



Predicting Success on the California High School Exit Exam

Accountability has become a watchword in California's K–12 public education system, and many state and federal policies are geared toward holding districts, schools, and teachers responsible for students' academic progress. One component of California's accountability program also holds students themselves responsible: the California High School Exit Exam (CAHSEE). The class of 2006 was the first cohort to be bound by this graduation requirement, and in that year, 90.4 percent of the class statewide passed the exam.

Many educators, parents, and policymakers have expressed deep concern about the 10 percent who do not graduate because of the CAHSEE. By law, current funding for tutoring students at risk of failing the exam is targeted at students in grade 12 and at those two years *beyond* grade 12 who have failed to pass the exam. But should we wait until grade 12 or later before funding additional assistance? Or should we intervene earlier? Can California use funds connected with the CAHSEE more wisely?

In a time of severe budget constraints, these questions are particularly important. A new PPIC report, *Predicting Success, Preventing Failure: An Investigation of the California High School Exit Exam*, provides some answers. Authors Andrew Zau and Julian Betts have developed a highly accurate method for identifying students likely to fail the CAHSEE—the first step in any early intervention plan. Using the San Diego Unified School District (SDUSD) as a test case, they are able to predict who will pass the CAHSEE as early as grade 4.

They also find that among the seniors who failed the CAHSEE, only a small percentage re-took the exam—and even fewer passed it—the following year. These results have important implications for students and educators, and for policymakers who may want to consider new ways to fund supplemental help for at-risk students.

Success Rates on the CAHSEE

Students begin taking the CAHSEE in grade 10. The exam is pitched at a grade 8 level in math and a grade 10

level in English Language Arts (ELA). SDUSD students performed much like students statewide, with about 90 percent of the class of 2006 passing by their senior year. But many more struggled to pass the CAHSEE, as the grade 10 failure rates demonstrate (see the table). English Learners (ELs) in particular often had difficulties with the exam.

Class of 2006 CAHSEE Passage Rates, San Diego and Statewide

	Passage Rate (%)	
	SDUSD	California
By grade 12		
Overall passage by spring 2006 for class of 2006	90	91
By grade 10		
All students		
Passed ELA	76	75
Passed math	74	74
EL students		
Passed ELA	28	39
Passed math	41	49

SOURCES: For first row: San Diego, authors' calculations; for California, Lauress L. Wise et al., "Independent Evaluation of the California High School Exit Examination (CAHSEE): 2006 Evaluation Report Volume 1," 2006, p. 31, online at <http://www.cde.gov>; for the remaining rows, data from <http://dq.cde.ca.gov/dataquest>.

Although many students scored quite high on the CAHSEE, many others barely passed. If the passing level had been just 10 points higher, failure rates would have been markedly higher, especially for math—a finding that should generate considerable concern about the future of those who struggle to pass.

Early, Strong Predictions of CAHSEE Passage

The report emphasizes that it is not necessary to wait until high school to identify students likely to fail the CAHSEE. Grade 4 student characteristics predict CAHSEE passage almost as well as those from grade 9.

Academic grade point average (GPA) is the strongest predictor of eventual outcomes on the CAHSEE. However,

some nonacademic characteristics such as absences and classroom behavior, as reported on elementary school report cards, are also significantly related to CAHSEE passage.

What other factors help predict CAHSEE passage? African American, EL, and special education students are less likely than white, non-EL, non-special education students to pass the exam, even after controlling for grades and test scores. A one-point increase in GPA, or a large jump in a student's math or ELA scores on the California Standards Test in grade 9, are associated with significantly higher probabilities of passing.

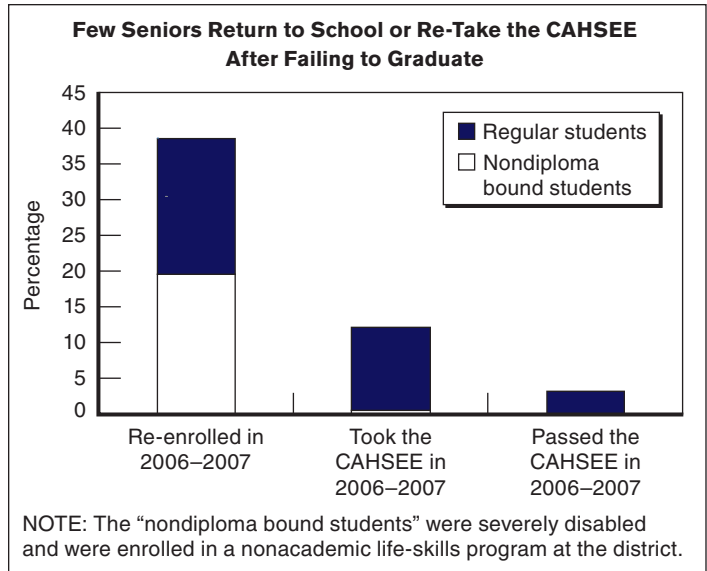
Notably, after accounting for GPA and test scores, Hispanic students are no less likely than white students to pass the CAHSEE. In addition, the importance of EL status changes over time. Grade 4 EL students are just as likely as others to pass the exam—but grade 9 EL students are not.

When and How to Intervene?

These findings raise crucial questions about the timing of extra help for struggling students. With Assembly Bill 128, the California Legislature has focused substantial spending on tutoring for students who have reached grade 12 without passing the CAHSEE. Assembly Bill 347, passed into law in October 2007, will also fund districts to provide up to two years of educational assistance to those who failed to graduate because of the CAHSEE.

However, evidence strongly suggests that these eleventh-hour interventions are unlikely to yield great success. In San Diego, almost none of the seniors who failed in 2005–2006 re-took the exam in 2006–2007, and only 3.1 percent passed (see the figure). Given the ability to identify at-risk students as early as grade 4, policymakers may want to consider new and innovative ways to spend CAHSEE tutoring funds.

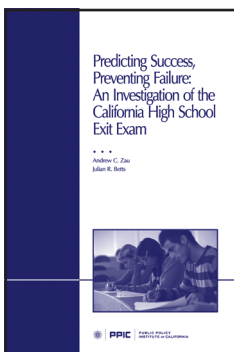
What is the best way to intervene? The report suggests that after-school reading classes and related reforms implemented in San Diego may have modestly boosted students' chances of passing the CAHSEE. Regarding programs funded by AB 128, evidence suggests that intensive content-based tutoring may have been more effective than less-intensive tutoring focused on test-taking strategies.



Reform Suggestions

The report offers several ideas for policymakers concerned not only with the CAHSEE but also with overall educational quality in California:

- Develop an “early warning” system to forecast which elementary or middle school students will be at risk of failing the CAHSEE.
- Consider targeting additional tutoring funds at elementary and middle school students at risk of failing the exam. Allow districts increased flexibility in how they spend AB 128 and AB 347 dollars to help to create such funds.
- Align these additional funds with No Child Left Behind supplemental service funds for tutoring students at schools that repeatedly fail to make Adequate Yearly Progress.
- Commission rigorous statewide studies of the effect of AB 128 and AB 347 funding on outcomes for seniors and post-senior year students.
- Develop a series of rigorous evaluations of alternative math and ELA interventions targeted at students at risk of failing the CAHSEE.
- Consider additional academic support directed at the many students who marginally pass the CAHSEE.



This research brief summarizes a report by Andrew C. Zau and Julian R. Betts, *Predicting Success, Preventing Failure: An Investigation of the California High School Exit Exam* (2008, 94 pp., \$10.00, ISBN 978-1-58213-129-0). The report may be ordered online at www.ppic.org or by phone at (800) 232-5343 or (415) 291-4400 (outside mainland U.S.). A copy of the full text is also available at www.ppic.org. The Public Policy Institute of California is a private, nonprofit organization dedicated to independent, objective, nonpartisan research on economic, social, and political issues affecting California. This study was supported with funding from The William and Flora Hewlett Foundation.

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