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MORE QUESTIONS THAN ANSWERS: CAHSEE Results, Opportunity to Learn, & the Class of 2006

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MORE QUESTIONS

THAN ANSWERS:

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UCLA/IDEA



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UCLA's IDEA¹

California's Class of 2006 is the first group of students required to pass the California High School Exit Examination (CAHSEE) in order to receive a diploma. CAHSEE asks students to show what they know by answering 72 multiple-choice English-language arts questions, completing 1 writing task, and answering 80 multiple-choice questions in mathematics. Students who get 60% correct on the English test and 44% in math by the end of their senior year get diplomas. The rest do not, even if they have passed all of their classes.

Although 20 states currently have an exit exam requirement, most allow students to demonstrate their proficiency through other means (other standardized tests or assessments, course grades and passage, culminating projects, portfolios of work, etc.) if they fail the test. No students are granted diplomas unless they meet clear standards. Because California has only a single measure of student proficiency, it is one of only eight states that automatically denies diplomas to students who fail the paper-and-pencil exam.² The stakes for students are very high: students lacking diplomas are 75% more likely to be unemployed and are estimated to have 30% lower lifetime earnings than students with diplomas. These impacts are most severe for students of color.³

This report presents new analyses of CAHSEE data released by the California Department of Education (CDE) on August 15, 2005 and other publicly available data about California schools. Section I shows striking connections between student performance on the CAHSEE and the resources and opportunities their schools provide. The schools where large numbers of students have not passed the CAHSEE are also schools with fewer qualified teachers, overcrowding, and multi-track schedules that limit learning time. Section II demonstrates that the CDE over-estimates the percentage of students who have passed either the ELA or mathematics portion of the exam by using a formula that excludes students who are more likely to fail the exam. The CDE leaves out of its formula more than 40,000 students who either dropped out during the 10th or 11th grade, or stayed enrolled but did not re-take the exam in the spring of 2005. Using a more accurate calculation based on the actual number in the Class of 2006 who, as 10th graders, were required to take the exam, we found that state-wide pass rates declined from 88% to 80% on the mathematics section, and from 88% to 81% on the English-language arts section. More than 60% of special education students and 40% of English Learners have not passed at least one of the tests. A smaller, but unknown, percentage of students (between 60-79%) have actually passed both tests and are eligible for a diploma. These pass rates would be lower if the calculation included all of the 9th graders from 2003. Section III raises important questions that cannot be answered by existing publicly available data, including the actual number of diplomas that will be denied to students due to the CAHSEE requirement, the impact of the CAHSEE on dropout rates, and the relationship between passing rates on the CAHSEE and school conditions. These questions must be answered before the full impact of the exam can be understood.

I. CAHSEE Results and Educational Resources: Have Failing Students Had a Meaningful Opportunity to Learn?

The CAHSEE data released by the CDE on August 15, 2005 about the graduating Class of 2006, when analyzed together with other publicly available data about California schools, reveal alarming connections between student performance and the resources and opportunities students are provided by their schools.

We divided the state's comprehensive high schools into three groups, based on their students' performance on CAHSEE. We used 10th grade California Basic Educational Data System (CBEDS) enrollment for the Class of 2006 (2003-04 school year) for each of these schools to calculate these pass rates, for reasons we explain in the second section of the report. The categories we generated based on this analysis are as follows:

Low Pass Rate Schools (LPR): 257 schools where less than 70% have passed *either* the ELA or Math section. These schools enrolled 103,013 10th graders, 22.9% of the state total.

High Pass Rate Schools (HPR): 222 schools where more than 90% have passed *both* the ELA or Math section. These schools enrolled 101,698 10th graders, 22.7% of the state total

Schools in Between: 587 schools with pass rates between 70-90%. These schools enrolled 233,209 10th graders, 54.4% of the state total.

The opportunities to learn in **Low Pass Rate (LPR)** and **High Pass Rate (HPR)** schools differ dramatically. Data from California's Basic Education Data System (CBEDS) about these schools reveal substantial differences in such basic conditions and resources as school overcrowding, availability of qualified teachers, whether math courses are taught by teachers who are certified to teach math, and whether the school qualifies for relief under the *Williams* settlement.⁴

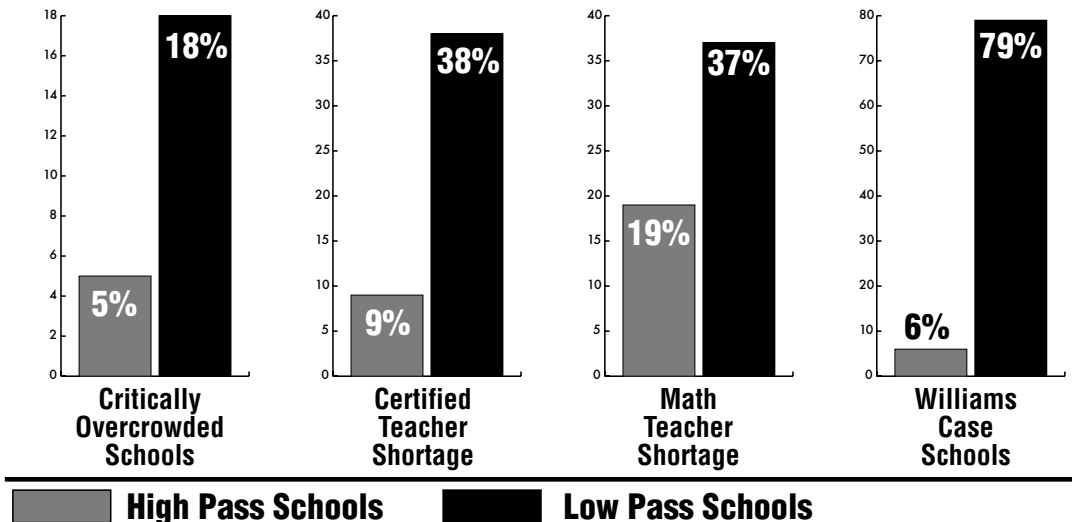
Our data show that the 257 **LPR** schools are:

- 3 times more likely to be critically overcrowded than **HPR** schools (and more likely to be year-round multi-track schools—0% of **HPR** schools vs. 6% of **LPR** schools.)
- 4 times more likely to have critical shortages of fully credentialed teachers.
- 2 times more likely to have at least 50% of math classes taught by teachers who are not certified to teach mathematics.
- 13 times more likely to be eligible for relief for substandard conditions under the settlement of *Williams v. California*



Figure 1

Percentage of SCHOOLS with the following Opportunity Problems:

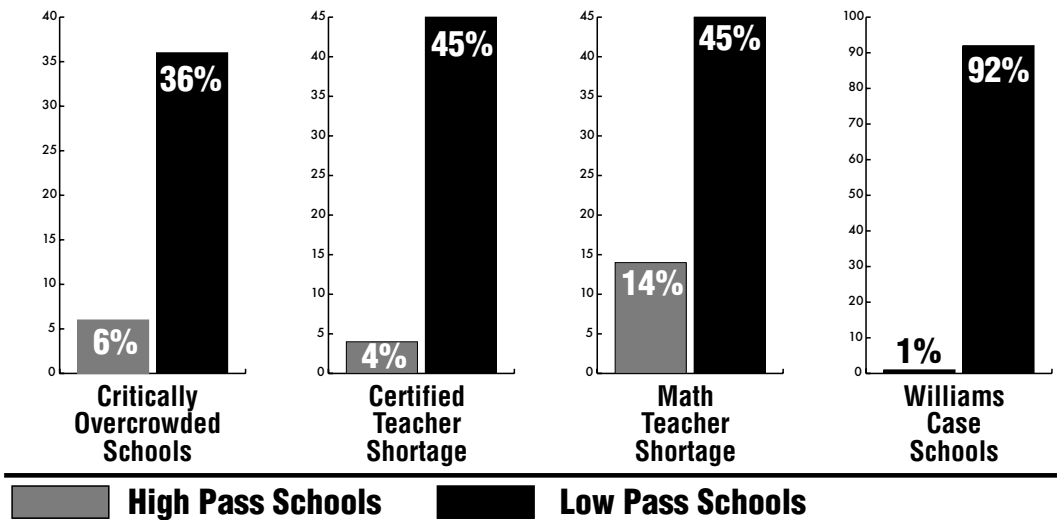


A more accurate, and even more disturbing, picture of the learning conditions experienced by the average student in **LPR** and **HPR** schools is revealed when we account for differences in school size. Because the most troubling conditions are found in the largest **LPR** schools, the proportion (and actual number) of students facing these conditions is far greater than the proportion of schools implies. Specifically, the 100,013 students in the LPR schools were:

- 6 times more likely to be in a critically overcrowded school than students in **HPR** schools. They are also more likely to be in a year round school. (1 in 6 students in **LPR** schools are also in a year-round school, but *no* student in a **HPR** school is also in a year-round school.)
- 11 times more likely to be in a school with critical shortages of fully credentialed teachers.
- 3 times more likely to be in a school where at least 50% of math classes are taught by teachers who are not certified to teach mathematics.
- Far more likely to be enrolled in schools designated as *Williams* schools. While 92% of all students in **LPR** schools were in *Williams* schools, just 1% of students in **HPR** schools were in *Williams* schools.

Figure 2

Percentage of STUDENTS with the following Opportunity Problems:

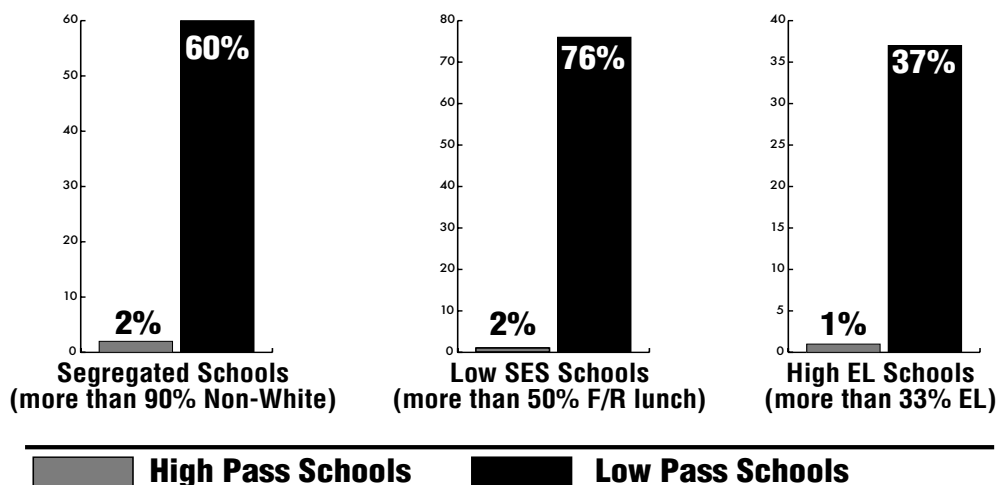


Students in **LPR** schools are also far more likely than students in **HPR** schools to be enrolled in racially segregated schools with high concentrations of poverty. Specifically, students in **LPR** schools are

- 30 times more likely to be in hyper-segregated schools (90% or more non-white) than students in **HPR** schools.
- 38 times more likely to be in schools with high concentrations of poverty (greater than 50% of students receiving free/reduced lunch) than students in **HPR** schools.
- 37 times more likely to be in schools with high concentrations of English Language Learners (greater than 33% of students classified EL).

Figure 3

Percentage of Students in Racially, Economically, and Linguistically Segregated Schools





II. CDE's Calculations: How Many Students in the Class of 2006 Have Not Passed the CAHSEE?

In the August data release, the CDE did not provide the number or percentage of students who have satisfied the CAHSEE requirement for graduation. We know how many students have passed the ELA test, and we know how many passed the mathematics test. But, we have no idea how many have passed *both* the ELA and mathematics section of the CAHSEE. Therefore, we do not know how many students in the Class of 2006 are on track for graduation or are currently at risk of being denied a diploma. While the state's independent evaluator, HumRRO, is slated to release their estimate of this number next month, it will only provide these numbers for the state as a whole. We will have no way of knowing how many students are at risk in any particular region, county, district, or school.

The report that the CDE released contains other serious problems. The most serious of these is CDE's calculations of passing rates on the individual sections of the exam both at the state level and for different sub-groups of students. These calculations *over-estimate the percentage of students who have passed either the ELA or mathematics portion of the exam, because they exclude students who are likely to fail the exam.*

In the 2004-05 academic year, Eleventh graders in the Class of 2006 who failed one or both portions of the CAHSEE in the 10th grade had two opportunities in 2005 to re-take the sections they had failed (one opportunity in the fall, one in the spring). However, because the state lacks a way to match tests of individual students on multiple administrations of the CAHSEE, the CDE had no way of knowing whether the students who failed the test in the fall were the same ones re-taking the test in the spring. Thus, while the CDE could determine the number of students passing either exam, they had no way of knowing exactly how many failed, and thus what the true failure rate is on either portion of the exam.

In their August 15th report, then, the CDE approximated the passing (and failing) rates using the following formula: the total number of students in the Class of 2006 who passed the exam during 10th or 11th grade, divided by number of students who passed plus the number of students who failed the exam in the spring administration, as shown below in Figure 4. In other words, they used the number of students in the original pool of 10th-graders, *minus* dropouts, *minus* students who didn't take the test this spring for any other reason.

This calculation is misleading and inaccurate because it excludes more than 40,000 students in the Class of 2006, including two groups of students that are the least likely to pass. The first of these groups consists of the 11th grade students in the Class of 2006 who failed the exam, but did not re-take it in the spring of 2005. The law only requires that students be given an *opportunity* to take the exam again in the spring of their junior



year; it does not require them to take it. Many students who failed as 10th graders and then again as 11th graders in the fall of 2004 may choose to wait until 12th grade to take the test again. The second group excluded from the CDE calculations is the group of students who failed the exam and then dropped out of school, either between 10th and 11th grade or during the 11th grade. These students are important to include when calculating the overall pass rates because Californians do not want the fact that students have dropped out of school to enhance the appearance of the testing program’s success.

We re-calculated the pass rates for each portion of the exam based on a more realistic count of the students who are required to take the exam—all of those enrolled as 10th graders in 2003-2004. This number is reported in CBEDS, based on data the schools provide in October. Our UCLA/IDEA pass rate, then, is *the percentage of students from the original number of 10th graders that has passed the test by the spring of 2005*. Our calculation provides a more accurate picture of overall pass rates, because it includes all 10th grade students who were officially enrolled in the fall of 2003, and who were subject to the CAHSEE graduation requirement.⁵

Figure 4

The CDE pass rate calculation is as follows:

- **The total number of students who have passed**
Divided by
- **The total number of students in the original pool of 10th graders**
Minus
- **Dropouts**
Minus
- **Students who didn't take the test this past spring for any other reason**

The UCLA/IDEA calculation is:

- **The total number of students who have passed**
Divided by
- **The total number of students in the original pool of 10th graders**

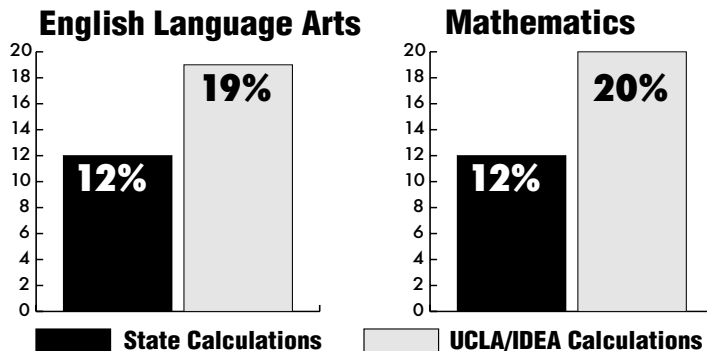
Whereas the state’s data show that 88% of students have passed the ELA section of the exam, we find that 81% of students have passed. For mathematics, the state claims that 88% of students have passed, but our numbers show that 80% of passed.

Using our calculations, the number of students who must pass the exam in 12th grade is far higher than state figures, assuming that these students continue to enroll in school. A significant and as yet unanswered question is whether failure on the exam caused some students to become discouraged and drop out when they otherwise would not have. However, this important question cannot be answered without additional data.



Figure 5

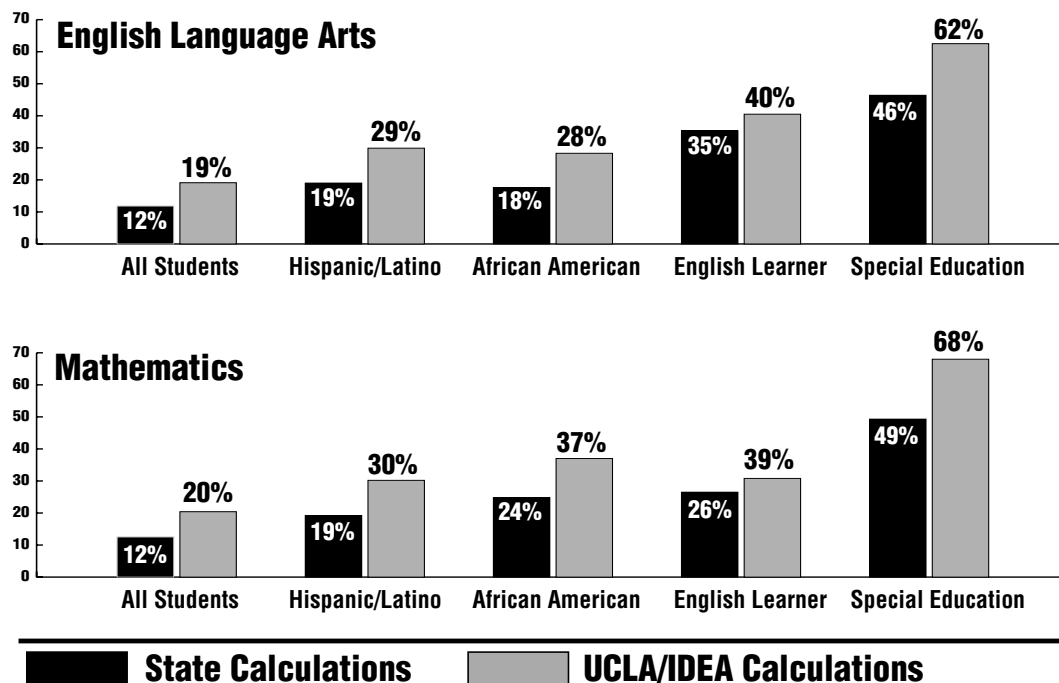
Re-Calculated Percentage of Students who have Not Passed in the Class of 2006 is Higher than State Reported Numbers



These more accurate percentages of students who have not passed either the ELA or mathematics section are even higher for some sub-groups of students.⁶ It is worth repeating that we do not have access to data regarding the total number of students who have not passed both exams. Since many students have passed just one of the two tests, the percentage of students who have not passed *both* tests is likely much higher, and could be as high as 40%.

Figure 6a and 6b

Calculated Percentage of Students who have Not Passed in the Class of 2006





MORE QUESTIONS THAN ANSWERS:

Given that each 1 percent of the cohort equals nearly 5,000 students, these differences of 7 to 19 percent between the CDE and UCLA calculations translate into very large numbers of students.

Calculations of the pass rates and “not passed” rates that begin with the Class of 2006’s enrollment as 9th graders yield even smaller success rates. Neither the CDE’s nor our UCLA analyses include the more than 30,000 students who were classified as 9th graders in 2002-2003 (therefore, members of the Class of 2006), but who did not enroll as 10th graders the following year. If we include these students in the calculation, we find that, over all groups, only 76% of the class has passed the ELA test and only 75% has passed the mathematics section. The pass rates in ELA for subgroups fall to 63% for Latinos, 65% for African Americans, 48% for English Learners, and 35% for Special Education students. The pass rates in math for these groups are even lower, at 63%, 57%, 56%, and 30% respectively, for these sub-groups.



III. More Answers Needed: What Does the Public Need to Know to Understand the Full Impact of the CAHSEE?

The state must address several important questions about the number of diplomas denied to students because of the CAHSEE requirement, the impact of the CAHSEE on dropout rates, and the relationship between passing rates on the CAHSEE and the learning opportunities that schools provide. Some questions can be answered now, some only at the end of the 2005/06 academic year, and some questions may be unanswerable until the state implements its plan for a comprehensive longitudinal data system with unique student identifiers. Answers are needed to understand the full impact of the exit exam on California's students and schools:

1. How many students who have met all graduation requirements except CAHSEE will be denied a diploma? How does this break down by student sub-group?
2. What is the impact of the exit exam on dropout rates in 10th, 11th, and 12th grades? How do enrollment declines for each of these grades differ between the Class of 2006 and previous graduating classes? How many of the students who have *not* passed one or both of the exams have dropped out of school? How many students who have passed one or both exams have also dropped out of school? How do these numbers break down by student sub-group?
3. How do pass rates vary by school learning conditions? How do learning conditions vary between schools with high and low failure rates on the exam, particularly with respect to the extent to which English-language arts and mathematics courses are taught by credentialed teachers with subject matter authorization; the extent to which standards-based textbooks and instructional materials have been made available to teachers and students; the extent to which standards-based instruction has been implemented across different types of schools; and the extent to which struggling students have been provided with additional resources and support, particularly in LPR schools?

This year is a crucial one for educators, students, and state leaders in California. Policy makers and education officials are asking students to *prove* that they deserve a diploma, and to do so under circumstances that appear highly unequal. As the state with the largest number of high school seniors, the stakes could not be higher. Without answers to the questions above, Californians cannot not feel at ease with *any* number of students being denied diplomas.

It may take years for the state to solve problems that currently prevent all students from having a reasonable and fair opportunity to learn what they are being held accountable for on the CAHSEE. However, the state can and should act immediately to develop its long-stalled data system that will allow us to assess students' performance accurately and to understand better how the conditions and opportunities in their schools relate to that performance.

MORE QUESTIONS THAN ANSWERS:

Endnotes

- ¹ For more information about UCLA's Institute for Democracy, Education, and Access, visit www.ucla-idea.org.
- ² Darling-Hammond, L., Rustique-Forrester, E., & Pecheone, R. (2005). *Multiple measures approaches to high school graduation*. Palo Alto, CA: Stanford School Redesign Network.
- ³ Orfield, G., Losen, D., Wald, J., & Swanson, C., (2004). *Losing our future: How minority youth are being left behind by the graduation rate crisis*, Cambridge, MA: The Civil Rights Project at Harvard University. Contributors: Advocates for Children of New York, The Civil Society Institute.
- ⁴ The August 2004 settlement of *Williams v. California* identifies a set of schools, which we term "Williams schools," that lack basic learning conditions and that require additional resources and oversight.
- ⁵ According to the state, however, approximately 40,000 10th graders did not take the CAHSEE originally in the Spring of their 10th grade year when required to do so. Because the state does not use a unique student identifier system, it is impossible to tell why this drop-off occurred. Further, we cannot tell from the most recently reported state denominator: 1) how many students took the test in 11th grade and did not originally take it in 10th; 2) how many who originally took the test in 10th grade did not take it in 11th grade; and 3) how many students in the 10th grade enrollment count dropped out entirely (some who were likely retained probably did drop out.)
- ⁶ Students who have "not passed" include both those students who have taken the test and failed and those students who have not taken the test, but who are subject to the exam requirement.



For more information please contact UCLA/IDEA:
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