8.54	22.11	37.71
	African American	Pass	11,283	42.67	9.90	26.43	35.81
		Fail	8,575	37.47	11.53	25.63	31.99
		Total	19,858	40.42	10.60	26.08	34.16
	Hispanic	Pass	55,932	43.75	8.44	28.18	34.28
		Fail	49,462	37.28	9.90	25.00	32.98
		Total	105,394	40.71	9.12	26.69	33.68
	White	Pass	88,511	43.19	7.48	23.05	42.20
		Fail	16,495	33.89	8.40	21.64	44.54
		Total	105,006	41.73	7.63	22.83	42.57
Disadvantage	Economic	Pass	42,000	45.22	8.67	28.15	33.50
		Fail	40,976	37.30	10.28	25.67	32.35
		Total	82,976	41.30	9.46	26.92	32.93
	English Learner	Pass	11,297	45.50	9.05	28.57	29.01
		Fail	23,337	38.77	11.35	26.14	27.98
		Total	34,634	40.96	10.60	26.93	28.32
	Disabilities	Pass	6,248	39.76	8.05	24.46	41.21
		Fail	16,840	36.94	9.88	23.19	35.61
		Total	23,088	37.71	9.38	23.53	37.13
Overall		Pass	186,142	43.92	8.01	24.59	38.89
		Fail	83,701	36.86	9.80	24.33	35.01
		Total	269,843	41.73	8.56	24.51	37.68

TABLE 4.3 Responses to Survey Question 1 by Mathematics Test Result

Question 1: How did you prepare for this test? (Check all that apply)

A. A teacher or Counselor told me about the purpose and importance of the test.
B. I practiced on a sample of the test.
C. A teacher spent time in class getting me ready to take the test.
D. I did not do anything to prepare for this test.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question			
				A	B	C	D
Gender	Female	Pass	68,397	39.00	8.14	18.80	46.02
		Fail	86,675	34.58	8.63	24.01	39.06
		Total	155,072	36.53	8.41	21.71	42.13
	Male	Pass	75,198	30.08	7.57	17.69	54.17
		Fail	81,980	33.55	9.68	21.45	40.40
		Total	157,178	31.89	8.67	19.65	46.99
Race	Asian	Pass	19,732	34.55	8.56	14.08	52.18
		Fail	7,857	36.76	10.23	24.39	33.77
		Total	27,589	35.18	9.04	17.02	46.94
	African American	Pass	6,227	35.19	8.53	20.86	46.73
		Fail	17,645	34.88	9.88	24.01	36.55
		Total	23,872	34.96	9.53	23.19	39.21
	Hispanic	Pass	32,944	34.68	8.03	22.06	46.00
		Fail	92,529	34.01	9.62	23.40	38.01
		Total	125,473	34.19	9.20	23.04	40.11
	White	Pass	75,709	33.80	7.52	17.37	52.23
		Fail	41,295	32.79	7.55	20.69	46.29
		Total	117,004	33.44	7.53	18.54	50.13
Disadvantage	Economic	Pass	26,669	36.03	8.37	21.67	44.90
		Fail	72,592	34.58	9.83	24.26	36.54
		Total	99,261	34.97	9.44	23.57	38.79
	English Learner	Pass	7,305	35.63	10.57	20.89	41.40
		Fail	34,227	35.68	11.51	24.68	32.21
		Total	41,532	35.67	11.35	24.01	33.82
	Disabilities	Pass	3,950	30.96	8.35	18.66	53.16
		Fail	24,041	34.46	9.44	21.57	39.41
		Total	27,991	33.97	9.29	21.16	41.35
Overall		Pass	143,690	34.33	7.84	18.21	50.30
		Fail	168,907	34.07	9.14	22.75	39.71
		Total	312,597	34.19	8.54	20.67	44.58

TABLE 4.4 Responses to Survey Question 2 by ELA Test Result

Question 2: How important is this test to you?

A. Very Important
B. Somewhat Important
C. Not Important

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question		
				A	B	C
Gender	Female	Pass	101,084	69.45	27.63	2.87
		Fail	33,599	78.49	19.05	2.42
		Total	134,683	71.71	25.49	2.76
	Male	Pass	84,784	64.16	29.29	6.48
		Fail	49,743	69.26	24.21	6.43
		Total	134,527	66.04	27.41	6.47
Race	Asian	Pass	18,716	62.67	32.65	4.64
		Fail	4,831	75.84	20.89	3.17
		Total	23,547	65.37	30.23	4.34
	African American	Pass	11,275	75.77	21.15	3.01
		Fail	8,550	75.96	19.20	4.80
		Total	19,825	75.85	20.31	3.78
	Hispanic	Pass	55,887	76.63	20.92	2.40
		Fail	49,322	76.97	19.51	3.45
		Total	105,209	76.79	20.26	2.90
	White	Pass	88,439	60.49	33.26	6.18
		Fail	16,463	59.63	31.09	9.14
		Total	104,902	60.36	32.92	6.65
Disadvantage	Economic	Pass	41,969	77.39	20.18	2.38
		Fail	40,866	77.36	18.87	3.71
		Total	82,835	77.37	19.54	3.04
	English Learner	Pass	11,292	82.39	16.23	1.35
		Fail	23,264	81.40	15.72	2.83
		Total	34,556	81.72	15.89	2.34
	Disabilities	Pass	6,245	66.42	27.80	5.64
		Fail	16,770	68.28	24.17	7.44
		Total	23,015	67.77	25.15	6.95
Overall		Pass	185,997	67.03	28.39	4.52
		Fail	83,481	72.97	22.13	4.82
		Total	269,478	68.87	26.45	4.61

TABLE 4.5 Responses to Survey Question 2 by Mathematics Test Result

Question 2: How important is this test to you?

A. Very Important
B. Somewhat Important
C. Not Important

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question		
				A	B	C
Gender	Female	Pass	68,360	60.94	35.15	3.87
		Fail	86,578	74.33	23.24	2.38
		Total	154,938	68.42	28.50	3.04
	Male	Pass	75,148	57.89	33.74	8.30
		Fail	81,815	68.58	25.50	5.83
		Total	156,963	63.46	29.45	7.02
Race	Asian	Pass	19,719	56.87	37.07	6.02
		Fail	7,837	74.91	22.28	2.76
		Total	27,556	62.00	32.86	5.09
	African American	Pass	6,224	68.93	26.16	4.90
		Fail	17,609	75.31	20.93	3.69
		Total	23,833	73.65	22.29	4.01
	Hispanic	Pass	32,931	70.05	26.33	3.59
		Fail	92,387	75.52	21.38	3.07
		Total	125,318	74.08	22.68	3.20
	White	Pass	75,654	54.08	38.11	7.73
		Fail	41,249	60.87	32.35	6.66
		Total	116,903	56.48	36.07	7.35
Disadvantage	Economic	Pass	26,657	71.05	25.25	3.67
		Fail	72,469	76.32	20.43	3.21
		Total	99,126	74.90	21.73	3.33
	English Learner	Pass	7,303	76.11	21.37	2.48
		Fail	34,147	80.31	17.21	2.42
		Total	41,450	79.57	17.95	2.43
	Disabilities	Pass	3,946	57.25	34.92	7.78
		Fail	23,974	66.74	25.97	7.19
		Total	27,920	65.40	27.23	7.27
Overall		Pass	143,603	59.34	34.41	6.19
		Fail	168,644	71.52	24.35	4.06
		Total	312,247	65.92	28.98	5.04

TABLE 4.6 Responses to Survey Question 3 by ELA Test Result

Question 3: Do you think you will graduate from high school?

A. Yes
B. No
C. Not sure

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question		
				A	B	C
Gender	Female	Pass	101,048	92.75	0.47	6.73
		Fail	33,560	66.81	2.97	30.13
		Total	134,608	86.28	1.09	12.56
	Male	Pass	84,751	71.09	3.52	25.31
		Fail	49,648	93.17	0.77	6.00
		Total	134,399	85.01	1.79	13.14
Race	Asian	Pass	18,704	92.18	0.49	7.30
		Fail	4,819	62.61	2.84	34.51
		Total	23,523	86.12	0.97	12.57
	African American	Pass	11,263	95.05	0.65	4.28
		Fail	8,526	79.84	2.72	17.26
		Total	19,789	88.49	1.54	9.87
	Hispanic	Pass	55,862	88.72	0.66	10.56
		Fail	49,242	65.93	3.30	30.69
		Total	105,104	78.04	1.90	19.99
	White	Pass	88,423	95.59	0.59	3.78
		Fail	16,452	76.37	3.60	19.94
		Total	104,875	92.57	1.06	6.31
Disadvantage	Economic	Pass	41,953	88.24	0.72	10.98
		Fail	40,812	66.52	3.19	30.22
		Total	82,765	77.53	1.93	20.47
	English Learner	Pass	11,287	82.81	0.83	16.28
		Fail	23,240	63.65	3.31	32.98
		Total	34,527	69.91	2.50	27.52
	Disabilities	Pass	6,244	88.53	1.28	10.06
		Fail	16,745	66.22	4.79	28.88
		Total	22,989	72.28	3.84	23.76
Overall		Pass	185,928	92.94	0.61	6.40
		Fail	83,348	69.36	3.30	27.26
		Total	269,276	85.64	1.44	12.86

TABLE 4.7 Responses to Survey Question 3 by Mathematics Test Outcome

Question 3: Do you think you will graduate from high school?

A. Yes
B. No
C. Not sure

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question		
				A	B	C
Gender	Female	Pass	68,334	96.21	0.39	3.37
		Fail	86,508	77.41	1.86	20.62
		Total	154,842	85.71	1.21	13.00
	Male	Pass	75,115	94.07	0.97	4.90
		Fail	81,758	75.21	3.16	21.53
		Total	156,873	84.24	2.11	13.57
Race	Asian	Pass	19,713	93.11	0.63	6.23
		Fail	7,833	68.88	2.60	28.41
		Total	27,546	86.22	1.19	12.54
	African American	Pass	6,222	96.83	0.64	2.52
		Fail	17,594	84.57	2.34	12.96
		Total	23,816	87.77	1.90	10.23
	Hispanic	Pass	32,915	92.92	0.61	6.41
		Fail	92,314	72.07	2.53	25.30
		Total	125,229	77.55	2.02	20.33
	White	Pass	75,625	96.48	0.76	2.73
		Fail	41,223	83.57	2.48	13.85
		Total	116,848	91.92	1.36	6.65
Disadvantage	Economic	Pass	26,638	92.01	0.68	7.27
		Fail	72,420	71.75	2.63	25.51
		Total	99,058	77.20	2.11	20.60
	English Learner	Pass	7,297	86.89	0.90	12.11
		Fail	34,141	66.46	2.88	30.56
		Total	41,438	70.06	2.53	27.31
	Disabilities	Pass	3,946	91.61	1.29	7.07
		Fail	23,956	68.37	4.85	26.65
		Total	27,902	71.66	4.35	23.88
Overall		Pass	143,544	95.09	0.70	4.18
		Fail	168,517	76.33	2.49	21.07
		Total	312,061	84.96	1.67	13.30

TABLE 4.8 Responses to Survey Question 4 by ELA Test Result

Question 4: Will it be harder to graduate if you have to pass a test like this?
A. Yes, a lot harder
B. Somewhat harder
C. Not much harder at all
D. I really don't know

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question			
				A	B	C	D
Gender	Female	Pass	101,013	20.76	44.59	24.35	10.15
		Fail	33,502	44.59	29.98	8.99	16.31
		Total	134,515	26.70	40.95	20.52	11.68
	Male	Pass	84,718	20.82	40.80	29.21	9.05
		Fail	49,606	42.09	30.86	11.73	15.20
		Total	134,324	28.68	37.13	22.75	11.32
Race	Asian	Pass	18,698	21.16	43.00	26.63	9.08
		Fail	4,818	51.45	25.55	8.68	14.22
		Total	23,516	27.37	39.43	22.95	10.13
	African American	Pass	11,265	21.37	43.82	25.75	8.87
		Fail	8,523	38.25	31.98	13.70	15.87
		Total	19,788	28.64	38.72	20.56	11.89
	Hispanic	Pass	55,833	27.33	45.96	17.14	9.47
		Fail	49,161	43.92	29.89	9.69	16.42
		Total	104,994	35.10	38.43	13.64	12.72
	White	Pass	88,392	16.31	40.24	33.28	10.03
		Fail	16,438	41.13	33.09	11.83	13.77
		Total	104,830	20.20	39.12	29.91	10.61
Disadvantage	Economic	Pass	41,931	28.05	45.36	16.80	9.65
		Fail	40,750	43.82	28.98	10.14	16.93
		Total	82,681	35.83	37.29	13.52	13.24
	English Learner	Pass	11,280	35.92	43.16	11.21	9.57
		Fail	23,171	46.96	26.88	9.33	16.72
		Total	34,451	43.35	32.21	9.95	14.38
	Disabilities	Pass	6,238	30.31	40.00	18.71	10.82
		Fail	16,729	48.29	26.11	8.31	17.16
		Total	22,967	43.41	29.88	11.14	15.43
Overall		Pass	185,860	20.79	42.86	26.57	9.65
		Fail	83,248	43.09	30.50	10.63	15.65
		Total	269,108	27.69	39.04	21.64	11.50

TABLE 4.9 Responses to Survey Question 4 by Mathematics Test Result

Question 4: Will it be harder to graduate if you have to pass a test like this?

A. Yes, a lot harder
B. Somewhat harder
C. Not much harder at all
D. I really don't know

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question			
				A	B	C	D
Gender	Female	Pass	68,306	13.50	45.87	33.62	6.92
		Fail	86,462	41.39	39.65	9.04	9.76
		Total	154,768	29.08	42.40	19.89	8.51
	Male	Pass	75,087	16.51	39.95	36.62	6.79
		Fail	81,683	41.18	35.40	12.00	11.30
		Total	156,770	29.37	37.58	23.79	9.14
Race	Asian	Pass	19,706	16.00	42.13	34.86	6.96
		Fail	7,838	47.93	33.43	9.11	9.43
		Total	27,544	25.09	39.65	27.53	7.66
	African American	Pass	6,218	16.58	43.84	32.42	7.04
		Fail	17,582	37.44	37.73	13.92	10.78
		Total	23,800	31.99	39.33	18.75	9.81
	Hispanic	Pass	32,898	20.30	48.98	24.05	6.56
		Fail	92,214	43.09	36.47	9.04	11.28
		Total	125,112	37.10	39.76	12.98	10.04
	White	Pass	75,598	12.30	39.51	41.12	6.95
		Fail	41,217	37.83	40.69	12.33	8.97
		Total	116,815	21.31	39.92	30.97	7.66
Disadvantage	Economic	Pass	26,641	21.19	47.68	24.05	7.00
		Fail	72,342	43.20	35.05	9.67	11.96
		Total	98,983	37.27	38.45	13.54	10.62
	English Learner	Pass	7,291	27.65	44.97	19.85	7.39
		Fail	34,077	46.71	32.07	8.73	12.39
		Total	41,368	43.35	34.34	10.69	11.51
	Disabilities	Pass	3,942	23.06	40.74	26.56	9.36
		Fail	23,931	49.19	28.13	8.74	13.76
		Total	27,873	45.49	29.91	11.26	13.14
Overall		Pass	143,488	15.08	42.77	35.19	6.85
		Fail	168,395	41.29	37.57	10.49	10.51
		Total	311,883	29.23	39.93	21.85	8.83

TABLE 4.10 Responses to Survey Question 5 by ELA Test Result

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

A. I will join the military.
B. I will go to community college.
C. I will go to a 4-year college or university.
D. I will go to Vocational/Technical/Trade school.
E. I will work full-time.
F. I really don't know what I will do after high school.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question					
				A	B	C	D	E	F
Gender	Female	Pass	100,994	2.17	10.54	74.47	1.18	1.11	9.30
		Fail	33,498	5.17	18.82	46.43	2.21	5.60	20.85
		Total	134,492	2.92	12.61	67.48	1.43	2.23	12.17
	Male	Pass	84,627	6.99	8.91	64.25	3.03	2.05	13.14
		Fail	49,582	13.74	14.38	35.70	4.22	8.99	21.65
		Total	134,209	9.49	10.93	53.70	3.47	4.61	16.29
Race	Asian	Pass	18,700	1.64	4.63	84.94	1.01	0.59	6.41
		Fail	4,816	4.61	15.03	57.35	2.51	5.56	14.29
		Total	23,516	2.25	6.76	79.29	1.31	1.61	8.02
	African American	Pass	11,260	3.43	6.40	79.44	1.94	1.34	6.07
		Fail	8,521	6.77	14.22	55.19	3.65	6.87	11.77
		Total	19,781	4.87	9.77	68.99	2.67	3.73	8.52
	Hispanic	Pass	55,808	5.69	11.75	62.92	2.37	2.08	13.91
		Fail	49,154	11.10	16.35	36.74	3.19	7.94	23.72
		Total	104,962	8.23	13.91	50.66	2.75	4.82	18.50
	White	Pass	88,312	4.20	10.24	69.42	2.07	1.48	10.96
		Fail	16,426	11.10	17.33	36.10	4.21	7.87	21.68
		Total	104,738	5.28	11.35	64.20	2.41	2.48	12.65
Disadvantage	Economic	Pass	41,920	6.02	10.90	63.85	2.39	2.19	13.23
		Fail	40,734	10.58	16.14	38.99	3.16	7.96	22.12
		Total	82,654	8.27	13.48	51.59	2.77	5.04	17.61
	English Learner	Pass	11,268	6.01	11.98	62.75	2.00	2.25	13.87
		Fail	23,174	9.72	16.38	39.93	2.96	7.40	22.88
		Total	34,442	8.50	14.94	47.40	2.65	5.71	19.93
	Disabilities	Pass	6,233	6.55	14.87	56.97	3.08	2.44	14.15
		Fail	16,730	11.42	18.18	33.43	4.02	9.79	21.65
		Total	22,963	10.10	17.28	39.82	3.76	7.80	19.62
Overall		Pass	185,750	4.37	9.80	69.81	2.02	1.54	11.05
		Fail	83,219	10.29	16.16	40.01	3.41	7.63	21.33
		Total	268,969	6.20	11.77	60.59	2.45	3.42	14.23

TABLE 4.11 Responses to Survey Question 5 by Mathematics Test Result

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

A. I will join the military.
B. I will go to community college.
C. I will go to a 4-year college or university.
D. I will go to Vocational/Technical/Trade school.
E. I will work full-time.
F. I really don't know what I will do after high school.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question					
				A	B	C	D	E	F
Gender	Female	Pass	68,286	1.49	7.32	79.80	0.93	0.62	8.75
		Fail	86,444	4.18	16.42	53.74	1.76	3.56	19.03
		Total	154,730	3.00	12.41	65.24	1.39	2.26	14.50
	Male	Pass	75,041	6.20	7.79	65.37	2.71	1.66	14.79
		Fail	81,643	13.11	13.47	37.67	3.98	7.69	22.68
		Total	156,684	9.80	10.75	50.94	3.37	4.81	18.90
Race	Asian	Pass	19,705	1.65	4.03	84.59	0.89	0.45	7.77
		Fail	7,826	4.10	12.78	59.79	2.24	4.54	15.67
		Total	27,531	2.35	6.52	77.54	1.27	1.61	10.01
	African American	Pass	6,215	2.67	4.23	81.74	1.80	0.92	7.40
		Fail	17,570	6.12	11.54	61.49	2.90	4.96	11.44
		Total	23,785	5.22	9.63	66.78	2.61	3.91	10.38
	Hispanic	Pass	32,888	5.38	8.66	66.02	2.25	1.51	14.92
		Fail	92,224	9.45	15.24	41.67	2.77	6.16	23.63
		Total	125,112	8.38	13.51	48.07	2.63	4.94	21.34
	White	Pass	75,549	3.99	8.39	70.76	1.98	1.26	12.12
		Fail	41,172	8.32	16.48	45.22	3.14	4.98	19.95
		Total	116,721	5.52	11.25	61.75	2.39	2.57	14.88
Disadvantage	Economic	Pass	26,631	5.44	8.19	66.76	2.23	1.66	14.45
		Fail	72,337	9.52	14.83	42.97	2.75	6.34	22.42
		Total	98,968	8.42	13.05	49.37	2.61	5.08	20.27
	English Learner	Pass	7,296	4.95	9.54	67.17	1.93	1.63	13.65
		Fail	34,087	9.37	15.65	40.41	2.47	6.42	24.89
		Total	41,383	8.59	14.57	45.13	2.37	5.58	22.91
	Disabilities	Pass	3,943	6.97	11.69	58.03	3.09	2.38	16.13
		Fail	23,917	10.82	17.83	34.13	3.80	8.81	23.10
		Total	27,860	10.27	16.96	37.51	3.70	7.90	22.12
Overall		Pass	143,422	3.96	7.57	72.24	1.86	1.16	11.92
		Fail	168,337	8.53	15.00	45.92	2.84	5.57	20.80
		Total	311,759	6.43	11.58	58.03	2.39	3.54	16.71

In a related question, students were asked how sure they were of their post-high-school plans. In general, respondents were evenly split between very sure and somewhat sure at about 43–44% each, and about 13–14% indicated they were not sure at all. Students who failed the test on their first attempt were less sure about their plans, as were EL students and exceptional needs students. Overall, students planning to go to a 4-year college were the most certain of their plans (55% very sure) and students planning to go into the military the next most certain (47% very sure). About 40% of the students planning community college, vocational-technical training, or working were very sure of their plans. These differences in certainty were consistent across all of the demographic groups.

TABLE 4.12 Responses to Survey Question 6 by ELA Test Result

Question 6: How sure are you about what you will do after high school?
A. Very sure
B. Somewhat sure
C. Not sure at all

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question		
				A	B	C
Gender	Female	Pass	100,972	48.06	43.18	8.69
		Fail	33,479	42.55	40.82	16.58
		Total	134,451	46.69	42.60	10.65
	Male	Pass	84,680	44.18	43.63	12.12
		Fail	49,528	39.93	41.20	18.81
		Total	134,208	42.61	42.74	14.59
Race	Asian	Pass	18,691	49.00	42.41	8.56
		Fail	4,811	43.21	40.47	16.28
		Total	23,502	47.81	42.01	10.14
	African American	Pass	11,264	62.55	31.68	5.68
		Fail	8,510	56.93	32.50	10.48
		Total	19,774	60.13	32.03	7.75
	Hispanic	Pass	55,796	42.58	46.46	10.92
		Fail	49,107	38.14	42.14	19.68
		Total	104,903	40.50	44.44	15.02
	White	Pass	88,361	46.34	42.83	10.75
		Fail	16,418	40.22	42.37	17.32
		Total	104,779	45.38	42.75	11.78
Disadvantage	Economic	Pass	41,907	44.04	45.57	10.34
		Fail	40,682	40.45	40.69	18.80
		Total	82,589	42.27	43.16	14.51
	English Learner	Pass	11,260	42.12	47.11	10.75
		Fail	23,160	39.18	40.45	20.33
		Total	34,420	40.14	42.63	17.20
	Disabilities	Pass	6,234	44.74	42.88	12.29
		Fail	16,694	42.15	38.66	19.12
		Total	22,928	42.85	39.81	17.27
Overall		Pass	185,781	46.29	43.39	10.25
		Fail	83,145	40.98	41.05	17.91
		Total	268,926	44.65	42.67	12.62

TABLE 4.13 Responses to Survey Question 6 by Mathematics Test Result

Question 6: How sure are you about what you will do after high school?

A. Very sure
B. Somewhat sure
C. Not sure at all

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question		
				A	B	C
Gender	Female	Pass	68,294	48.37	42.95	8.63
		Fail	86,427	42.89	43.14	13.88
		Total	154,721	45.31	43.06	11.57
	Male	Pass	75,074	43.23	42.79	13.87
		Fail	81,632	39.65	41.88	18.38
		Total	156,706	41.37	42.31	16.22
Race	Asian	Pass	19,703	47.67	42.81	9.49
		Fail	7,828	42.17	42.88	14.83
		Total	27,531	46.11	42.83	11.01
	African American	Pass	6,215	61.05	31.86	6.97
		Fail	17,570	57.57	33.22	9.13
		Total	23,785	58.48	32.86	8.56
	Hispanic	Pass	32,898	42.17	45.59	12.17
		Fail	92,178	38.62	43.37	17.95
		Total	125,076	39.55	43.95	16.43
	White	Pass	75,581	45.78	42.20	11.92
		Fail	41,185	40.33	44.17	15.36
		Total	116,766	43.86	42.90	13.13
Disadvantage	Economic	Pass	26,635	43.03	44.66	12.25
		Fail	72,308	40.72	41.85	17.35
		Total	98,943	41.34	42.61	15.98
	English Learner	Pass	7,294	42.46	44.63	12.87
		Fail	34,068	39.00	40.91	20.01
		Total	41,362	39.61	41.57	18.75
	Disabilities	Pass	3,939	42.24	42.65	14.98
		Fail	23,905	41.89	38.94	19.06
		Total	27,844	41.94	39.46	18.48
Overall		Pass	143,463	45.67	42.87	11.38
		Fail	168,309	41.31	42.52	16.07
		Total	311,772	43.32	42.68	13.91

Performance on the Test. Students were asked how well they did on this test. They were provided two options: *I did as well as I could* and *I did not do as well as I could have.* Tables 4.14 and 4.15 indicate responses on the ELA and mathematics tests, respectively. Overall approximately three quarters said they did as well as they could. Students who passed the test on their first try were more likely to report this.

TABLE 4.14 Responses to Survey Question 7 by ELA Test Result

Question 7: How well did you do on this test?

A. I did as well as I could.

B. I did not do as well as I could have.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question	
				A	B
Gender	Female	Pass	100,255	82.95	17.00
		Fail	33,080	70.56	29.36
		Total	133,335	79.87	20.07
	Male	Pass	84,089	79.12	20.82
		Fail	48,986	66.68	33.25
		Total	133,075	74.54	25.40
Race	Asian	Pass	18,590	76.42	23.55
		Fail	4,752	68.77	31.21
		Total	23,342	74.86	25.11
	African American	Pass	11,185	82.20	17.75
		Fail	8,419	70.79	29.09
		Total	19,604	77.30	22.62
	Hispanic	Pass	55,321	79.79	20.16
		Fail	48,500	68.44	31.61
		Total	103,821	74.48	25.47
	White	Pass	87,801	83.16	16.78
		Fail	16,267	66.02	33.87
		Total	104,068	80.48	19.46
Disadvantage	Economic	Pass	41,558	79.98	19.96
		Fail	40,180	70.03	29.92
		Total	81,738	75.09	24.86
	English Learner	Pass	11,190	78.00	21.96
		Fail	22,870	69.67	30.28
		Total	34,060	72.41	27.55
	Disabilities	Pass	6,182	79.94	20.01
		Fail	16,536	69.28	30.61
		Total	22,718	72.18	27.72
Overall		Pass	184,473	81.20	18.75
		Fail	82,203	68.24	31.68
		Total	266,676	77.21	22.73

TABLE 4.15 Responses to Survey Question 7 by Mathematics Test Result

Question 7: How well did you do on this test?
A. I did as well as I could.
B. I did not do as well as I could have.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question	
				A	B
Gender	Female	Pass	68,053	74.78	25.15
		Fail	85,843	64.42	35.48
		Total	153,896	69.00	30.91
	Male	Pass	74,746	76.54	23.39
		Fail	81,028	65.87	34.03
		Total	155,774	70.99	28.93
Race	Asian	Pass	19,638	77.61	22.35
		Fail	7,782	69.58	30.38
		Total	27,420	75.34	24.63
	African American	Pass	6,181	74.75	25.11
		Fail	17,417	66.50	33.35
		Total	23,598	68.66	31.19
	Hispanic	Pass	32,737	73.76	26.19
		Fail	91,522	65.52	34.39
		Total	124,259	67.69	32.23
	White	Pass	75,308	76.22	23.70
		Fail	40,935	63.03	36.83
		Total	116,243	71.58	28.33
Disadvantage	Economic	Pass	26,530	75.44	24.52
		Fail	71,772	67.22	32.70
		Total	98,302	69.44	30.49
	English Learner	Pass	7,264	78.44	21.48
		Fail	33,796	68.49	31.44
		Total	41,060	70.25	29.68
	Disabilities	Pass	3,922	73.20	26.70
		Fail	23,731	66.56	33.32
		Total	27,653	67.51	32.37
Overall		Pass	142,894	75.70	24.24
		Fail	167,120	65.12	34.78
		Total	310,014	69.99	29.92

Finally, students who said they had not done their best were asked to indicate the main reasons they did not do as well on the test as they could have, choosing from a list including: nervousness, lack of motivation, inadequate time, test topics that they were never taught, test topics they had been taught but could not remember how to answer, and "other" reasons. Tables 4.16 and 4.17 report responses from the ELA and mathematics tests, respectively. On the ELA test, the most common response was nervousness (42% overall), with one of the largest demographic differences occurring between males (37%) and females (48%). On the ELA test, disadvantaged students reported more nervousness than the overall group did. A greater proportion of exceptional needs students indicated they had encountered test topics they had never been taught (34% versus 26% overall). On the mathematics test, the most common selections were topics that had never been taught (52%) and topics that were taught but the student had forgotten (47%). A higher proportion of exceptional needs students reported encountering untaught topics (57%) than average, whereas a lower proportion of EL students (48%) did so.

TABLE 4.16 Responses to Survey Question 8 by ELA Test Result

Question 8: The main reasons I did not do as well on this test as I could have are (mark all that apply):

A. I was too nervous to do as well as I could.
B. I was not motivated to do well.
C. I did not have time to do as well as I could.
D. There are questions on this test that cover topics I was never taught.
E. There are questions on this test that cover topics I was taught, but I did not remember how to answer them.
F. There were other reasons why I did not do as well as I could have.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question					
				A	B	C	D	E	F
Gender	Female	Pass	20,694	44.74	25.44	26.18	22.36	26.39	57.35
		Fail	13,699	53.27	22.56	22.34	27.68	28.01	46.04
		Total	34,393	48.13	24.38	24.77	24.36	26.99	53.31
	Male	Pass	20,239	32.28	32.15	25.03	24.14	22.72	58.05
		Fail	21,114	41.58	29.74	26.00	30.78	26.60	48.52
		Total	41,353	37.02	30.96	25.50	27.44	24.63	53.47
Race	Asian	Pass	4,969	35.84	25.38	28.48	21.78	21.04	58.17
		Fail	1,909	39.03	22.12	28.54	33.15	25.62	47.44
		Total	6,878	36.73	24.53	28.50	24.89	22.26	55.38
	African American	Pass	2,423	42.14	28.67	26.50	22.82	24.46	55.86
		Fail	3,382	49.85	29.01	26.10	30.87	26.02	49.87
		Total	5,805	46.63	28.86	26.27	27.42	25.34	52.55
	Hispanic	Pass	13,749	44.00	23.98	28.31	22.58	27.32	52.97
		Fail	21,084	48.59	24.42	25.20	29.15	27.87	43.43
		Total	34,833	46.77	24.24	26.49	26.48	27.64	47.50
	White	Pass	17,067	34.36	33.50	22.71	24.48	23.22	61.17
		Fail	6,777	39.49	34.52	21.51	29.34	25.58	57.16
		Total	23,844	35.81	33.78	22.38	25.83	23.87	60.10
Disadvantage	Economic	Pass	10,166	43.11	23.35	30.45	25.20	27.66	54.85
		Fail	16,697	48.58	24.48	26.44	30.87	28.39	44.76
		Total	26,863	46.51	24.03	28.04	28.64	28.10	48.92
	English Learner	Pass	3,151	47.38	18.13	27.67	29.96	28.50	49.66
		Fail	9,997	50.90	21.48	24.52	31.96	28.28	40.89
		Total	13,148	50.05	20.63	25.32	31.45	28.34	43.20
	Disabilities	Pass	1,509	42.48	29.82	23.37	28.68	27.57	60.44
		Fail	7,165	49.27	27.80	25.43	34.64	29.48	49.21
		Total	8,674	48.09	28.20	25.04	33.55	29.12	51.45
Overall		Pass	40,964	38.57	28.86	25.60	23.28	24.55	57.70
		Fail	34,872	46.18	27.14	24.66	29.68	27.14	47.61
		Total	75,836	42.07	28.11	25.19	26.12	25.69	53.40

TABLE 4.17 Responses to Survey Question 8 by Mathematics Test Result

Question 8: The main reasons I did not do as well on this test as I could have are (mark all that apply):

A. I was too nervous to do as well as I could.
B. I was not motivated to do well.
C. I did not have time to do as well as I could.
D. There are questions on this test that cover topics I was never taught.
E. There are questions on this test that cover topics I was taught, but I did not remember how to answer them.
F. There were other reasons why I did not do as well as I could have.

Group	Subgroup	Test Result	Number of Students	Percent of Students Answering Each Choice of the Question					
				A	B	C	D	E	F
Gender	Female	Pass	18,003	19.52	16.71	4.32	46.81	60.76	32.55
		Fail	35,240	31.60	16.10	6.11	53.74	49.02	30.89
		Total	53,243	27.52	16.32	5.47	51.35	53.17	31.48
	Male	Pass	18,886	18.85	25.88	8.34	48.09	46.28	37.70
		Fail	33,093	30.70	23.31	12.04	54.24	38.25	34.73
		Total	51,979	26.40	24.28	10.63	51.98	41.28	35.87
Race	Asian	Pass	4,722	20.22	20.88	6.42	38.34	55.27	36.98
		Fail	2,829	29.62	18.81	10.39	51.77	49.25	32.34
		Total	7,551	23.75	20.14	7.84	43.39	53.06	35.32
	African American	Pass	1,651	18.90	20.00	6.26	47.32	52.91	34.87
		Fail	6,884	32.13	21.33	10.76	54.30	41.65	33.39
		Total	8,535	29.57	21.06	9.84	52.92	43.95	33.69
	Hispanic	Pass	9,312	23.25	18.17	7.04	47.39	54.37	33.28
		Fail	38,085	33.67	17.99	9.26	50.52	43.75	30.36
		Total	47,397	31.62	18.02	8.80	49.89	45.97	30.98
	White	Pass	18,831	16.95	23.37	5.99	49.95	52.34	35.61
		Fail	16,734	25.76	22.21	7.61	61.46	43.40	37.42
		Total	35,565	21.09	22.84	6.74	55.43	48.19	36.45
Disadvantage	Economic	Pass	7,104	34.27	17.59	7.23	48.56	55.18	35.93
		Fail	28,644	23.51	18.14	9.90	51.89	43.79	31.80
		Total	35,748	32.13	18.02	9.34	51.21	46.19	32.68
	English Learner	Pass	1,844	29.18	15.98	9.12	48.29	48.67	35.25
		Fail	13,856	39.11	17.68	10.83	48.45	41.83	29.54
		Total	15,700	37.95	17.47	10.61	48.43	42.69	30.28
	Disabilities	Pass	1,161	22.74	23.88	9.23	53.84	48.53	41.14
		Fail	10,107	36.81	21.89	13.64	57.82	36.98	36.97
		Total	11,268	35.36	22.11	13.15	57.40	38.28	37.44
Overall		Pass	36,928	19.18	21.40	6.37	47.46	53.43	35.20
		Fail	68,451	31.18	19.63	8.99	53.98	43.86	32.75
		Total	105,379	26.98	20.28	8.03	51.66	47.35	33.66

Summary

In general, student responses to the post-examination questionnaire indicated that the vast majority of students recognized the importance of the test. Many had not prepared for the test, but for 9th graders this is perhaps not surprising. Students who passed the test on this first, early try were confident that they would graduate from high school. A larger proportion of disadvantaged groups (i.e., economically disadvantaged, English learners, and exceptional needs students) were unsure of graduation. Those who did not pass the test reported, for the most part, that graduation would be harder if they have to pass a test like this. Students with exceptional needs and EL students, and to a lesser extent, economically disadvantaged students, were more inclined to see graduation as harder to achieve because of the test.

Post-high-school plans were queried to establish a baseline for this ongoing evaluation. Responses to this question will be monitored carefully in subsequent test administrations to determine whether the CAHSEE may affect expected graduation and post-high-school plans.

In terms of curricular coverage of test content, the mathematics test seemed to present more unfamiliar materials than the ELA test as indicated by reasons given for low performance. One possible mitigating factor is that Spring 2001 examinees were 9th graders and thus may not yet have encountered some math concepts; responses to this item by 10th graders in Spring 2002 will be revealing. A slightly higher proportion of exceptional needs students reported encountering untaught topics than average, whereas a lower proportion of EL students did so. Students reported more nervousness regarding the ELA test than the mathematics test. We did not ask why students were nervous, but this difference was perhaps due to the inclusion of essay questions.

CHAPTER 5: RESULTS OF THE SPRING 2001 ADMINISTRATIONS

Introduction

The legislation establishing CAHSEE called for the first operational form(s) of the exam to be administered in Spring 2001 to 9th graders in the Class of 2004. At the first administration, 9th graders could volunteer, but were not required, to take both portions of the exam. Students who did not pass the exam in that administration would be required to take the exam as 10th graders in Spring 2002.

In Fall 2000, the Superintendent set testing dates of March 7, 2001 for the English-language arts (ELA) portion of the CAHSEE and March 13 for the Math portion. Additional testing dates were set in May (May 17 for ELA and May 24 for Math) for year-round schools that were not in session during the March testing dates. Since participation was to be voluntary, no provision was made for makeup sessions for students who were absent on the designated testing dates.

At the December 2000 meeting of the State Board of Education (SBE), the Acting Secretary of Education announced that urgent legislation was being introduced in the state legislature that would change the nature of the first administration. Specifically, the March 2001 administration would be changed to a practice test, introducing 9th graders in the Class of 2004 to the nature and format of the examination, but not classifying any students as either passing or failing the exam. The first operational administration would be in Spring 2002, when all 10th graders in the Class of 2004 would be required to participate. The change was motivated by two concerns. First, it appeared that many students do not complete courses that cover the content of the exam until the 10th grade. Making the test operational for 9th graders could raise significant questions about inequity in opportunity to learn the material covered by the test.

The second reason for the change was that census testing of 10th graders in 2002 would provide important normative information. Under the original plan, no single administration would include a representative sample of students. The Spring 2001 administration would be voluntary and the Spring 2002 administration would partially or completely exclude students who had previously passed one or both parts of the exam, respectively. Before operational results could be reported, the Board had to determine the minimum score levels required for passing each of the two parts. Minimum passing scores based on performance results on previous administrations of a test are often referred to as “performance standards,” in contrast to content standards, which describe the material covered by the test. In setting performance standards, it is common for the governing body to use normative information (specifically the proportion who pass the exam) to check on the reasonableness of performance standards recommended by panels of content experts.

Following the December 2000 Board meeting, Senate Bill 84 (SB 84) was introduced to enact changes with respect to the initial administration of the CAHSEE. SB 84 was introduced in the state Senate on January 11, 2001 as an urgency measure, meaning that it would take effect immediately. Otherwise the bill would not become effective until well after the planned March administration of the test. The Senate Education Committee approved the

bill with amendments on February 1, 2001 and the full Senate passed it on February 20, 2001. In the Assembly, the bill was amended to return it to its original form, deleting the Senate amendments that included a provision to defer the requirement until the Class of 2005. On March 1, 2001, the Assembly passed the bill in its original form. Assembly amendments restored the urgency provision, which had been deleted in the Senate. As an urgency measure, the bill required approval by 60% of the members of each house. When the Senate voted on the revised (original) measure on March 1, 2001, the bill failed to receive the required 60% majority. A second vote was taken on March 5, 2001, but again the measure failed to obtain the required majority. Note that the final vote to defeat SB 84 occurred just 2 days before the administration of the ELA portion of the exam, scheduled for March 7. Fortunately, most 9th graders were already signed up to take the exam, but it is likely that many would have received more extensive preparation had it been known earlier that the exam would count. In reality, however, students in the Class of 2004 were not negatively impacted by the failure of the legislation. They now had one more chance to pass the exam, which they would not have had if SB 84 had gone through.

In this chapter we present our analyses of pupil performance on the 2001 CAHSEE, as required in the legislative mandate for the independent evaluation. Since scores have just recently been returned to schools and students, there has not yet been an opportunity to consider the effects of the CAHSEE testing on student outcomes. By the time of our February 2004 report there will be ample opportunity to analyze and report dropout and retention rates and changes in expectations for graduation and college attendance.

Student Result Data Files

The analyses reported here are based on student result data supplied by AIR, the contractor for test development and administration. AIR had made processing and reporting plans based on the assumption that the 2001 administration would be a practice test only. When this proved not to be the case, heroic efforts were launched to conduct the standard setting panels, get a decision from the State Board of Education on the final passing standards, and reprogram all of the reporting of student results to include pass/fail information and eliminate some item-specific information that had been planned. As a result of these changes, it was not possible to report scores within 6 weeks as specified in the original legislation.

When we received the final data files, we discovered two problems that had to be resolved before we could complete our analyses. Neither of these problems affected the scores returned to individual students in any way, but they did create problems for analyses we were required to perform.

The first problem concerned efforts to merge each student's results on the ELA test with their results on the Mathematics test. There is no universal student identifier that could be used to match results on the two tests. Some schools supplied a local student identifier, but coding or scanning errors in this field led to a number of unmatched cases. In other instances, the only information that could be used to match ELA and math results was the name and birth date that the students themselves coded on each of their answer sheets. We examined all of the cases where a student was recorded as having taken one test but not the other. We

needed to know how many students passed both parts of the test, thus fulfilling the CAHSEE requirement. We discovered nearly 20,000 cases where previously unmatched test results could be matched up with a reasonable degree of certainty. For statistical reporting, we could tolerate a few cases where two different students were inadvertently matched. These were more than offset by instances (about 4–5% of the remaining unmatched test results) where results for the same student were not successfully matched due to coding discrepancies in key identifiers.

The second data problem was the coding of language fluency. An error in the initial instructions for precoding student information left off the 3rd language fluency category. This category, Redesignated Fluent English Proficiency (RFEP), indicated that a student who had been an English learner was now proficient in English. While this error was soon corrected in amended instructions, some districts overlooked the amended instructions or had coded the student information before receiving the amendment. As a result of this error a significant number of English learners were assigned Code 3 and treated as if they were RFEP students. This led to an undercount of the number of English learners by about 17,000 (relative to reported results from the 2001 STAR administration a few weeks later. It also meant that the performance of redesignated students was understated, since about 17,000 English learners, who tended to perform less well, were inadvertently mixed in with the RFEP students.

AIR is working with the districts to correct language fluency codes. Since we are required to report results separately for English learners, we proceeded with a provisional correction to the data file. We used school-by-school counts from STAR to identify instances where EL students were significantly undercounted and then looked at demographic categories (most notably length of time in the district) that were related to the likelihood that a student had not yet been redesignated as proficient in English. The 16,896 students whom we changed from “redesignated” to English learners had average test scores that were very similar to those of the other English learners and were significantly different from the rest of the “redesignated” students. The average ELA scale score for the students we recoded was 334.8 compared to means of 334.4 for the students originally coded as English learners and 359.2 for RFEP students who were not recoded. Passing rates were 31.3% for the recoded students, 29.5% for students originally coded as English learners, and 61.6% for RFEP students who were not recoded. Overall, this change raised the passing rates for RFEP students from 51.8% before recoding to 61.6%, a rate close to the overall passing rate.

The data problems that we encountered lead to two suggestions for future administrations of the test. First, districts might be required to use and check individual student identifiers so that results from the answer sheets for the two tests can be matched unambiguously. The matching problem could otherwise be even more significant in 2002 since the ELA test will be divided and administered to each student over a 2-day period. The new test development contractor, ETS, plans to use a single answer sheet for all three days of testing. This will essentially eliminate matching problems, but it may lead to test security issues because procedures will be needed to ensure that students are not able to change answers on previous sections during the second and third day of testing.

The second recommendation is that a data correction cycle should be an essential part of the CAHSEE processing. Rosters of students taking the exam could be returned to schools

for checking as soon as the initial scanning of answer sheets is completed. There would be plenty of time to receive and process corrections to identifiers and key demographic fields (e.g., language fluency) while the essays are being hand-scored.

Who Passed?

Once the data file was received and corrected, we conducted a number of analyses to see who passed each of the two parts of the exam. A major charge for our evaluation is to report passing rates for specific demographic groups, including all students, economically disadvantaged students, special education students or students with disabilities (characterized as "exceptional needs students" in the legislation), and EL students. Table 5.1 shows the passing rates for each of these groups, further broken down by gender and race. We also show the (estimated) number of examinees in each group passing both parts of the exam and fulfilling the CAHSEE requirement.

TABLE 5.1 Passing Rates by Demographic Group

		Number Taking the Exam			Percent Passing		
Group	Sex	ELA	Math	Both*	ELA	Math	Both*
All Students	All	369,387	364,664	344,650	64.1	44.4	42.2
	Female	180,680	178,370	169,498	71.0	43.1	42.4
	Male	188,239	185,818	174,985	57.5	45.8	42.1
Asian	All	31,242	31,435	30,515	76.3	70.2	64.5
	Female	15,067	15,170	14,776	81.1	69.8	65.9
	Male	16,151	16238	15,726	71.8	70.7	63.1
African American	All	29,947	29,442	27,197	49.6	24.3	22.8
	Female	15,039	14,815	13,789	59.4	24.5	24.1
	Male	14,857	14582	13,392	39.7	24.2	21.5
Hispanic	All	150,369	148,176	139,036	47.9	25.2	22.8
	Female	73,719	72,593	68,455	55.1	23.3	22.4
	Male	76,525	75,468	70,536	41.0	27.0	23.3
Caucasian	All	136,108	133,874	128,004	81.5	63.6	61.4
	Female	66,620	65,602	62,975	88.0	62.3	61.8
	Male	69,414	68,203	64,996	75.4	64.8	61.1
Economically Disadvantaged	All	118,680	116,898	109,860	45.4	25.7	22.7
	Female	56,777	55,963	52,891	52.7	23.9	22.5
	Male	61,848	60,862	56,952	38.7	27.3	22.8
English learners*	All	64,962	64,746	60,489	29.9	16.6	11.9
	Female	30,470	30,352	28,488	35.5	14.4	11.3
	Male	34,442	34,334	31,981	24.9	18.6	12.3
Redesignated Fluent English Proficient*	All	33,100	32,124	31,330	61.6	40.6	37.6
	Female	16,896	16,413	16,032	67.3	38.3	36.9
	Male	16,200	15,708	15,297	55.6	43.0	38.3
Students with Disabilities	All	35,957	35,177	32,334	22.8	12.8	10.3
	Female	12,181	11,974	11,050	28.0	9.9	9.3
	Male	23,734	23,150	21,271	20.1	14.3	10.5

* Note: Results reflect statistical corrections to the counts by language fluency categories.

The percentage of students passing both of the exams shown here, 42%, is significantly higher than the 34% passing rate reported previously by AIR. Two factors account for this difference. First, the rates reported above reflect only those students who attempted *both* tests. The previous rate was a percentage of those students who attempted *either* of the tests,

a significantly larger base. Second, in matching about 20,000 additional ELA and Math results, we increased the number passing both tests. The initial files showed these students twice, once attempting only the ELA test and once attempting only the mathematics test. Consequently, none of these students were counted as passing both parts when, in fact, many of them did.

Overall, 64 percent of the students who took the ELA test in either the March or May administration passed. For Math, the passing rate was 44 percent. Most of the students who passed the mathematics test and also took the ELA test passed both parts since 42 percent of the students taking both parts passed. The combined passing rates were similar for males and females, although a noticeably higher percentage of females passed the ELA test (70 compared to 58 percent) while a slightly higher percentage of males passed the mathematics test (45 versus 41 percent). The overall passing rate was higher for Asian and White students, over 60 percent. The combined passing rate for African American and Hispanic students and also for economically disadvantaged students (those eligible for free or reduced lunches) was just over 20 percent. The combined passing rate for English learners and students with disabilities was barely over 10 percent.

We also analyzed results separately for students who had been English learners but are now redesignated as proficient in English. A total of 61.6% of the redesignated students (compared to 29.9% of the EL students) passed the ELA test. For Math, the passing rate was 40.6% compared to 16.6% for EL students. The combined passing rate was 37.6 compared to 11.9 for EL students. The implication of these differences is that the passing rates for English learners will be likely to increase dramatically if they can reach proficiency in English. Of course, other learning will also be required to bring passing rates closer to 100%.

Who Has Completed the CAHSEE Graduation Requirement?

In addition to comparisons of passing rates for various demographic groups who took the exam, another important consideration is an assessment of how many students in the Class of 2004 have completed the graduation requirement to pass both parts of the CAHSEE to date. Table 5.2 lists the total enrollments of 9th graders, and the number and percentage who have already passed both parts of the exam. Calculations of enrollment and determination of the number who passed both parts of the exam are subject to the same constraints identified above. The results reveal that 29.9% of all students in the Class of 2004 have successfully completed the CAHSEE requirement. In other words, the remaining 70.1% of the Class of 2004 must take one or both tests in the spring of 2002, some for the first time and some for the second time. Completion rates are highest among Asian students. Only 8.1% of EL students and 6.5% of SD students have completed this graduation requirement.

TABLE 5.2 CAHSEE Completion Rates by 9th Grade Enrollment

Group	Enrollment**	Number Taking Both Tests*	Percentage Taking Both*	Number Passing Both *	Percentage of 9th Graders Passing Both *
All	485,910	344,650	70.9	145,442	29.9
Female	234,911	169,498	72.2	71,867	30.6
Male	250,999	174,985	69.7	73,669	29.4
Asian	38,823	30,515	78.6	19,682	50.7
Female	18,551	14,776	79.7	9,737	52.5
Male	20,272	15,726	77.6	9,923	48.9
African Amer.	42,196	27,197	64.5	6,201	14.7
Female	20,825	13,789	66.2	3,323	16.0
Male	21,371	13,392	62.7	2,879	13.5
Hispanic	201,966	139,036	68.8	31,700	15.7
Female	97,408	68,455	70.3	15,334	15.7
Male	104,558	70,536	67.5	16,435	15.7
White	180,253	128,004	71.0	78,594	43.6
Female	87,127	62,975	72.3	38,919	44.7
Male	93,126	64,996	69.8	39,713	42.6
ED	Not available	109,860	N/A	24,938	N/A
EL**	88,488	60,489	68.4	7,170	8.1
SD	51,070	32,334	63.3	3,330	6.5

Note: ED = Economically Disadvantaged, EL = English learner, SD = Students with Disabilities.
* Based on attempts to match ELA and Math records originally shown as separate. Note that here the number passing both parts was divided by total enrolled students, not just those taking the exam, resulting in smaller percentages in comparison to those in Table 5.1
**Based on statistical corrections to the counts by language fluency categories

Multiple-Choice versus Essays

The ELA test combined multiple-choice and essay questions. One issue that was debated extensively by the HSEE Standards Panel was how well students should have to perform on each part of the ELA test in order to be considered proficient. In the end, separate passing levels were not established for each question type or for different content areas. Instead, the panel established a compensatory model, where exceptional performance in one content area or on one type of question would compensate for lower performance in other content areas or on other types of questions.

Table 5.3 below shows the number of students (from the March administration) with each possible total essay score (the sum of the scores on the two essays) and the percent of these students who received a passing score on the ELA test. A very small number of students (242) passed the ELA test without getting any credit for either of the essays. Of the 226,022 students who passed the ELA test in March, only 1,856 of them (0.8%) had essay scores lower than 3.0, (out of a possible maximum of 8 points). Students received a score of 3.0 or greater only if two of the four judges rated one or the other of their essays at score level two or higher. In fact, only 6,607 of the student who passed (2.9%) had a total essay score lower than 4.5. Thus 97.1% of the students who passed scored 4.5 or higher, meaning that at least one of their essays received a score of 2.5 or better. Although there are no explicit passing scores for each essay, 2.5 provides a reasonable lower boundary for “acceptable” essays. Less than 3% of the students who passed the ELA failed to write an essay that scored at least this high.

TABLE 5.3 Percent Passing the ELA Test by Total Essay Score

Total Essay Score	Number of Students	% of Students	Number Passing ELA	% Passing ELA
0.0	15,920	4.5%	242	1.5%
1.0	5,968	1.7%	104	1.7%
1.5	3,100	0.9%	68	2.2%
2.0	12,096	3.5%	753	6.2%
2.5	7,494	2.1%	689	9.2%
3.0	14,693	4.2%	2,369	16.1%
3.5	11,494	3.3%	2,382	20.7%
4.0	24,772	7.1%	7,763	31.3%
4.5	26,077	7.5%	12,410	47.6%
5.0	39,320	11.2%	25,497	64.8%
5.5	43,508	12.4%	34,629	79.6%
6.0	65,278	18.7%	59,761	91.5%
6.5	37,004	10.6%	36,214	97.9%
7.0	24,425	7.0%	24,357	99.7%
7.5	12,253	3.5%	12,248	100.0%
8.0	6,536	1.9%	6,536	100.0%
Total	349,938	100.0%	226,022	64.6%

Table 5.4 shows a similar breakout of passing rates for different number-correct scores on the multiple-choice questions. An overall score of 54 on the weighted composite of scores from the multiple-choice and essay sections was required for passing. The essay score translated to a maximum of 27 of the 90 possible total score points. Students had to answer at least 36 multiple-choice questions correctly to achieve a weighted score of 27 on the multiple-choice portion of the ELA test. In fact, no one passed the exam without answering at least 38 of the 82 multiple-choice questions correctly. Students who answered 71 questions correctly received at least 54 points from the multiple-choice portion and so were guaranteed a passing total score. As noted above, nearly all of these students also had high scores on the essays.

TABLE 5.4 Number and Percent of Students Passing the ELA test by Total Multiple-Choice Score

Multiple-Choice Total Score	Number of Students	% of Students	Number of Students Passing	% Passing for this MC Score
0–37	66,310	18.9%	0	0.0%
38–40	13,269	3.8%	27	0.2%
41–45	24,875	7.1%	2,424	9.7%
46–50	30,156	8.6%	16,639	55.2%
51–55	35,126	10.0%	29,323	83.5%
56–60	40,839	11.7%	38,972	96.2%
61–70	88,495	25.3%	87,769	99.2%
71–82	50,868	14.5%	50,868	100.0%
TOTAL	349,938	100.0%	226,022	64.6%

For mathematics, we examined passing rates for different course completion patterns. Information was recorded on the student answer sheets as to the grade (from 7 to 12) in which specific mathematics courses were taken. Unfortunately, there was no specific way to indicate that a given course was not taken. For 106,987 students, there were no marks for any

course in the preliminary data files. The course status of these students was set to missing. Course status was set to invalid for a few students who indicated courses taken in grades they had not reached. Otherwise, students were classified on the basis of whether they had taken or were taking Algebra 1. Students who took Algebra 1 prior to the 9th grade were further classified according to whether they were or were not currently enrolled in Geometry. Students who had not taken Algebra 1 but had taken or were enrolled in an Integrated Math course were coded separately. Table 5.5 shows the number of students and passing rates for the CAHSEE math exam for each math course status category. Not surprisingly, students who had completed Algebra 1 and were enrolled in Geometry had a very high passing rate—above 90%. Students who had not taken and were not enrolled in Algebra 1 had very low passing rates—below 20%.

TABLE 5.5 CAHSEE Math Passing Rate by Math Courses Taken

Math Course Status	Number of Students	% Passing Mathematics
Completed Algebra and Enrolled in Geometry	35,923	90.29
Completed Algebra, not Enrolled in Geometry	10,819	60.74
Completed or Enrolled in Integrated Math 1	11,283	52.81
Currently Enrolled in Algebra 1	118,097	48.77
Algebra 1 not Taken	61,537	18.23
Course Information Missing	106,987	37.80
Invalid Course Information	1,264	16.67

School Level Passing Rates

A key question is the extent of variation in passing rates by school. To the extent that relatively few students from a particular school pass the exam, there is reason to believe that somewhere along the way these students have not had the opportunity to learn either the material covered by the test or, even more likely, to learn key prerequisite skills taught at lower grades. Conversely, if most students in a school do pass the exam, there is good reason to believe that students at that school did have adequate opportunity to learn the required material. Table 5.6 and Table 5.7 below show the number of schools where very few (less than 10%) of the students tested received passing scores through the number of schools where nearly all students (at least 90%) of the students passed. The edited data files included 1,611 different schools that participated in the 2001 administration. In 350 of the schools, fewer than 10 students were tested. For these schools very low or high passing rates are not surprising. Most of the schools where larger numbers of students were tested had passing rates between 25% and 75%, consistent with the overall passing rates for the state as a whole. Schools where at least 100 students were tested and the passing rate was below 25% may deserve special attention.

TABLE 5.6 Number and Percent of Schools with Low and High Passing Rates By Number of Students Tested—ELA

ELA Passing Rate for the School	Number of Students Tested									
	1–9		10–99		100–499		500+		All Schools	
	No. of Schools	% of Schools	No. of Schools	% of Schools	No. of Schools	% of Schools	No. of Schools	% of Schools	No. of Schools	% of Schools
Very Low (< 10%)	132	38	63	13	6	1	2	1	203	13
Low (10–24%)	39	11	100	21	20	4	16	5	175	11
Moderate (25–74%)	132	38	230	49	266	59	244	72	872	54
High (75–89%)	19	5	57	12	120	27	70	21	266	17
Very High (> 89%)	28	8	22	5	37	8	8	2	95	6
Total	350	100	472	100	449	100	340	100	1611	100

Note: For schools where 500 or more students were tested, the passing rates ranged from 6.7% to 98.0%; for schools where 101 to 499 students were tested, the passing rates ranged from 0.0% to 98.4%. Column percents may not add to 100 due to rounding.

TABLE 5.7 Number and Percent of Schools with Low and High Passing Rates By Number of Students Tested —Mathematics

Mathematics Passing Rate for the School	Number of Students Tested									
	1–9		10–99		100–499		500+		All Schools	
	No. of Schools	% of Schools	No. of Schools	% of Schools	No. of Schools	% of Schools	No. of Schools	% of Schools	No. of Schools	% of Schools
Very Low (< 10%)	214	61	210	44	30	7	10	3	464	29
Low (10–24%)	44	13	85	18	54	12	67	20	250	16
Moderate (25–74%)	74	21	158	33	326	73	251	74	809	50
High (75–89%)	7	2	13	3	31	7	11	3	62	4
Very High (> 89%)	11	3	6	1	8	2	1	0	26	2
Total	350	100	472	100	449	100	340	100	1611	100

Note: For schools where 500 or more students were tested, the passing rates ranged from 2.8% to 97.7%; for schools where 101 to 499 students were tested, the passing rates ranged from 1.2% to 94.7%. Column percents may not add to 100 due to rounding.

Note that of the 340 schools where 500 or more students were tested, 18 of them (6%) had passing rates below 25% on the ELA test and 77 of them (23%) had passing rates below 25% on the Mathematics test. Schools such as these will merit particular attention if the low passing rates persist in future administrations. We plan to monitor passing rates by school in future CAHSEE administrations.

Test Score Accuracy

Another key question is how accurately students were classified as having achieved or failed to achieve the passing standard. In our Year 2 report (Wise et al., 2001), we described the statistical methodology we used to estimate classification error rates. Key results from those analyses are summarized briefly here.

If a student took two parallel (equivalent content and equally difficult) forms of a test, his or her scores on the two forms would not be exactly the same. The proportion of questions for which students know the correct answer will vary slightly across different samples of questions and further, they will have varying luck in guessing the correct answer to multiple-

choice questions for which they do not know (or cannot figure) the correct answer. Usually, a standard error of measurement is computed to summarize how much scores might vary across parallel forms.

In the present context, we are most concerned with instances where score differences across test forms would lead to the student's sometimes passing and sometimes failing the test. Note that students who are exactly at the minimum level of competency for passing are likely to pass half (with positive measurement error) and fail the other half of the time (when measurement error is negative) resulting in a classification error rate of 50%. In our analyses, we identified the point at which a student whose true achievement was below the passing standard was estimated to have at least a 10% chance of passing in any single testing session. Similarly, we identified the point at which a student whose true achievement level was above the passing point would still have a 10% chance of failing in a single testing session. The range between these two points identifies a "zone of uncertainty" where students are close enough to the passing level that the outcome of a single testing session is somewhat uncertain. To the extent that test scores are highly reliable, this zone will be very narrow and relatively few students will fall within this zone.

Tables 5.8 and 5.9 show the zones of uncertainty thus defined for the CAHSEE ELA and mathematics test forms used in the March and May 2001 administrations. These tables show the number and percentage of students at each of four levels, ranging from well below the minimum to well above the minimum. For each level, the percentage of students who might pass the test on a single administration is estimated. For the first two levels, the student's "true" achievement is below the minimum so passing the test would result in a classification error. For the two upper levels, true achievement is above the minimum so not passing would result in a classification error. For each level, the percentage of students at that level is multiplied by the percentage of classification errors to estimate the percentage of all students who would be misclassified.

Overall, the classification error rates were estimated to be 7.1% and 7.4% for the ELA test forms and 6.5% and 6.2% for the Mathematics test forms. More importantly, almost all of the errors were estimated for students near the minimum passing levels. This zone of uncertainty was relatively narrow, within 8 points on the percent correct scale or about 10 points on the reporting scale of the minimum. Fewer than 1% of all students (about 0.8%) were estimated to have classification errors outside this zone.

TABLE 5.8 Estimated Classification Error Rates for the March 2001 Forms

True Level of Achievement	Score Range: % of Total Points	Score Range: Scale Scores	%. in Range	Estimated % Passing	Total % Incorrectly Classified
English-language arts					
1. Well Below Minimum	00.0-51.8	250-336	24.6	1.4	0.3
2. Slightly Below Minimum	51.9-59.9	337-349	11.0	32.5	3.6
3. Slightly Above Minimum	60.0-66.1	350-361	11.4	76.1	2.7
4. Well Above Minimum	66.2-100	362-450	52.9	99.0	0.5
Range of Uncertainty	51.9-66.1	337-361	22.4		6.3
Outside this Range			77.6		0.8
TOTAL			100.0		**7.1**
Mathematics					
1. Well Below Minimum	00.0-47.6	250-338	43.1	1.1	0.5
2. Slightly Below Minimum	47.7-54.9	339-349	10.4	30.4	3.2
3. Slightly Above Minimum	55.0-60.7	350-359	9.8	74.9	2.5
4. Well Above Minimum	60.8-100	360-450	36.7	99.1	0.3
Range of Uncertainty	47.7-60.7	339-359	20.2		5.7
Outside this Range			79.8		0.8
TOTAL			100.0		**6.5**

TABLE 5.9 Estimated Classification Error Rates for the May 2001 Forms

True Level of Achievement	Score Range: % of Total Points	Score Range: Scale Scores	%. in Range	Estimated % Passing	Total % Incorrectly Classified
English-language arts					
1. Well Below Minimum	00.0-52.0	250-336	33.9	1.2	0.4
2. Slightly Below Minimum	52.1-59.9	337-349	12.2	30.6	3.7
3. Slightly Above Minimum	60.0-66.0	350-361	11.5	75.4	2.8
4. Well Above Minimum	66.1-100	362-450	42.4	98.9	0.5
Range of Uncertainty	52.1-66.0	338-361	23.7		6.5
Outside this Range			76.3		0.9
TOTAL			100.0		**7.4**
Mathematics					
1. Well Below Minimum	00.0-49.9	250-337	48.4	0.8	0.4
2. Slightly Below Minimum	50.0-57.4	338-349	12.1	29.0	3.5
3. Slightly Above Minimum	57.5-63.2	350-363	7.3	74.0	1.9
4. Well Above Minimum	63.3-100	364-450	32.2	98.9	0.4
Range of Uncertainty	50.0-63.2	338-363	19.4		5.4
Outside this Range			80.6		0.8
TOTAL			100.0		**6.2**

At its December 2000 meeting, the SBE approved revised test specifications that included fewer questions for each of the two exams. Both tests were shortened relative to the original specifications, from about 100 multiple-choice questions down to 80 to 82 questions.

The result was inevitably some loss in the accuracy of the test scores and in the precision with which students are classified as above or below the passing standard, because accuracy necessarily increases with test length, other things being equal. The accuracy of the ELA test is further affected by the relatively large weight given to the two essay questions in comparison to the larger number of multiple-choice questions. Nonetheless, both tests appear to be performing reasonably well. Estimated classification error rates are modest. Errors occur almost exclusively where true achievement is quite near the passing standard. The consequences of passing a modest number of students who are only slightly below the standard while requiring a modest number who are barely above the standard to retest would not appear to be serious.

Summary

Results from the 2001 CAHSEE administration are summarized above. Overall, 64% of the students taking the ELA test passed and 44% of the students taking the mathematics test passed. We estimate that 42% of the students taking both exams passed both, although there is a small amount of uncertainty about this number due to problems in matching students' ELA and mathematics results. Passing rates were considerably lower for economically disadvantaged students (22.7% overall) and particularly for English learners and students with disabilities (11.9% and 10.3% respectively passing both parts). Overall we estimate that about 30% of the Class of 2004 took and passed both parts of the CAHSEE. Only about 6% to 8% of the EL and SD students have completed the requirements as fewer of these students took the exam and fewer of those who took it passed.

Two factors were significantly related to the passing rates. For the ELA test, students who had been English learners but were reclassified as proficient in English passed the exam at relatively high rates in comparison to students classified as English learners. Again, there is a small amount of uncertainty about these estimates due to data coding problems that were being corrected by AIR and CDE. For the mathematics test, completing Algebra I was significantly related to the passing rates. We also examined the consistency between scores on the essay and multiple-choice portions of the ELA test and found that relatively few students passed who did not have moderate to high scores on both parts.

Our analyses of test score accuracy indicated that a modest number of students were too near the cutoff to classify accurately. For students significantly below or above the cutoff, classification was quite accurate. The zone of uncertainty was modest for the ELA test and much narrower for the mathematics test.

CHAPTER 6: FINDINGS AND RECOMMENDATIONS

General Findings

The main questions for our evaluation, as specified in the enabling legislation and in our contract with the California Department of Education (CDE), concern the impact of the new graduation requirement on students. Specifically, we were asked to look at changes in graduation and dropout rates and in other important student outcomes, such as college attendance rates for all students and for specified subpopulations of students. It will be at least another year, however, before we can begin to report information relevant to these outcomes. At that time students who have completed the curriculum through the 10th grade will have taken the test and received their results.

To this point, we have focused on the development of the exam and on what schools and districts are doing in anticipation of the new requirement. In our earlier reports, we expressed concern with the time line for implementing the new graduation requirement. Our concern was based on two key questions:

(1) Would the exam be ready for the students?

(2) Would students be ready for the exam?

The first question was asked with regard to the risk of problems in the assembling and printing of test forms, with the administration of the test, and with the reporting of results. Based on evaluation activities to date, we offer the following general findings:

General Finding 1: Progress in developing the exam has been noteworthy. We found no significant problems with the exams administered in March and May 2001 or with the scoring of these exams.

Given low initial passing rates, there may be a tendency to question the validity of the exam. Our analyses of data from the Spring 2001 administration, however, showed that all test questions performed as expected. The operational test forms were printed correctly and on time and delivered to districts with few difficulties. Administration of the exam presented a number of significant challenges to schools in finding times and spaces in which to schedule students to take the exam. Even though the Spring administration was not a practice test, as it appeared for awhile that it might be, it provided a good opportunity to identify logistical and administrative issues to be addressed further in future administrations. The 2002 administrations will be the first time students who have completed much of the 10th grade curriculum will take the exam. Lessons learned from the 2001 administrations should be helpful in improving the process for 2002.

General Finding 2: The process used to establish minimum passing scores was well designed and executed and the resulting passing standards appear reasonable.

There was some concern that the passing scores for the two exams could not be set until data from a census testing of 10th graders were available. With the failure of the urgency legislation (SB 84), the State Board of Education (SBE) was required to set minimum passing scores without normative information on 10th graders. Many experts disagree with the use of normative information and, where it is used, it rarely has much impact on the recommendations of the standard-setting process. CDE and American Institutes for Research (AIR) used a systematic process for identifying panels of teachers and others who were very familiar with California standards and students and were broadly representative of the state. The SBE appropriately considered the passing standards as provisional, recognizing a concern that results for students completing the 10th grade curriculum are not yet available.

General Finding 3: Administrative and reporting procedures could be strengthened in several areas in future administrations of the CAHSEE.

Schools and districts faced difficult logistical challenges in scheduling and locating the testing and in planning activities for other students who were not scheduled to take the test. Uncertainty, up to the last minute, as to whether the test would count added to planning difficulties. For the most part, administration was handled remarkably well and we are not aware of significant administration problems. Nonetheless, procedures could be improved for future administrations in a number of areas, such as decisions about appropriate accommodations for students with disabilities.

Two issues in reporting also should be more fully addressed in future administrations. Given the necessity of switching to operational reporting on short notice, there was not adequate time for a comprehensive public review of reporting plans, a situation that will be remedied in the future.

The first reporting issue is the need to communicate, in some form, the degree of error or uncertainty in the test scores as required under the *AERA/APA/NCME* standards test (AERA, APA, NCME, 1999, Standard 5.10, page 65). We assume that information on score precision will be provided in technical documentation, which we have not yet had an opportunity to review. The standards, however, require that this information be communicated to parents, students, and teachers along with the test results. Public opinion surveys now routinely report "margin of error" information. The public should be prepared for similar information in conjunction with this important test, even if only in footnotes to the score reports.

The second reporting issue is that results for English learners reported on the CDE's Web site are incorrect due to problems in coding the language fluency of many of the students who took the exam. (See Chapter 5 above for a more complete discussion.) CDE and the development contractor are working to correct this problem

Overall, the risks associated with an aggressive schedule for CAHSEE test development and administration did not result in significant errors. At present, the pool of test questions

that have been reviewed and field-tested is sufficient to support the development of test forms for the 2002 administration.

More significant attention continues to be focused on our second question, whether students will be ready for the exam. Our general finding with respect to this question is:

General Finding 4: Progress on providing all students adequate opportunity to learn the material covered by the CAHSEE has been good, but it is too soon to tell whether there will be significant problems in preparing all students in the Class of 2004 to pass the exam.

Since our earlier reports expressed concern as to whether all schools could provide the Class of 2004 adequate opportunity to master the standards tested by the CAHSEE, a number of changes have occurred:

1. Beginning with the Class of 2004, algebra will be a statewide requirement for high school graduation.

2. Survey results indicate that schools are taking the content standards seriously and have progressed in plans to provide students opportunities to learn these standards, but a substantial minority of teachers indicate that the current curriculum covers less than half of the targeted content standards.

3. Principals and teachers report that students and parents have a greater awareness of the CAHSEE than they did a year ago.

4. SBE plans are in place for adoption of K–8 textbooks aligned to the content standards and to incorporate results of standards-based tests into the Academic Performance Index (API).

5. CDE has launched a campaign for disseminating information about the CAHSEE and the content standards that it covers to districts and schools.

The fact that significant numbers of 9th graders have not yet mastered the standards covered by the CAHSEE is not surprising. Results from our Spring 2001 survey suggest that many of the standards are addressed by courses most students do not take until the 10th grade. Our analyses of passing rates suggest two important steps in preparing students to pass the exam:

1. For the mathematics tet, it is important for students to have completed an algebra course prior to taking the exam; most students who had completed algebra and were enrolled in geometry passed the exam, while most students who had not taken algebra did not. Although algebra is now required for graduation, many students in the Class of 2004 did not take it as 9th graders. Note, however, that to benefit from an algebra course students must have mastered essential pre-requisite skills.

2. For the ELA test, it is important that students achieve English language proficiency prior to taking the exam; passing rates were quite low for English learners, but much higher for students who had been redesignated as proficient in English.

By 10th grade, more students will have completed Algebra and current EL students will have had more time to attain English proficiency.

Members of the standard-setting panels were generally optimistic about schools' capacity for bringing students up to standard. Results from the 2002 administration of the CAHSEE to 10th graders will begin to tell us whether this optimism is justified.

Recommendations

Based on information available to date, as summarized in our four general findings, we offer two main recommendations at this time:

General Recommendation 1: Stay the course. The legislature and Board should continue to require students in the Class of 2004 to pass the exam, but monitor schools' progress in helping most or all of their students to master the required standards.

Notwithstanding earlier recommendations, we think it best not to alter the current schedule for implementing the CAHSEE requirements at this time. As expected, initial passing rates are low, indicating that many 9th grade students have not yet had the opportunity to learn the material covered by the CAHSEE, either because they have not taken the requisite courses, or the courses taken in earlier grades covering prerequisite skills were not yet aligned to the California content standards. Continuing with the current requirement means demanding that schools, teachers, and even parents not give up on the Class of 2004 just because their education to this point may not have been as comprehensive as we would like it to be. Most educators with whom we have spoken are optimistic regarding the potential for most students to master the required content standards given more years of instruction and targeted assistance. Schools and districts have expended considerable effort in improving the curriculum to increase coverage of the state content standards, particularly those covered by the CAHSEE. A decision to delay the requirement at this point could be seen as undercutting these efforts.

While we think the state should continue to move ahead, we continue to have concerns, as expressed in our earlier reports, as to whether all students in the Class of 2004 will have adequate opportunity to learn the material covered by the CAHSEE by the time they complete the 12th grade. A new bill (AB 1609) passed this year calls for further investigation of the extent to which schools are providing sufficient opportunity to learn the material covered by the CAHSEE. It requires an evaluation with a recommendation to the State Board by May 2003 as to whether the requirement to pass the exam should be delayed and authorizes the SBE to make such a decision by August 2003.

There is not, however, a clear consensus in either the educational or legal communities as to what constitutes adequate opportunity to learn. Many would argue that analysis of the

current curriculum alone is insufficient. The quality of instruction, as defined by teacher qualification and effectiveness, is also an issue. Further, the quality of the curriculum and instruction with which prerequisite skills were taught in earlier grades remains an issue. While we strongly support research on opportunities to learn the material covered by the CAHSEE, we are concerned that such research will not result in the conclusive evidence needed to support a decision on continuing the CAHSEE requirement for the Class of 2004.

We suggest that ***the best evidence that a school system is providing its students adequate opportunity to learn the required material is whether most students do, in fact, learn the material.*** Our evaluation will continue to monitor passing rates by school as an indicator of the extent to which students in these schools have had effective opportunities to learn the required knowledge and skills. Schools where most students pass the CAHSEE will have demonstrated their ability to provide sufficient opportunity to learn the required material. Where significant numbers of students cannot pass, issues of opportunities to learn the required material will remain. A critical factor will be whether schools with the most difficult challenges, as evidenced by low initial passing rates, will be given the guidance and resources needed to bring their students up to required levels.

Whether the requirement is ultimately deferred or not, it will be very important to give the CAHSEE time to work. The history of state assessment programs shows a lack of stability over any prolonged period of time. For students to achieve the skills embedded in California's content standards, a sustained effort over an extended period of time will be required. California should "stay the course" to allow this to happen.

Passing rates by school will provide an important indicator of whether students, in general, have adequate opportunity to learn the material on which they are tested. We continue to be particularly concerned, however, with students who face the most difficult challenges. Based on this concern, we offer a second general recommendation:

General Recommendation 2: The legislature and Board should continue to consider options for students with disabilities and for English learners.

There is significant tension between the desire to have high expectations for all students, including students with disabilities and English learners, and the need to be realistic about what some students can accomplish. Initial low passing rates for both students with disabilities and English learners suggest particular concern with the time it may take to help these students master the required standards. Options to be considered range from more liberal use of accommodations to some form of alternative diploma for students who are physically unable to develop or demonstrate the required skills or alternate means of demonstrating competency for students who are still learning English, and also to deferring implementation of the graduation requirement for these students (i.e., to a later class).

Since the 2001 administration, a great deal of attention has been focused on appropriate test accommodations for students with disabilities. CDE has developed extensive and specific instructions for testing coordinators and other school personnel on procedures for identifying appropriate accommodations for students who require them. The SBE has reviewed several versions of regulations regarding CAHSEE testing accommodations, approving revised

regulations at their November 2001 meeting. Schools are left with some discretion, although they must now request approval for accommodations not on the list of those specifically allowed. We will monitor how new procedures are followed in the 2002 administrations.

Other Specific Findings and Recommendations

Based on activities and findings from the first two years of the evaluation, we offer a number of other, more specific recommendations for improving the quality of the exam. These include:

Specific Recommendation 1: More technical oversight is needed.

Because of the rapid pace of implementation, a number of decisions have been made without technical review of the consequences. Examples are the decision to shorten the tests without public consideration of consequences for test score accuracy and the lack of independent review of plans for equating scores from the different test forms used in March and May.

In response to a prior recommendation for more technical oversight, CDE engaged independent technical expertise and is in the process of transforming its Technical Studies Group to provide specific and timely advice on psychometric issues with the CAHSEE and other state assessment programs. CDE and the SBE have engaged an additional panel of experts to address technical and coordination issues across state assessment programs. To date, however, this panel has not had time to address the range of specific technical issues requiring immediate attention.

Specific Recommendation 2: For future classes, testing should be delayed until the 10th grade.

The initial CAHSEE legislation required that the test be offered to 9th graders. Attempts to amend this legislation (SB 84 and AB 1609) to defer initial testing until the 10th grade are based on concerns that 9th graders have not all had opportunities to learn some of the material covered by the CAHSEE. Our analyses support this position. Many students do not receive instruction in important content standards until the 10th grade. For mathematics, results from the March 2001 administration showed a close link between passing rates and the mathematics courses students had completed. Results from the field tests showed that more students were able to answer the mathematics questions correctly at the end of the 10th grade in comparison to students at the beginning of the 10th grade. For ELA, teachers reported that several of the more difficult standards were most fully covered in 10th grade English courses. Substantial percentages of 9th grade examinees reported that they had never been taught some of the math concepts included in the math exam.

Specific Recommendation 3: A practice test of released CAHSEE items should be constructed and given to districts and schools to use with 9th graders to identify students at risk of failing the CAHSEE.

While it may be unfair to administer the CAHSEE to 9th graders when many have not yet completed essential courses, some means of identifying 9th grade students at risk of failing would be useful. Schools and the at-risk students themselves could then put additional efforts into mastering the required material, while freeing other students to work on more advanced skills. A practice test, with scoring instructions included, so that teachers and students can gauge how much additional effort might be needed to reach passing levels, should be developed, and should include as much diagnostic information as possible. Such a practice test should, of course, be accompanied by guidance to prevent an undesirable narrowing of instruction or inappropriate "teaching to the test." In addition, research linking the 8th and 9th grade California Standards Test used for school accountability to future CAHSEE administrations could also provide a means of identifying students who will need additional help to pass the CAHSEE. However, as noted under specific recommendation 5 below, privacy concerns create a significant barrier to conducting such research.

Specific Recommendation 4: More extensive monitoring of test administration and a system for identifying and resolving issues is needed.

Observation of the initial administration revealed some concern about describing and enforcing procedures for test session breaks so as to maintain test security. In addition, procedures for determining appropriate testing accommodations may need further clarification and reinforcement. CDE and its contractor for test administration should continue to summarize lessons learned from the 2001 CAHSEE administrations and provide improved specifications and mandatory training for test coordinators prior to the 2002 administrations. Plans to do so are now in place.

Specific Recommendation 5: The state needs a more comprehensive information system that will allow it to monitor individual student progress.

Privacy concerns currently prohibit the state from maintaining databases that include both test scores and identifying information for individual students. Third party evaluators have difficulty, or may even be prevented from, obtaining such information. In the present evaluation, for example, we cannot link student's CAHSEE scores with scores from the STAR assessment because we do not have access to STAR results for individual students. It is not clear that school and district information systems will necessarily support data requirements associated with the CAHSEE. How will information on whether students have taken and passed part or all of the CAHSEE be maintained for students who transfer between districts? Will schools and districts be able to enforce the requirement that, in 2002, all 10th graders who have not passed the CAHSEE take the exam? CDE does not have access to the information necessary to identify students who fail to test and cannot, therefore, help in monitoring this requirement.

In addition, information on cumulative passing rates for each high school class is needed to answer important policy questions, including whether to defer the initial CAHSEE requirement. The state will not have information on score gains for individual students if results cannot be linked across testing years. A mechanism for creating cumulative databases without infringing on student privacy concerns is clearly needed. Further, as suggested above, research data on the relationship between scores from other state-mandated

assessments and scores on the CAHSEE exams would provide useful information for improving assessment policies. Examples include whether scores from tests in the Golden State Exam could or should be counted in allowing students to meet the CAHSEE requirements (in lieu of taking the CAHSEE) and whether scores on the 8th, 9th, and even 10th grade standards tests are useful in identifying students at risk of failing the CAHSEE.

Specific Recommendation 6: The Superintendent, SBE, and legislature should specify in more detail how students in special circumstances will be treated by the CAHSEE requirements.

A number of students may not have the full range of opportunities to take the CAHSEE. These include students who transfer into the state in the 12th grade; students in the Class of 2003 who, through illness or other unforeseen circumstance, fail to graduate on time and will then be subjected to requirements for the Class of 2004; and English learners who may be exempted from taking the CAHSEE until late in their high school years. Such students would miss out on several opportunities to pass the CAHSEE and end up with at most 3 or 4 chances to pass the test rather than the 8 chances most students would have.

The current legislation does not specify a process for waivers and exceptions for special circumstances, as is the case with graduation examinations in many other states. Section 60856 of the Education Code does require the Superintendent and SBE to "study the appropriateness of other criteria by which high school pupils who are regarded as highly proficient but unable to pass the high school exit examination may demonstrate their competency and receive a high school diploma." The Superintendent and SBE are required to forward recommendations to the legislature for enactment. To date, much of the discussion about this provision assumes that "highly proficient" means well above the minimum criteria as evidenced, for example, by passing scores on the Golden State Exam for advanced courses. Now that initial administration of the CAHSEE has been completed, we recommend that broad consideration be given to all of the circumstances under which students with the required proficiency may not be able to pass the exam in a timely manner.

In making each of the above recommendations, we recognize the provisional nature of the data available at this time. We also commend CDE for the extensive efforts that have already been made to improve the program in response to these and earlier suggestions.

REFERENCES

American Institutes for Research. (2000, Aug. 23). *The California high school exit exam: Spring 2000 field test technical report*. Palo Alto, CA: Author.

Dorans, N.J., & Holland, P.W. (1993). DIF detection and description: Mantel-Haenszel and standardization. In P.W. Holland & H. Wainer (Eds.), *Differential item functioning*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Kolen, M. and Brennan, R. *Test equating: Methods and practices.* New York: Springer-Verlang, 1995.

Lord, F.M., & Novick, M.R. (1968) *Statistical theories of mental test scores.* Reading, MA: Addison-Wesley Publishing Company.

Mantel, N., & Haenszel, W. (1959). Statistical aspects of the analysis of data from retrospective studies of disease. *Journal of the National Cancer Institute, 22*, 719-748.

Muraki, E. (1997). A generalized partial credit model. In Wim J. van der Linden & Ronald K. Hambleton (Eds.), *Handbook of Modern Item Response Theory* (Chapter 9). New York: Springer.

Muraki, E. (1992). A generalized partial credit model: Application of an EM algorithm. *Applied Psychological Measurement (16)*, 159–176.

Sipes, D. E., Harris, C. D., Wise, L. L., & Gribben, M. A. (2001). *High school exit examination (HSEE): Fall 2000 district baseline survey report* (IR-01-01). Alexandria, VA: Human Resources Research Organization. [On-Line]. Portions Available:

van der Linden, W.J., & Hambleton, R.K. (Eds.). (1997). *Handbook of Modern Item Response Theory*. New York: Springer.

Wise, L. L., Hoffman, R. G., & Harris, C. D. (2000). *The California high school exit examination (HSEE): Evaluation plan*. Alexandria, VA: Human Resources Research Organization.

Wise, L.L., Harris, C.D., Sipes, D.E., Hoffman, R.G., & Ford, J.P. (2000a, June 30). *High school exit examination (HSEE): Year 1 evaluation report* (HumRRO Preliminary Report IR–00–27r). Alexandria, VA: Human Resources Research Organization. [On-Line]. Available:

Wise, L.L., Sipes, D.E., George, C. E., Ford, J.P., & Harris, C.D. (2001, June 29). *California high school exit examination (CAHSEE): Year 2 evaluation report* (HumRRO Interim Evaluation Report IR–01–29r). Alexandria, VA: Human Resources Research Organization. [On-Line]. Available:

Wise, L.L., Sipes, D.E., Harris, C.D., Collins, M.M., Hoffman, R.G., & Ford, J.P. (2000b, August 25). *High school exit examination (HSEE): Supplemental year 1 evaluation report* (HumRRO Supplemental Report IR–00–37). Alexandria, VA: Human Resources Research Organization. [On-Line]. Available:

APPENDIX A

Sample Parent and District Score Reports

The following sample reports were excerpted from:
http://www.cde.ca.gov/ta/tg/hs/

California High School Exit Examination

Student and Parent Report

	Your Score	Score Required to Pass
Mathematics	390	350
English-Language Arts	332	350

STUDENT NAME: EMILY BANKS
DATE OF BIRTH: 07/28/86
STUDENT ID: 0018608974
GRADE: 9
SCHOOL: 0000001 - EXAMPLE HIGH SCHOOL
DISTRICT: 00000 - EXAMPLE SCHOOL DISTRICT
COUNTY: 00 - EXAMPLE COUNTY
TEST DATES: English-Language Arts 03/07/01
Mathematics 03/13/01

MATHEMATICS

Your Total Mathematics Score: 390 - PASSED

STRANDS FOR MATHEMATICS	Number of Questions	Number Correct	Percent Correct
Probability & Statistics	12	8	67%
Number Sense	19	14	74%
Algebra & Functions	19	17	89%
Measurement & Geometry	18	14	78%
Algebra I	12	9	75%

ENGLISH-LANGUAGE ARTS

Your Total English-Language Arts Score: 332 - NOT PASSED

STRANDS FOR ENGLISH-LANGUAGE ARTS	Number of Questions	Number Correct	Percent Correct
READING			
Word Analysis	10	5	50%
Reading Comprehension	24	10	42%
Literary Responses & Analysis	24	10	42%
WRITING			
Writing Strategies	11	6	55%
Writing Conventions	13	6	46%

WRITING APPLICATIONS*	Maximum Score	Your Score
Essay 1	4.0	3.0
Essay 2	4.0	2.5

SAMPLE

* Each student essay receives two scores that range from 1 (lowest) to 4 (highest) or non-scorable (NS). The average of these two scores is listed above under the heading "Your Score." The Writing Applications score counts as 30% of your total English-Language Arts score.

A student must only retake the subject area examination (English-language arts and/or mathematics) that was not passed.

You may obtain copies of selected test questions at your school site or at the following Web site: http://www.cde.ca.gov/statetests/hsee/hsee.html

CALIFORNIA HIGH SCHOOL EXIT EXAMINATION

About Your Student and Parent Score Report

General Information

The top part of this report includes your student's scale scores and general information about your student.

The upper left section of this report contains your student's total test score for mathematics and English-language arts. Your student's test score for each subject is reported as a scale score, which ranges from approximately 250-450. A scale score of 350 is necessary to pass each subject.

The upper right section of this report contains your student's name, date of birth, student identification number (if provided by your school), school name, testing dates, and other general information.

Mathematics

The Mathematics section of the report describes how well your student performed on the mathematics portion of the test. "Your Total Mathematics Score" shows your student's mathematics scale score and whether your student passed the mathematics test.

Information also is provided for each of the five major areas (strands) tested: Probability and Statistics, Number Sense, Algebra and Functions, Measurement and Geometry, and Algebra 1. This report shows the number of questions for each strand, as well as the number and percent of questions your student answered correctly.

English-Language Arts

The English-language arts section of the report describes how well your student performed on the English-language arts portion of the test. "Your Total English-Language Arts Score" shows your student's English-language arts scale score and whether your student passed the English-language arts test.

Information is also provided for each of the six major areas (strands) tested: Word Analysis, Reading Comprehension, Literary Response & Analysis, Writing Strategies, Writing Conventions (spelling, grammar, and punctuation), and Writing Applications. For the first five strands, the report shows the number of questions for each strand, as well as the number and percent of questions your student answered correctly.

The scores for the sixth strand, Writing Applications, show how well your student wrote two essays. One essay was written in response to a reading passage, and one essay was written in response to an assigned task. Each essay is scored on a four-point scale, with 1 being the lowest score a student can receive and 4 being the highest. Students also can receive a "non-scorable" (NS) score if they do not write enough to score, write off the topic, write illegibly, or write in a language other than English. Each essay is read at least twice by professionally trained scorers.

California Content Standards

All questions on this examination address *California Content Standards for Mathematics* and *English-Language Arts*. Adopted by the State Board of Education, these standards describe what students should know and be able to do in these subject areas. The *California Standards* addressed on the California High School Exit Examination (CAHSEE) are listed in the test blueprints that are available on the CAHSEE Web site listed below. Copies of selected test questions and related answer key are also posted on the CAHSEE web site. The *California Standards*, the test questions, related answer key, and other CAHSEE information are also available at your school site.

Important Information About the Test

Your student will need to receive a passing score of at least 350 for each subject to receive a high school diploma. Students will continue to have many opportunities, beginning in spring 2002, to pass this test. Keep in mind that all other graduation requirements still must be met to graduate.

Final Note

Your student's scores are based on the results of one test. Many factors must be considered when looking at your student's academic achievement, including other test scores, grades, student's work, and teacher evaluations. You should contact your student's school for more information about your student's current academic performance, and ways you can help him or her succeed.

You may obtain copies of selected test questions and additional information about the California High School Exit Examination at your school site or on the California Department of Education Web site at:

http://www.cde.ca.gov/statetests/hsee/hsee.html

California Department of Education
Standards and Assessment Division
P.O. Box 944272
Sacramento, CA 94244-2720
Phone: (916) 657-3011
Fax: (916) 657-4964

California High School Exit Examination
District Report - Mathematics
DEMOGRAPHIC SUMMARY FOR ALL STUDENTS TESTED

DISTRICT:
00000 - EXAMPLE SCHOOL DISTRICT
COUNTY:
00 - EXAMPLE COUNTY OFFICE OF ED
TEST DATE:
3/13/01
NUMBER OF STUDENTS
TESTED **1,804**
ENROLLED **2,085**

	NUMBER TESTED	NUMBER PASSED	PERCENT PASSED	NUMBER NOT PASSED	PERCENT NOT PASSED	MEAN SCALE SCORE	STRANDS FOR MATHEMATIC Average Percent Correct				
							PROBABILITY & STATISTICS	NUMBER SENSE	ALGEBRA & FUNCTIONS	MEASUREMENT & GEOMETRY	ALGEBRA 1
ALL STUDENTS TESTED (AVERAGE)	1,804	271	15%	181	10%	375	92%	68%	53%	61%	92
GRADE											
Ninth	174	104	60%	70	40%	375	92%	68%	53%	61%	92
Tenth	125	75	60%	50	40%	375	92%	68%	53%	61%	92
Eleventh	80	48	60%	32	40%	375	92%	68%	53%	61%	92
Twelfth	73	44	60%	29	40%	375	92%	68%	53%	61%	92
Unknown	0	0	0%	0	0%	0	0%	0%	0%	0%	0
GENDER											
Female	866	520	60%	346	40%	375	92%	68%	53%	61%	92
Male	848	509	60%	339	40%	375	92%	68%	53%	61%	92
Unknown	90	54	60%	36	40%	375	92%	68%	53%	61%	92
RACE/ETHNICITY											
American Indian/Alaskan Native	18	---	---	---	---	---	---	---	---	---	---
Asian/Asian-American	433	260	60%	173	40%	375	92%	68%	53%	61%	92
Black/African-American	271	162	60%	108	40%	375	92%	68%	53%	61%	92
Filipino/Filipino-American	198	119	60%	79	40%	375	92%	68%	53%	61%	92
Hispanic/Latino	415	249	60%	166	40%	375	92%	68%	53%	61%	92
Pacific Islander	36	---	---	---	---	---	---	---	---	---	---
White	361	216	60%	144	40%	375	92%	68%	53%	61%	92
Unknown	72	43	60%	29	40%	375	92%	68%	53%	61%	92
LANGUAGE FLUENCY											
English Learner Students	144	87	60%	58	40%	375	92%	68%	53%	61%	92
Initally Fluent English Proficient (IFEP)	90	54	60%	36	40%	375	92%	68%	53%	61%	92
Redesignated Fluent English Proficient (RFEP)	180	108	60%	72	40%	375	92%	68%	53%	61%	92
English Only Students	1,299	779	60%	520	40%	375	92%	68%	53%	61%	92
Unknown	90	54	60%	36	40%	375	92%	68%	53%	61%	92
ECONOMIC STATUS											
Economically Disadvantaged Students	740	444	60%	296	40%	375	92%	68%	53%	61%	92
Non-economically Disadvantaged Students	848	509	60%	339	40%	375	92%	68%	53%	61%	92
Unknown	216	130	60%	87	40%	375	92%	68%	53%	61%	92
SPECIAL EDUCATION PROGRAM PARTICIPATION											
Students Receiving Services	9	---	---	---	---	---	---	---	---	---	---
Students Not Receiving Services	1,750	1,050	60%	700	40%	375	92%	68%	53%	61%	92
Unknown	45	27	60%	18	40%	375	92%	68%	53%	61%	92

--- To protect privacy, no results for any group with fewer than 11 students will be released.

You may obtain copies of selected test questions at your school site or at the following Web site: http://www.cde.ca.gov/statetests/hsee/hsee.html

SAMPLE

California High School Exit Examination
District Report - English-Language Arts
DEMOGRAPHIC SUMMARY FOR ALL STUDENTS TESTED

DISTRICT:
00000 - EXAMPLE SCHOOL DISTRICT
COUNTY:
00 - EXAMPLE COUNTY OFFICE OF ED
TEST DATE:
03/07/01
NUMBER OF STUDENTS
TESTED **1,804**
ENROLLED **2,085**

							READING Average Percent Correct			WRITING Average Percent Correct		WRITING APPLICATIONS* Average Score	
	NUMBER TESTED	NUMBER PASSED	PERCENT PASSED	NUMBER NOT PASSED	PERCENT NOT PASSED	MEAN SCALE SCORE	WORD ANALYSIS	READING COMPREHENSION	LITERARY RESPONSE & ANALYSIS	WRITING STRATEGIES	WRITING CONVENTIONS	ESSAY 1	ESSAY 2
ALL STUDENTS TESTED (AVERAGE)	1,804	1,082	60%	722	40%	375	90%	54%	42%	82%	38%	3.5	2.5
GRADE													
Ninth	774	464	60%	310	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Tenth	516	310	60%	206	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Eleventh	366	220	60%	146	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Twelfth	148	89	60%	59	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Unknown	0	0	0%	0	0%	0	0%	0%	0%	0%	0%	0.0	0.0
GENDER													
Female	866	520	60%	346	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Male	848	509	60%	339	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Unknown	90	54	60%	36	40%	375	90%	54%	42%	82%	38%	3.5	2.5
RACE/ETHNICITY													
American Indian/Alaskan Native	18	11	60%	7	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Asian/Asian-American	430	260	60%	172	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Black/African-American	271	162	60%	108	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Filipino/Filipino-American	198	119	60%	79	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Hispanic/Latino	415	249	60%	166	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Pacific Islander	36	22	60%	14	40%	375	90%	54%	42%	82%	38%	3.5	2.5
White	361	216	60%	144	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Unknown	72	43	60%	29	40%	375	90%	54%	42%	82%	38%	3.5	2.5
LANGUAGE FLUENCY													
English Learner Students	144	87	60%	58	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Initally Fluent English Proficient (IFEP)	90	54	60%	36	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Redesignated Fluent English Proficient (RFEP)	180	108	60%	72	40%	375	90%	54%	42%	82%	38%	3.5	2.5
English Only Students	1,299	779	60%	520	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Unknown	90	54	60%	36	40%	375	90%	54%	42%	82%	38%	3.5	2.5
ECONOMIC STATUS													
Economically Disadvantaged Students	740	444	60%	296	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Non-economically Disadvantaged Students	848	509	60%	339	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Unknown	216	130	60%	87	40%	375	90%	54%	42%	82%	38%	3.5	2.5
SPECIAL EDUCATION PROGRAM PARTICIPATION													
Students Receiving Services	9	---	---	---	---	---	---	---	---	---	---	---	---
Students Not Receiving Services	1,750	1,050	60%	700	40%	375	90%	54%	42%	82%	38%	3.5	2.5
Unknown	45	27	60%	18	40%	375	90%	54%	42%	82%	38%	3.5	2.5

* Each student essay receives two scores that range from 1 (lowest) to 4 (highest) or non-scorable (NS). The average of these two scores is listed above. The Writing Applications score counts as 30% of the total English-Language Arts score.

--- To protect privacy, no results for any group with fewer than 11 students will be released.

You may obtain copies of selected test questions at your school site or at the following Web site: http://www.cde.ca.gov/statbeats/hsee/hsee.html

SAMPLE

APPENDIX B

Principal and Teacher Surveys—Spring 2001

California High School Exit Examination Evaluation (CAHSEE)
Principal Longitudinal Sample Survey Spring 2001

Principal Name:

School Name:

DIRECTIONS: *Please provide the following information by marking in the circle of the appropriate response or by writing an appropriate response.*

About You and Your School

1. What is your highest level of education?

- ○ Bachelor's (4-year) degree
- ○ Some graduate school
- ○ Master's Degree
- ○ Doctorate Degree
- ○ Other (please specify)_____

2. What is your gender?

- ○ Female
- ○ Male

3. What is your primary ethnic background?

- ○ American Indian/Alaskan Native
- ○ Asian or Pacific Islander
- ○ Black or African American, not Hispanic origin
- ○ Caucasian, not Hispanic origin
- ○ Hispanic/Latino
- ○ Other (specify) _____

4. When you were a teacher, what was the primary subject area that you taught?

_____

5. Including the 2000-2001 school year, how many years...

...have you been a principal (or school-level administrator)?	... were you a teacher?	...have you worked in your present school?	...have you worked in public schools?
☐☐	☐☐	☐☐	☐☐
0 0	0 0	0 0	0 0
1 1	1 1	1 1	1 1
2 2	2 2	2 2	2 2
3 3	3 3	3 3	3 3
4 4	4 4	4 4	4 4
5 5	5 5	5 5	5 5
6 6	6 6	6 6	6 6
7 7	7 7	7 7	7 7
8 8	8 8	8 8	8 8
9 9	9 9	9 9	9 9

6. For the 2000-2001 school year:

How many teachers are on your staff?	What percentage of your teachers have taught at this school for 3 years or more?	What percentage of your teachers have earned advanced degrees (i.e., beyond BA/BS)?	What percentage of your teachers are certified in the subject they are teaching?
☐☐☐	☐☐☐ %	☐☐☐ %	☐☐☐ %
0 0 0	0 0 0	0 0 0	0 0 0
1 1 1	1 1 1	1 1 1	1 1 1
2 2 2	2 2 2	2 2 2	2 2 2
3 3 3	3 3 3	3 3 3	3 3 3
4 4 4	4 4 4	4 4 4	4 4 4
5 5 5	5 5 5	5 5 5	5 5 5
6 6 6	6 6 6	6 6 6	6 6 6
7 7 7	7 7 7	7 7 7	7 7 7
8 8 8	8 8 8	8 8 8	8 8 8
9 9 9	9 9 9	9 9 9	9 9 9

7. Which of the following best describes the trend in your staffing?

- ○ Increasing the proportion of teachers working out of credential
- ○ Continuing at about the same proportion of teachers working out of credential
- ○ Decreasing the proportion of teachers working out of credential

8. Have there been any major staff or faculty changes in your school over the past three years? If so, please describe.

_____

_____

_____

_____

_____

_____

9. What is your school's student-counselor ratio?

- less than 50:1
- 50 to 100:1
- 101 to 200:1
- 201 to 300:1
- greater than 300:1

10. Does your school have a test site coordinator?

- yes
- no
- Will have by _____ *date*

11. How is your school year configured?

- Semesters
- Trimesters
- Quarters
- Year-Round School
- Other (please specify)

12. How many academic class periods are in your school day?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

13. What grades are taught at your school?

- 9th, 10th, 11th, 12th
- 10th, 11th, 12th
- 7th, 8th, 9th
- Other (please specify) _____

14. How long is each academic class period (in minutes)?

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

15. If you use any block scheduling, please describe.

_____

_____

_____

_____

_____

_____

_____

16. Indicate the various specialty education programs offered by your school. (Mark all that apply; estimate percentage (%) of students who participate in each; and comment.)

- Remedial Courses
- Magnet Program
- Special Education
- Program for English Learners
- Multicultural/ Diversity-Based

			%				%				%				%				%
0	0	0		0	0	0		0	0	0		0	0	0		0	0	0	
1	1	1		1	1	1		1	1	1		1	1	1		1	1	1	
2	2	2		2	2	2		2	2	2		2	2	2		2	2	2	
3	3	3		3	3	3		3	3	3		3	3	3		3	3	3	
4	4	4		4	4	4		4	4	4		4	4	4		4	4	4	
5	5	5		5	5	5		5	5	5		5	5	5		5	5	5	
6	6	6		6	6	6		6	6	6		6	6	6		6	6	6	
7	7	7		7	7	7		7	7	7		7	7	7		7	7	7	
8	8	8		8	8	8		8	8	8		8	8	8		8	8	8	
9	9	9		9	9	9		9	9	9		9	9	9		9	9	9	

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

(continued)

16. Indicate the various specialty education programs offered by your school. (Mark all that apply; estimate percentage (%) of students who participate in each; and comment.)

Advanced Placement	International Baccalaureate	School/Community/ BusinessPartnerships	Targeted Tutoring	Other (specify) _____
%	%	%	%	%

Comments: _____

17. Consider your students, overall, and within each of the following racial/ethnic groups. Estimate your current graduation rate. Estimate the mobility rate in a typical school year.

	Seniors Overall	American Indian/ Alaskan Native	Asian or Pacific Islander	Black or African American, not Hispanic origin	Caucasian not Hispanic origin	Hispanic/ Latino	Other (specify) _____
Current graduation rate (% of entering 9th graders who graduate within 4-5 years)	%	%	%	%	%	%	%
Typical mobility rate (% of students who transfer in and/or out of your school within a school year)	%	%	%	%	%	%	%

18. Based on your own most recent school data (e.g., Senior Survey), what percentage of your seniors indicated each main activity as their choice for the year after they graduate from high school? The row percentages should total approximately 100%.

	0	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100 %
Working full time	○	○	○	○	○	○	○	○	○	○	○
Attending a vocational, technical, or business school	○	○	○	○	○	○	○	○	○	○	○
Attending a 2-year college	○	○	○	○	○	○	○	○	○	○	○
Attending a 4-year college, service academy, university	○	○	○	○	○	○	○	○	○	○	○
Serving in the regular military service	○	○	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○	○	○

○ *We do not collect this type of data.*

19. Have there been any changes in the student demographics and/or academic environment over the past three years (e.g., push for new programs - advanced or remedial, graduation or dropout rate, interest in college, school boundaries)? If so, please describe.

_____

_____

_____

_____

_____

_____

20. How would you describe the academic atmosphere of your school (e.g., rigor of the curriculum, staff's satisfaction with the curriculum, student motivation and effort, parental involvement, etc.)?

_____

_____

_____

_____

_____

_____

_____

21. How would you describe the education level of your students' parents? Estimate the overall average percent of parents in each of the following categories. The row percentages should total approximately 100%.

	0	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100 %
Less than high school graduation	○	○	○	○	○	○	○	○	○	○	○
High school diploma or GED	○	○	○	○	○	○	○	○	○	○	○
Vocational, technical, or business training	○	○	○	○	○	○	○	○	○	○	○
Associate, 2-year degree	○	○	○	○	○	○	○	○	○	○	○
College graduate (4- or 5-year degree)	○	○	○	○	○	○	○	○	○	○	○
Some graduate school or graduate degree	○	○	○	○	○	○	○	○	○	○	○
Other (specify) _____	○	○	○	○	○	○	○	○	○	○	○

About the California High School Exit Examination (CAHSEE)

22. How much do you know about the:

a. California High School Exit Examination (CAHSEE)?

- I do not know anything about the CAHSEE.
- I have only general information about the CAHSEE.
- I know what knowledge and skills are covered by the CAHSEE.
- I know the plans for administering the CAHSEE.

b. State Content Standards?

- I do not know anything about the state content standards.
- I have only general information about the content standards.
- I am very knowledgeable about the content standards.

c. CAHSEE Score Report?

- I do not know anything about the CAHSEE score report.
- I have only general information about the CAHSEE score report.
- I am very knowledgeable about information in the CAHSEE score report and how to apply it.

23. What have been your sources of information about the CAHSEE? (Mark all that apply.)

- None
- State-provided information
- District-provided information
- Newspaper
- Education organization (e.g., publication, meeting, etc.)
- Professional association (e.g., publication, meeting, etc.)
- CDE website
- Computer-based source (e.g., listserv, newsgroup, etc.)
- Other (specify) _____

_____

24. The state level provides information regarding the CAHSEE to the district level for dissemination to the schools. In general, how do you rate the CAHSEE information that you and your school received from your district?

a. Sufficiency of Information

- Less than adequate
- Adequate
- More that adequate

b. Usefulness of Information

- Not very useful
- Useful
- Very useful

c. Timeliness of Information

- Too late for our needs
- On time for our needs
- Ahead of our needs

25. a. How aware do you think students in your school are of the CAHSEE? (Mark all that apply.)

- They know nothing about the exam.
- They have only general information about the exam.
- They know what knowledge and skills are covered by the exam.
- They know the time of year when the exam is given.
- They know which students have the opportunity to take the exam.

25. b. What is your estimate of the percentage of students in your school who know what knowledge and skills are covered by the exam?

			%
0	0	0	
1	1	1	
2	2	2	
3	3	3	
4	4	4	
5	5	5	
6	6	6	
7	7	7	
8	8	8	
9	9	9	

26. a. How aware do you think parents of students in your school are of the CAHSEE? (Mark all that apply.)

- They know nothing about the exam.
- They have only general information about the exam.
- They know what knowledge and skills are covered by the exam.
- They know when the exam will be given.
- They know which students have the opportunity to take the exam.

26. b. What is your estimate of the percentage of parents of students in your school who know what knowledge and skills are covered by the exam?

			%
0	0	0	
1	1	1	
2	2	2	
3	3	3	
4	4	4	
5	5	5	
6	6	6	
7	7	7	
8	8	8	
9	9	9	

27. The relationship between your district standards for English/language arts and those described by the English-Language Arts Content Standards and the Reading/Language Arts Framework can best be described by which of the following statements? (Mark only one.)

- Our district has adopted the state content standards.
- The state content standards include more than our district content standards.
- Our district content standards include more than the state content standards.
- The two sets of content standards are different.
- I cannot judge the relationship between our district standards and the state standards.
- Our district does not have an official set of content standards

28. The relationship between your district standards for mathematics and those described by the Mathematics Content Standards and the Mathematics Framework can best be described by which of the following statements? (Mark only one.)

- Our district has adopted the state content standards.
- The state content standards include more than our district content standards.
- Our district content standards include more than the state content standards.
- The two sets of content standards are different.
- I cannot judge the relationship between our district standards and the state standards.
- Our district does not have an official set of content standards.

29. Consider the full set of state content standards and mark ALL that apply.

- Our district encourages use of the content standards to organize instruction.
- Our current textbooks align well with the content standards.
- We can cover all of the content standards with a mix of textbooks and supplemental material.
- Our district is in the process of aligning its curriculum to the state standards.
- Our district is in the process of aligning its curriculum across grade levels.
- Our district has a plan, which ensures that all high school students receive instruction in each of the content standards.
- Our district has a plan that ensures that all pre-high school students are prepared to receive instruction in each of the content standards.
- Our district has adopted algebra as a graduation requirement.
- Our district (or school) is hiring only teachers certified in their field.
- Our district (or school) is assigning teachers only in their certified fields.

30. What activities did your school undertake to prepare faculty/staff for the spring 2001 administration of the CAHSEE? (Mark all that apply.)

- No special preparation.
- Administrators participated in February test administration workshops.
- Delivered local workshops on test administration.
- Delivered local workshops on CAHSEE content (e.g., used Teacher Guides as a focal point for discussion).
- Provided test taking strategies.
- Other (please specify) _____

_____

31. What activities did your school undertake to prepare students for the spring 2001 administration of the CAHSEE? (Mark all that apply.)

For those activities you marked in the 1st column, mark the three (3) that you consider most important in your CAHSEE preparation.

For those activities you marked in the 1st column, what percentage of your students do you estimate are affected by each?

		0%	1-20 %	21-40 %	41-60 %	61-80 %	81-100 %
No special preparation							
Encourage students to work hard and prepare							
Provide individual/group tutoring							
Teach test-taking skills							
Modify curriculum							
Increase summer school offerings							
Add homework							
Eliminate electives in favor of remedial classes							
Use school test results to change instruction							
Use school test results to design remedial instruction							
Adopt state content standards							
Change graduation requirements to include courses that enhance student success on the CAHSEE							
Other (specify) _____							

32. During this school year (2000-2001), how much time, in total, do you estimate you have spent in activities specifically related to the CAHSEE (e.g., meetings, discussions, curriculum review, your professional development, your staff's development, etc.)?

- None
- Less than 6 hours
- 6-15 hours
- 16-35 hours
- More than 35 hours

33. Based on your knowledge of your faculty, what percentage of your teachers do you think understand the difference between *teaching to the test* and *aligning curriculum and instruction to the standards*?

- Fewer than 50%
- 50–74%
- 75–95%
- Greater than 95%
- Unsure

34. What plans has your school made to prepare for assisting high school students — who do not pass the exit exam or who do not seem prepared to take it? (Mark all that apply.)

	Who do not pass the CAHSEE?	Who do not seem prepared to take the CAHSEE?
No special plans		
Increase high school remedial courses		
Reduce high school electives in favor of remedial classes		
Increase high school summer school offerings		
Provide individual/group tutoring		
Add homework		
Adopt state content standards		
Alter high school curriculum		
Work with feeder middle schools		
Develop parent support program		
Use school test results to change high school instruction		
Evaluate high school students' abilities and place them in courses/programs accordingly		
Ensure that students are taking demanding courses from the beginning		
Ensure we are offering demanding courses from the beginning		
Other (specify) _____		

35. Based on your knowledge of the English-Language Arts standards assessed by the CAHSEE, what percentage of your students do you think will meet these standards by the end of 10th grade?

- ◯ Fewer than 50%
- ◯ 50-74%
- ◯ 75-95%
- ◯ Greater than 95%
- ◯ Unsure

36. Based on your knowledge of the mathematics standards assessed by the CAHSEE, what percentage of your students do you think will meet these standards by the end of 10th grade?

- ◯ Fewer than 50%
- ◯ 50-74%
- ◯ 75-95%
- ◯ Greater than 95%
- ◯ Unsure

37. Based on what you know about your school, what do you predict the impact of the CAHSEE, will be on...

	Strongly Negative	Negative	No Effect	Positive	Strongly Positive
a....student motivation prior to taking the exam for the first time?	◯	◯	◯	◯	◯
b....motivation to excel for students who pass the first time?	◯	◯	◯	◯	◯
c.... motivation to excel for students who fail the first time?	◯	◯	◯	◯	◯
d....parental involvement prior to the first required administration of the exam?	◯	◯	◯	◯	◯
e....parental involvement for students who pass the exam?	◯	◯	◯	◯	◯
f....parental involvement for students who fail the exam?	◯	◯	◯	◯	◯
g....student retention rates?	◯	◯	◯	◯	◯
h....student dropout rates?	◯	◯	◯	◯	◯

38. Based on what you know about your school, what do you predict the influence of the CAHSEE will be on classroom instructional practices...

	Considerably Improved	Improved	No Effect	Weakened	Considerably Weakened
a....next year (2001-2002)?	◯	◯	◯	◯	◯
b....in 3 years (2003-2004)?	◯	◯	◯	◯	◯
c....in 5 years (2005-2006)?	◯	◯	◯	◯	◯

39. What percentage of your school's 10th grade students in each of the following groups would you say have had instruction that covers the English-Language Arts content standards for the exam?

	Fewer Than 50%	50-74%	75-95%	Greater Than 95%
a....all your school's 10th grade students	◯	◯	◯	◯
b....10th grade students with disabilities	◯	◯	◯	◯
c....10th grade English learners	◯	◯	◯	◯
d....10th grade economically disadvantaged students	◯	◯	◯	◯
e....10th grade minority student	◯	◯	◯	◯

40. Which of the following do you consider to be a factor in your students' success in meeting the requirements of the CAHSEE? (Mark one response for each possible factor.)

	Not a Factor	Possibly a Factor	Definitely a Factor
a. Lack of preparation needed to pass	◯	◯	◯
b. Lack of motivation	◯	◯	◯
c. Poor attendance	◯	◯	◯
d. Too many tests to prepare for	◯	◯	◯
e. Language barriers	◯	◯	◯
f. Our district's current level of standards in English or writing	◯	◯	◯
g. Our district's current level of standards in math or algebra	◯	◯	◯
h. Other (specify) _____	◯	◯	◯

41. What percentage of your school's 10th grade students in each of the following groups would you say have had instruction that covers the mathematics content standards for the CAHSEE?

	Fewer Than 50%	50-74%	75-95%	Greater Than 95%
a....all your school's 10th grade students	○	○	○	○
b....10th grade students with disabilities	○	○	○	○
c....10th grade English learners	○	○	○	○
d....10th grade economically disadvantaged students	○	○	○	○
e....10th grade minority students	○	○	○	○

42. Which of the following has your school implemented to promote learning for all students? (Mark one response for each.)

	No Plan to Implement	Plan to Implement	Partially Implemented	Fully Implemented
a. School, teacher, and student access to appropriate instructional materials	○	○	○	○
b. Encourage all students to take Algebra 1	○	○	○	○
c. Individual student assistance	○	○	○	○
d. Teacher and school support services	○	○	○	○
e. Student and parent support services	○	○	○	○
f. Teacher access to inservice training on content standards	○	○	○	○
g. Teacher access to inservice training on instructional techniques	○	○	○	○
h. Administrator and teacher access to inservice training for working with diverse student populations and different learning styles	○	○	○	○

43. What plans or strategies do you and your faculty/staff have to prepare for Individual Education Program (IEP) or 504 Plan changes that will address participation of a student with a disability in the CAHSEE? At what stage are you in implementing these?

_____

_____

_____

_____

_____

_____

44. What plans or strategies do you and your faculty/staff have to help English Learners (EL) overcome language barriers so they can succeed in meeting the requirements of the CAHSEE? At what stage are you in implementing these?

_____

_____

_____

_____

_____

_____

45. Please describe any specific challenges you feel your school and students face in successfully meeting the requirements of the CAHSEE.

46. Please describe any specific benefits for your school and students that you feel are associated with the requirements of the CAHSEE.

47. Please write any comments about other factors specific to your school that are influencing preparation for or performance on the CAHSEE (e.g., community conditions, economic changes, parental views, etc.)

Thank you for your cooperation.

California High School Exit Examination Evaluation (CAHSEE)
Teacher Longitudinal Sample Survey Spring 2001

Teacher Name:

School Name:

SECTION 1 DIRECTIONS:

Please provide the following information by marking in the circle of the appropriate response or by writing an appropriate response. All teachers should complete Section 1 (pages 1-4). Section 2 or 3, depending on primary subject area, may be completed by the individual teachers or by a group of the appropriate subject area teachers.

1. What is your highest level of education?

- ◯ Bachelor's (4-year) degree
- ◯ Some graduate school
- ◯ Master's Degree
- ◯ Doctorate Degree
- ◯ Other (specify) _____

2. What is the primary subject area you teach?

- ◯ English-Language Arts (E-LA)
- ◯ Mathematics (Math)

3. Are you certified in your primary subject area?

- ◯ Yes
- ◯ No (specify other area)

_____

_____

4. What is your primary ethnic background?

- ◯ American Indian/Alaskan Native
- ◯ Asian or Pacific Islander
- ◯ Black or African American, not Hispanic origin
- ◯ Caucasian, not Hispanic origin
- ◯ Hispanic/Latino
- ◯ Other (specify) _____

5. What is your gender?

- ◯ Female
- ◯ Male

6. Including the 2000-2001 school year, how many years have you...

....been a teacher? _____

....been a teacher in your primary subject area? _____

....taught in your present school? _____

About You and Your Classes

For the purposes of this survey, please think of your typical classes and answer the following set of questions with an emphasis on your 9th and 10th grade students.

7. What grade level do you teach? (Mark all that apply.)

- ◯ 9th
- ◯ 10th
- ◯ 11th
- ◯ 12th

8. What is your average enrollment per class period this year? _____

9. What is the average percentage of the students in your classes who speak English fluently?

- ◯ 100%
- ◯ 90% - 99%
- ◯ 75% - 89%
- ◯ 50% - 74%
- ◯ Less than 50%

10. Think about the level of preparation that students in your classes have in your subject area -- math or English-Language Arts (E-LA) -- for proficiency on the CAHSEE.

If you are a **mathematics teacher**, estimate the overall average percentage of students in each of the following categories:

Excellent math preparation _____

Good math preparation _____

Fair math preparation _____

Poor math preparation _____

Total = 100%

If you are an **English-Language Arts teacher**, estimate the overall average percentage of students in each of the following categories:

Excellent E-LA preparation _____

Good E-LA preparation _____

Fair E-LA preparation _____

Poor E-LA preparation _____

Total = 100%

11. On average, how much time do you believe students in your classes spend each week on your assignments outside of the classroom?

- ◯ None
- ◯ Less than 1 hour
- ◯ 1 - 3 hours
- ◯ More than 3 hours

12. In general, how often do you plan for students in your classes to: ...? (Please mark the appropriate circle for each of the following.)

	Almost Every Day	Once or Twice a Week	Once or Twice a Month	Once a Grading Period	Never or Hardly Ever
a. Do work from their textbooks	○	○	○	○	○
b. Do work from supplemental materials	○	○	○	○	○
c. Work with hands-on materials, physical models or manipulatives	○	○	○	○	○
d. Work in pairs or small groups	○	○	○	○	○
e. Take quizzes or tests	○	○	○	○	○
f. Be asked to apply subject area knowledge to real-world situations	○	○	○	○	○
g. Write a few sentences about a topic or its consequences (or math problem or its solution)	○	○	○	○	○
h. Write reports or complete projects	○	○	○	○	○
i. Conduct research on issues or ideas	○	○	○	○	○
j. Present their work to the class	○	○	○	○	○

13. During the current school year (2000-2001), how much time, in total, did you spend in professional development workshops, inservice, or seminars in your primary subject area. Include attendance at district-sponsored training and external training.

- ○ None
- ○ Less than 6 hours
- ○ 6 - 15 hours
- ○ 16 -35 hours
- ○ More than 35 hours

About the California High School Exit Examination

14. How much do you know about the:

a. California High School Exit Examination (CAHSEE)?

- ○ I do not know anything about the CAHSEE.
- ○ I have only general information about the CAHSEE.
- ○ I know what knowledge and skills are covered by the CAHSEE.
- ○ I know the plans for administering the CAHSEE.

b. State Content Standards?

- ○ I do not know anything about the state content standards.
- ○ I have only general information about the content standards.
- ○ I know essential information about the content standards.
- ○ I am very knowledgeable about the content standards.

c. CAHSEE Score Report?

- ○ I do not know anything about the CAHSEE score report.
- ○ I have only general information about the CAHSEE score report and how to apply it.
- ○ I know enough about information in the CAHSEE score report to use it for planning to change instruction.
- ○ I am very knowledgeable about information in the CAHSEE score report and how to use it to change instruction.

15. What have been your sources of information about the CAHSEE? (Mark all that apply.)

- ○ None
- ○ School-provided information
- ○ State-provided information
- ○ District-provided information
- ○ Newspaper
- ○ Education organization (e.g., publication, meeting, etc.)
- ○ Professional association (e.g., publication, meeting, etc.)
- ○ Computer-based source (e.g., listserv, newsgroup, etc.)
- ○ Other (specify) _____

_____

16. Based on what you know about your feeder schools, how well prepared do you feel the students will be to pass the High School Exit Examination...

	Very Well Prepared	Well Prepared	Prepared	Not Well Prepared	Not At All Prepared
a....when they are in 9th grade?	◯	◯	◯	◯	◯
b....when they are in 10th grade?	◯	◯	◯	◯	◯

17. a. During this school year (2000-2001), how much time, in total, do you estimate you have spent in activities related to the CAHSEE (e.g., faculty and department meetings, discussions, staff development, etc.)?

- ◯ None
- ◯ Less than 6 hours
- ◯ 6-15 hours
- ◯ 16-35 hours
- ◯ More than 35 hours

b. How would you rate the quality of the professional development related to the California High School Exit Examination you have received this year...

	Excellent	Good	Fair	Poor
From local sources?	◯	◯	◯	◯
From state sources?	◯	◯	◯	◯

18. a. During this school year (2000-2001), how much time, in total, do you estimate you have spent on classroom instruction preparation activities related to the CAHSEE (e.g., department planning, lesson plan review, etc)?

- ◯ None
- ◯ Less than 6 hours
- ◯ 6-15 hours
- ◯ 16-35 hours
- ◯ More than 35 hours

b. How much classroom instruction time do you estimate you spent on activities that you <u>would not have</u> if it weren't for the CAHSEE (e.g., unit or course review, etc.)?

- ◯ None
- ◯ Less than 6 hours
- ◯ 6–15 hours
- ◯ 16–35 hours
- ◯ More than 35 hours

19. What activities did you personally undertake to prepare your students for the spring 2001 administrations of the CAHSEE? (Mark all that apply.)	For those activities you marked in the 1st column, mark the **three** (3) that you consider **most important** in CAHSEE preparation for your students.	For those activities you marked in the 1st column, mark the **three** (3) that you consider **least important** in CAHSEE preparation for your students.
○ No special preparation	○	○
○ Encourage students to work hard and prepare	○	○
○ Encourage students (and through their parents) to take demanding courses	○	○
○ Provide individual/group tutoring	○	○
○ Teach test-taking skills	○	○
○ Increase classroom attention to content standards covered by the CAHSEE in the weeks preceding the CAHSEE	○	○
○ Work with feeder school teachers	○	○
○ Modify my instruction	○	○
○ Talk with my students	○	○
○ Add homework	○	○
○ Administer "early warning" tests	○	○
○ Use class test results to change instruction	○	○
○ Use class test results to design remedial instruction	○	○
○ Encourage summer school attendance	○	○
○ Suggest remedial classes rather than electives	○	○
○ Talk or work with parents	○	○
○ Other (specify)	○	○

20. Please describe any specific changes you made in the 2000-2001 school year to your classroom instructional practices based on influences you anticipate from the CAHSEE.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

21. Please describe any specific changes you plan to make in the future to your classroom instructional practices based on influences you anticipate from the CAHSEE.

22. Based on what you know about your school, what do you predict the impact of the CAHSEE, will be on...

	Strongly Positive	Positive	No Effect	Negative	Strongly Negative
a....student motivation prior to taking the exam for the first time?					
b....motivation to excel for students who pass the first time?					
c.... motivation to excel for students who fail the first time?					
d....parental involvement prior to the first required administration of the exam?					
e....parental involvement for students who pass the exam?					
f....parental involvement for students who fail the exam?					
g....student retention rates?					
h....student dropout rates?					

23. Based on what you know about your school, what do you predict the influence of the CAHSEE will be on instructional practices...

	Considerably Improved	Improved	No Effect	Weakened	Considerably Weakened
a....next year (2001-2002)?					
b....in 3 years (2003-2004)?					
c....in 5 years (2005-2006)?					

24. Please describe any specific challenges you feel your school and students face in successfully meeting the requirements of the CAHSEE.

25. Please describe any specific benefits for your school and students that you feel are associated with the requirements of the CAHSEE.

26. Please write any comments about other factors specific to you, your classes, or your school that are influencing preparation for or performance on the CAHSEE (e.g., community conditions, economic changes, parental views, etc.)

Please complete **Section 2 if** you are an **English-Language Arts teacher**.

Please complete **Section 3 if** you are a **Mathematics teacher**. (starting on p.12)

SECTION 2: ***About English-Language Arts(E-LA) and State Content Standards***

DIRECTIONS: *Section 2 concerns the ways in which students are prepared to pass the English-Language Arts of the CAHSEE.* ***Mathematics teachers should skip to Section 3.***

2-1 Indicate respondent for this section of the survey.

- ◯ Individual—English-Language Arts Teacher
- ◯ Group—English-Language Arts Department Members (How many? _____)
- ◯ Other (specify) _____

2-2 Based on your knowledge of the CAHSEE, at what level does your school's current curriculum cover the English-Language Arts standards tested by the CAHSEE?

- ◯ Less than 1/4
- ◯ 1/4 - 1/2
- ◯ About 3/4
- ◯ Almost all
- ◯ No knowledge of CAHSEE English-Language Arts standards

2-3 What plans does your district or school have to increase coverage of the English-Language Arts content standards assessed by the CAHSEE? (Mark all that apply.)

- ◯ Committee initiative to recommend modifying curriculum
- ◯ Inservice training to modify instructional practices
- ◯ Recommend changing graduation requirements to include English-Language Arts courses that enhance student success on the CAHSEE
- ◯ None- English-Language Arts content standards already fully covered
- ◯ Other (specify) _____

2-4 Based on your knowledge of the English-Language Arts standards assessed by the CAHSEE, what percentage of your current 9th grade students do you think will meet these standards by the end of 10th grade?

- ◯ Fewer than 50%
- ◯ 50-74%
- ◯ 75-95%
- ◯ Greater than 95%
- ◯ Unsure

2-5 In developing the CAHSEE, several questions were tried out for each of the content standards. The standards below are ones where student performance was particularly low in the tryouts. We would like to know in which courses, if any, these standards are taught. For each standard, please complete the following steps:

1 Decide whether it is taught in one or more of the courses offered in your district. If it is not, mark "Not Taught in Any Courses" and move to the next standard.

2 If it is taught, identify up to three courses from the list below where the standard is taught. For each course, mark the letter, A through K, which corresponds to the course title from the list. There also is space to add the title of an additional course where the standard is taught.

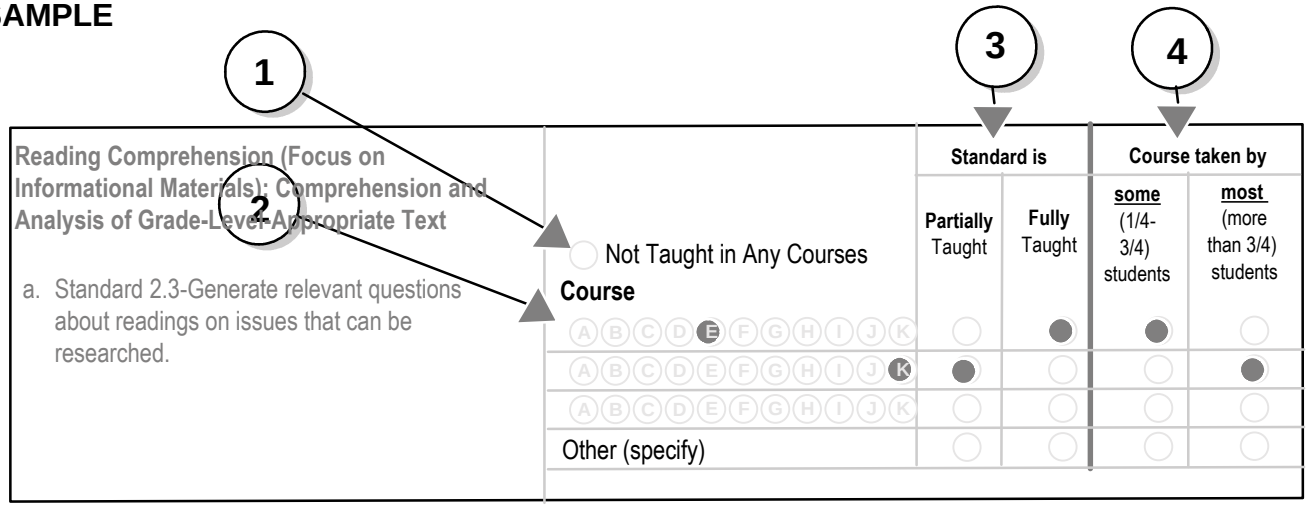
3 In the first two columns, mark one choice to indicate he standard is **partially** or **fully** taught in this course.

4 In the last two columns, mark whether the course is only taken by **some students** (1/4 to 3/4) or is taken by **most students** (more than 3/4). *If fewer than 1/4 of your students take this course, do not mark either of these bubbles.*

List of Selected English-Language Arts Courses

A Comprehensive English-Grade 7	G World/Other Literature
B Comprehensive English-Grade 8	H Composition
C Comprehensive English-Grade 9	I Language Structure/Language Arts
D Comprehensive English-Grade 10	J English as a Second Language
E American Literature	K Developmental Reading
F English Literature	

SAMPLE



		Standard is		Course taken by	
		Partially Taught	Fully Taught	some (1/4-3/4) students	most (more than 3/4) students
Reading Comprehension (Focus on Informational Materials)	○ Not Taught in Any Courses				
a. Standard 2.3-Generate relevant questions about readings on issues that can be researched.	**Course**				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
b. Standard 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).	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
Literary Response and Analysis					
c. Standard 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).	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
d. Standard 3.7-Recognize and understand the significance of various literary devices, including figurative language, imagery, allegory, and symbolism, and explain their appeal.	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
e. Standard 3.8-Interpret and evaluate the impact of ambiguities, subtleties, contradictions, ironies, and incongruities in a text.	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
f. Standard 3.12-Analyze the way in which a work of literature is related to the themes and issues of its historical period. (Historical approach)	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○

		Standard is		Course taken by	
		Partially Taught	**Fully** Taught	**some** (1/4-3/4) students	**most** (more than 3/4) students
Writing Strategies					
g. Standard 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.	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
h. Standard 1.2-Use precise language, action verbs, sensory details, appropriate modifiers, and the active rather than the passive voice.	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
i. Standard 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).	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
Written and Oral English Language Conventions					
j. Standard 1.2-Understand sentence construction (e.g., parallel structure, subordination, proper placement of modifiers) and proper English usage (e.g., consistency of verb tenses).	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
k. Standard 1.3-Demonstrate an understanding of proper English usage and control of grammar, paragraph and sentence structure, diction, and syntax.	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○
Writing Applications (Genres and Their Characteristics) l. Standard 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.	○ Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	A B C D E F G H I J K	○	○	○	○
	Other (specify)	○	○	○	○

Writing Applications (Genres and Their Characteristics) - continued

m. Standard 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.
d. Follow a conventional style with page formats, fonts, and spacing that contribute to the document's readability and impact.

Not Taught in Any Courses **Course**	**Standard is**		**Course taken by**	
	Partially Taught	**Fully** Taught	**some** (1/4-3/4) students	**most** (more than 3/4) students
A B C D E F G H I J K				
A B C D E F G H I J K				
A B C D E F G H I J K				
Other (specify)				

2-6 Please write any comments, specific to your district, schools, and students, about the English-Language Arts content standards, the CAHSEE, and opportunities for students to learn the content addressed by the standards.

Thank you for your cooperation.

SECTION 3: ***About Mathematics and State Content Standards***

DIRECTIONS: *Section 3 concerns the ways in which students are prepared to pass the mathematics standards tested by the CAHSEE.* ***English-Language Arts teachers should skip this section.***

3-1 Indicate respondent for this section of the survey.

- ◯ Individual—Mathematics Teacher
- ◯ Group—Mathematics Department Members (How many? _____)
- ◯ Other (specify) _____

3-2 Based on your knowledge of the CAHSEE, at what level does your school's current curriculum cover the mathematics standards tested by the CAHSEE?

- ◯ Less than 1/4
- ◯ 1/4 - 1/2
- ◯ About 3/4
- ◯ Almost all
- ◯ No knowledge of CAHSEE mathematics standards

3-3. What plans does your district or school have to increase coverage of the mathematics content standards assessed by the CAHSEE? (Mark all that apply.)

- ◯ Committee initiative to recommend modifying curriculum
- ◯ Inservice training to modify instructional practices
- ◯ Recommend changing graduation requirements to include mathematics courses that enhance student success on the CAHSEE
- ◯ None - Mathematics content standards already fully covered
- ◯ Hire more algebra teachers
- ◯ Other (specify) _____

3-4. Based on your knowledge of the mathematics standards assessed by the CAHSEE, what percentage of your current 9th grade students do you think will meet these standards by the end of 10th grade?

- ◯ Fewer than 50%
- ◯ 50-74%
- ◯ 75-95%
- ◯ Greater than 95%
- ◯ Unsure

3-5 In developing the CAHSEE, several questions were tried out for each of the content standards. The standards below are ones where student performance was particularly low in the tryouts. We would like to know in which courses, if any, these standards are taught. For each standard, please complete the following steps:

1 Decide whether it is taught in one or more of the courses offered in your district. If it is not, mark "Not Taught in Any Courses" and move to the next standard.

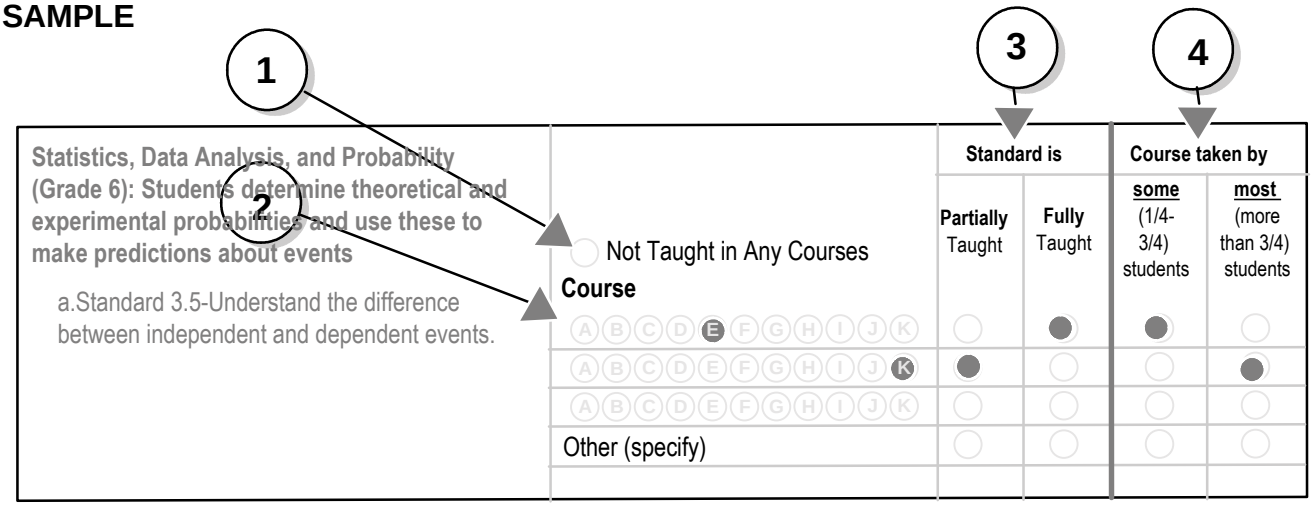
2 If it is taught, identify up to three courses from the list below where the standard is taught. For each course, mark the letter, A through K, which corresponds to the course title from the list. There also is space to add the title of an additional course where the standard is taught.

3 In the first two columns, mark one choice to indicate whether the standard is **partially** or **fully** taught in this course.

4 In the last two columns, mark whether the course is only taken by **some students** (1/4 to 3/4) or is taken by **most students** (more than 3/4). *If fewer than 1/4 of your students take the course, do not mark either of these bubbles.*

List of Selected Mathematics Courses	
A General Math	G (Plane) Geometry
B Math A	H Integrated Math I
C Math B	I Integrated Math II
D Pre-Algebra	J Consumer Math
E Beginning Algebra	K Remedial Math
F Intermediate Algebra	

SAMPLE



		Standard is		Course taken by	
		Partially Taught	Fully Taught	some (1/4-3/4) students	most (more than 3/4) students
Statistics, Data Analysis, and Probability (Grade 6): Students determine theoretical and experimental probabilities and use these to make predictions about events					
a. Standard 3.5-Understand the difference between independent and dependent events.	Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	Other (specify)				
Algebra and Functions (Grade 7): Students graph and interpret linear and some nonlinear functions					
b. Standard 3.1-Graph functions of the form $y=n^2$ and $y=n^3$ and use in solving problems.	Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	Other (specify)				
c. Standard 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 [ratio of the] quantities.	Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	Other (specify)				
Measurement and Geometry (Grade 7): 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					
d. Standard 3.2-Understand and use coordinate graphs to plot simple figures, determine lengths and areas related to them, and determine their images under translations and reflections.	Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	Other (specify)				
Algebra 1					
e. Standard 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.	Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	Other (specify)				
f. Standard 10.0-Students add, subtract, multiply, and divide monomials and polynomials. Students solve multi-step problems, including word problems, by using these techniques.	Not Taught in Any Courses				
	Course				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	A B C D E F G H I J K				
	Other (specify)				

Algebra 1 - continued

g. Standard 15.0-Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems.

○ Not Taught in Any Courses

Course	Standard is: Partially Taught	Standard is: Fully Taught	Course taken by: some (1/4-3/4) students	Course taken by: most (more than 3/4) students
A B C D E F G H I J K	○	○	○	○
A B C D E F G H I J K	○	○	○	○
A B C D E F G H I J K	○	○	○	○
Other (specify)	○	○	○	○

3-6. Please write any comments, specific to your district, schools, and students, about the mathematics content standards, the CAHSEE, and opportunities for students to learn the content addressed by the standards.

Thank you for your cooperation.

APPENDIX C

CAHSEE School Site Testing Coordinator Survey—Spring 2001

School Name:

California High School Exit Examination Evaluation
CAHSEE School Site Testing Coordinator Survey
Spring 2001 9th Grade Administration

DIRECTIONS: *This survey should be completed by the person primarily responsible for CAHSEE test coordination at your school. Please provide the following information by marking in the circle of the appropriate response or by writing an appropriate response.*

1. What is your position?

- ◯ Principal
- ◯ Assistant Principal
- ◯ Test Coordinator
- ◯ Counselor
- ◯ Teacher
- ◯ Other (please specify) _____

2. Which part(s) of the CAHSEE did you coordinate?

- ◯ E-LA only
- ◯ Math only
- ◯ E-LA and Math

3. Where did you get information on how to administer the CAHSEE? (Mark all that apply.)

- ◯ CDE workshop
- ◯ Directions for school site testing coordinator
- ◯ Directions for test administrator
- ◯ District workshop
- ◯ Other (please specify) _____

4. Was any of the information you received confusing?

- ◯ No
- ◯ Yes (please describe)

_____

5. Do you think that any of the information you received is unrealistic?

- ◯ No
- ◯ Yes (please describe)

_____

6. Did you face any problems that were not covered in the information you received?

- ◯ No
- ◯ Yes (please describe)

_____

7. What did you do to prepare proctors and monitors? (Mark all that apply.)

- ○ No preparation
- ○ Conducted workshop
- ○ Distributed excerpts of AIR manuals
- ○ Developed step-by-step procedure
- ○ Described general requirements
- ○ Other (please specify) _____

8. Did you take advantage of the option to have NCS pre-code answer sheets?

- ○ No
- ○ Yes

9. Will you take advantage of the pre-coding option for the next administration?

- ○ No
- ○ Yes
- ○ Not sure

10. What proportion of students in each category do you estimate you tested?

	None	Fewer than Half	About Half	Most	All Present
English Learners (EL)	○	○	○	○	○
Special Ed	○	○	○	○	○

11. Overall, how does the achievement level of the 9th graders who took the test compare with that of all 9th graders in your school?

- ○ Much lower
- ○ Lower
- ○ About the same
- ○ Higher
- ○ Much higher

12. What accommodations did you provide for:

	Special Education Students? (Mark all that apply.)	**EL students?** (Mark all that apply.)
Calculators	○	○
Word glossary	○	○
Scribe	○	○
Reader	○	○
Braille	○	○
Large format booklets	○	○
Other (specify) _____	○	○

13. Do you expect to provide more accommodations the next time you administer CAHSEE?

- ○ No
- ○ Yes (please specify) _____

14. What did you do with students who finished the first section early?

- ○ Had them go directly to the second section
- ○ Had them stay in the room until the scheduled break
- ○ Had them wait outside the room until the scheduled break
- ○ Other (please specify) _____

15. What did you do with students who had not finished by the break between sessions?

- ○ All students finished by the time scheduled for the break
- ○ Delayed the break until all students had finished
- ○ Had all students take the break and, if needed, finish the section after the break
- ○ Had students who were not finished work through the break
- ○ Moved students who were not finished to another room
- ○ Other (please specify) _____

16. What did you do with students who had not finished by the time lunch was scheduled?

- ○ All students finished by lunch
- ○ Released students to lunch and had them come back to finish
- ○ Had students work through lunch
- ○ Other (please specify)_____

17. What did students in other grades do during the day of testing?

- ◯ Special school-wide activity
- ◯ Regular classes but revised schedule
- ◯ Regular classes and regular schedule
- ◯ Other (please specify) _____

18. What impact did the testing have on attendance of 9th graders?

- ◯ Higher attendance than normal
- ◯ No impact
- ◯ Lower attendance than normal

19. What impact did the testing have on attendance of the other grades?

- ◯ Higher attendance than normal
- ◯ No impact
- ◯ Lower attendance than normal

20. How do you plan to use the results? (Mark all that apply.)

- ◯ Guide individual counseling decisions
- ◯ Revise current courses
- ◯ Design remedial courses
- ◯ Other (please specify) _____

21. What will you do differently for the next CAHSEE administration?

Thank you for your cooperation.