



Before the Recession...

# Conditions, Opportunities, and Outcomes in California Public Schools

(January 2010)

For the past four years, UCLA's Institute for Democracy, Education, and Access (IDEA) and UC All Campus Consortium on Research for Diversity (UC/ACCORD) have produced a series of reports that examine the quality and distribution of educational opportunities across California's public schools. The Educational Opportunities series and our web-based searchable educational database allow policymakers and parents to look across the state and see, for every high school and middle school, the relationships among California's educational infrastructure, rates of high school completion, and preparation and enrollment in the state's four-year colleges and universities.

This year we have produced both a state report and this addendum. The state report illuminates the current, "real time" effects of the recession on California children and public schools. *Educational Opportunities in Hard Times: The Impact of the Economic Crisis on Public Schools and Working Families* reports on interviews with a representative sample of 87 principals from across the state. The principals speak of the growing social welfare needs of California's children, the efforts of educators to meet these needs, and the impact of the budget cuts on educational programs.<sup>1</sup>

In this addendum we analyze the most recent publically available state educational data to highlight differences in resources and outcomes across different groups of California public schools. The report covers three areas:

- **Demographics of California Schools highlights patterns of racial segregation in the state and presents data on the schools attended by low-income students and English language learners.**
- **Unequal Conditions and Opportunities for Teaching and Learning points to the inequitable distribution of educational resources (such as spacious classrooms, qualified teachers, and rigorous curriculum) across California public schools.**
- **Unequal Outcomes highlights how No Child Left Behind has imposed sanctions primarily on schools serving large proportions of Latino, African American, and American Indian students. It also includes charts that follow the students in the Class of 2008, from their freshman year in 2004 to their possible enrollment in community college, a California State University, or a University of California after graduation.**

A broader set of analyses of educational conditions and outcomes, including reports on each California legislative district and reports on each public high school and middle school in the state, can be found online at [www.edopp.org](http://www.edopp.org).

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<sup>1</sup> We provide data about the percentages of A-G courses and rates of college-going separately for each high school in the on-line version of this report. Available online at [www.edopp.org](http://www.edopp.org)

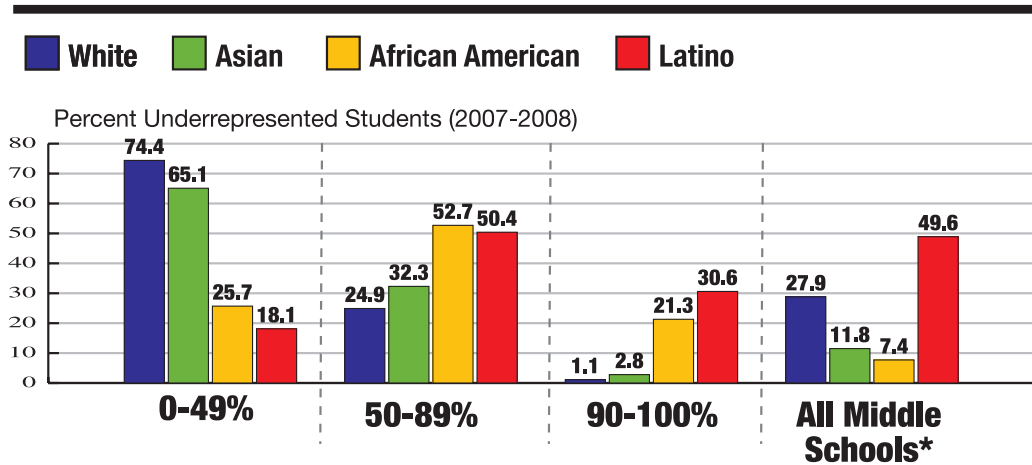
# I. Demographics of California Schools

California’s public secondary schools (including middle schools and high schools) serve an extraordinarily racially diverse student body. Almost 40% of California’s secondary students are white or Asian (including Pacific Islander and Filipino).<sup>2</sup> Fifty-eight percent are Latino, African American, or American Indian—the three groups that are underrepresented in California’s higher education system.<sup>3</sup>

Despite this considerable diversity, California’s racial groups often attend schools isolated from other racial groups.

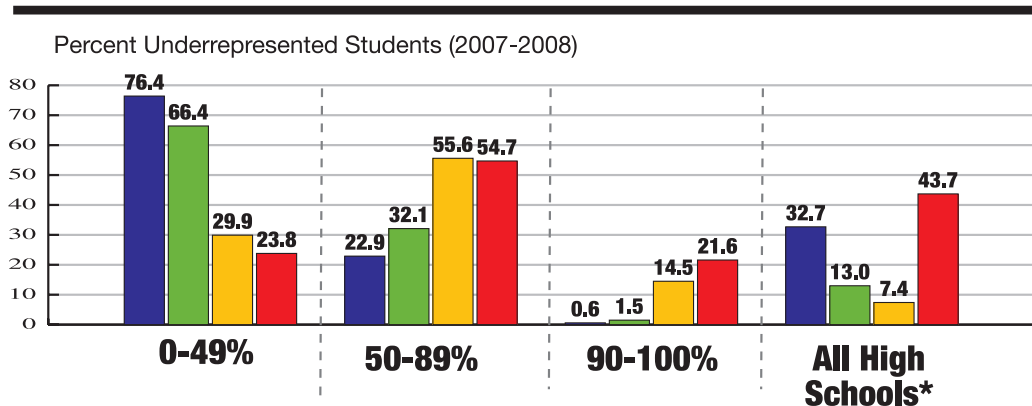
In this addendum, the tables present data on three categories of schools: 1) schools composed of less than 50% underrepresented students; 2) schools composed of 50 to 80% underrepresented students; and 3) intensely segregated schools where 90-100% of the students are from underrepresented groups.

## Racial Composition of California: Middle Schools 2007–2008



\* All Middle Schools does not include American Indian or multi-racial students and hence totals add up to less than 100%.

## High Schools 2007–2008



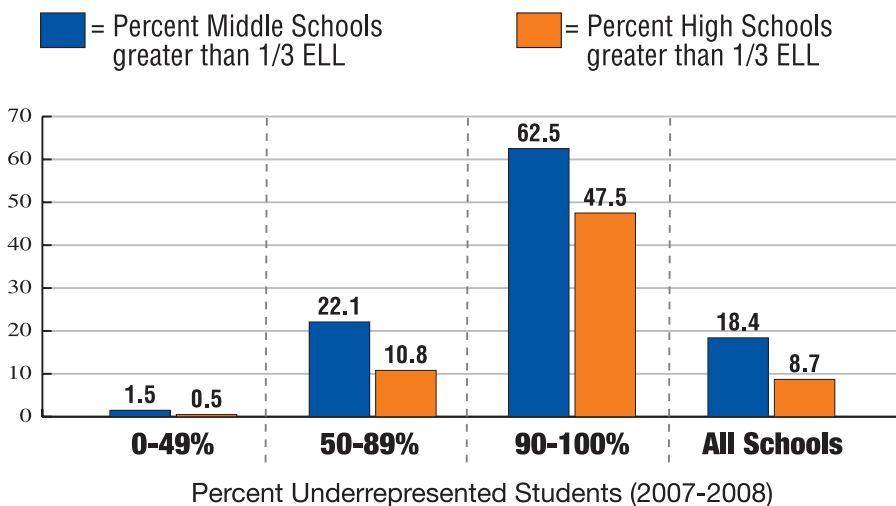
\* All High Schools does not include American Indian or multi-racial students and hence totals add up to less than 100%.

2 Hereinafter, we use the shorthand “Asian” to refer to students designated as Asian, Pacific Islander, or Filipino.

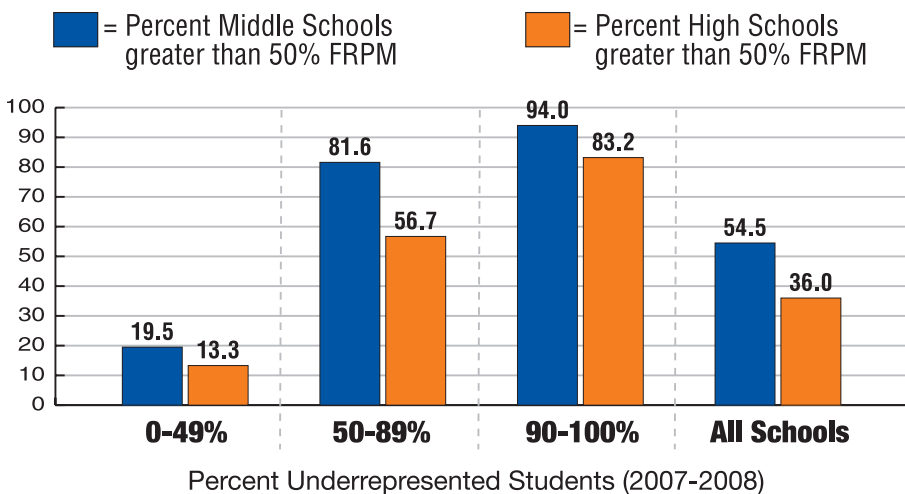
3 Hereinafter, we use the shorthand “Underrepresented” to refer to students designated as African American, Latino, and American Indian. These groups are underrepresented in the University of California system.

*Intensely segregated minority high schools and middle schools are far more likely than other secondary schools to serve high concentrations of low-income students and students learning English.*

### Concentrations of English Learners 2007-2008



### Concentrations of Low-Income Students 2007-2008



*Intensely segregated minority high schools and middle schools are more likely than other secondary schools to serve students eligible for Free and Reduced-Price Meals (FRPM).*



# II. Unequal Conditions and Opportunities for Teaching and Learning

California students lack critical educational opportunities provided to students in most other states. The charts presented throughout this report point to the state's insufficient educational resources and their inequitable distribution in California's schools.<sup>4</sup>

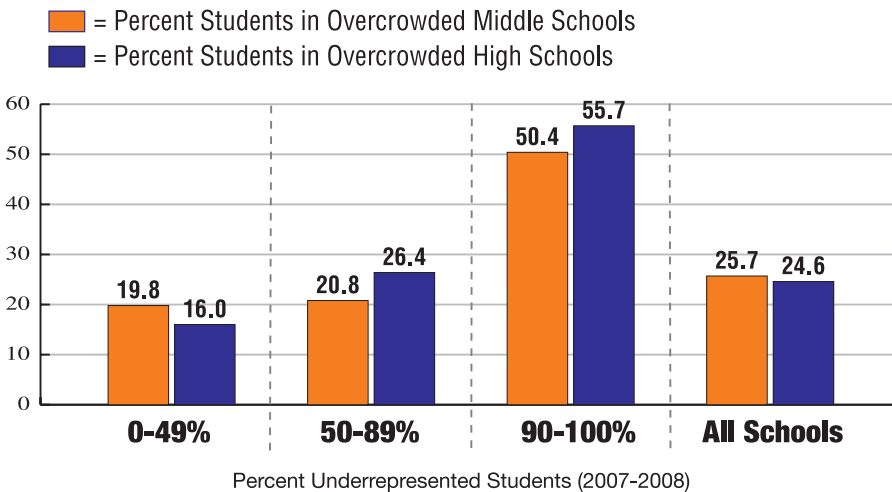
## California Schools Are Overcrowded

California's secondary classrooms are more overcrowded than classrooms in any other state. California's secondary (grades 9-12) student-teacher ratio is 23.4 to 1.

California schools serving 90% or more Latino, African American, and American Indian students are the most likely to be designated as critically overcrowded.

The graphic below displays the relationship between race and overcrowding in the three categories of California schools.

### Secondary School Racial Composition and Overcrowding 2007–2008



Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/cb/](http://www.cde.ca.gov/ds/cb/)

Overcrowding creates unsafe environments and makes teaching and learning more difficult. Schools with too little space may not be able to maintain specially equipped rooms such as science labs or libraries because these spaces need to be “flexible” for teaching multiple subjects. Overcrowding has led some California school districts to employ policies such as year-round, multi-track school calendars in order to keep some portion of the teachers and students off campus and “on break.” Some of these calendars provide students with fewer days of instruction than are provided to other California students.

## Secondary Teacher–Student Ratios, 2008

State	Student/Teacher Ratio
South Carolina	6.8
Kansas	7.6
D.C.	7.7
West Virginia	7.8
Wyoming	8.1
Rhode Island	8.2
Missouri	8.6
North Carolina	8.6
Vermont	8.6
New Jersey	8.9
Oklahoma	8.9
Delaware	9.2
Iowa	9.4
Pennsylvania	9.4
Wisconsin	9.4
Alabama	10.2
Arkansas	10.3
Georgia	10.3
Hawaii	10.3
Virginia	10.3
Mississippi	10.5
Texas	10.5
North Dakota	10.6
Maryland	10.8
Illinois	10.9
Ohio	11.2
Alaska	11.3
Colorado	11.3
Idaho	11.3
Indiana	11.3
Minnesota	11.4
Nebraska	11.6
National Average	11.9
New York	12
Florida	12.1
Louisiana	12.5
Massachusetts	12.5
Maine	12.6
Montana	13.5
New Hampshire	13.5
Michigan	14.3
Connecticut	14.4
Washington	14.9
New Mexico	15
Nevada	15.1
South Dakota	15.1
Tennessee	15.2
Utah	17.1
Kentucky	19.4
Oregon	19.9
Arizona	20.8
California	23.4

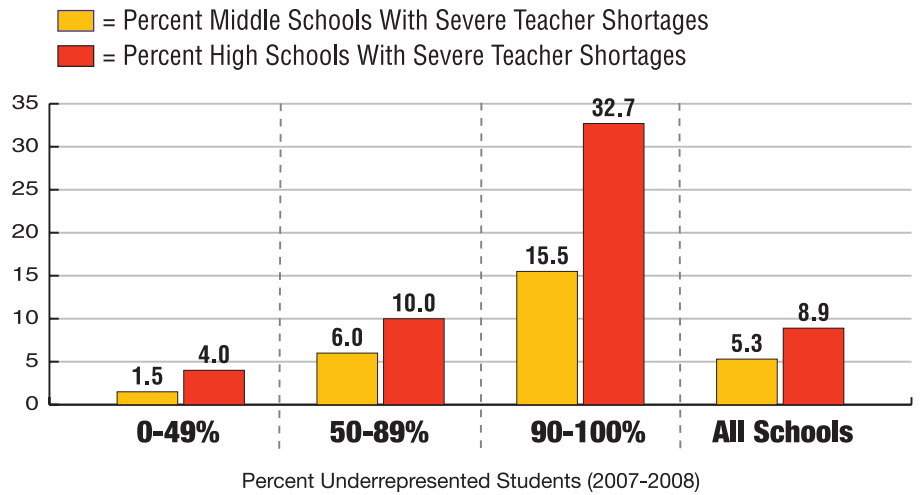
Source: “Secondary” (grades 9–12) student-teacher ratios, <http://nces.ed.gov/pubs2010/2010309.pdf>

<sup>4</sup> For an analysis of California's educational opportunities, see [www.edopp.org](http://www.edopp.org).

# California Schools Have Limited and Unequal Access to Qualified Teachers

Schools with a severe shortage of qualified teachers, where more than 20% of the teachers lack full credentials, have high levels of teacher turnover; additionally, these schools do not have enough experienced and qualified teachers to mentor new and less prepared ones. As the table to the right shows, a severe shortage of qualified teachers is rarely found in secondary schools that enroll a majority of white and Asian students.

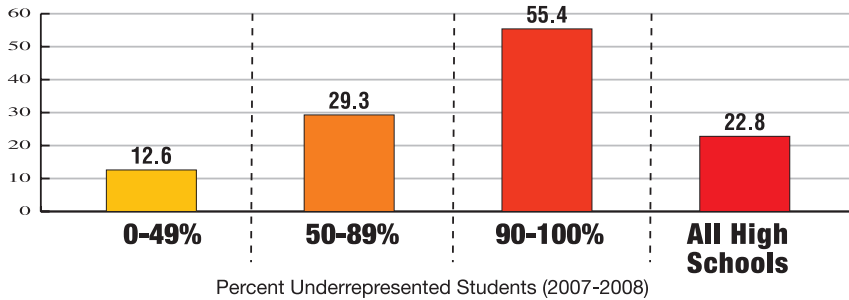
## School Racial Composition and Teacher Shortages 2007–2008



Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

## High School Racial Composition and Access to Qualified College Preparatory Teachers '07-'08

Percent of High Schools With Severe Shortages of Qualified College Preparatory Teachers



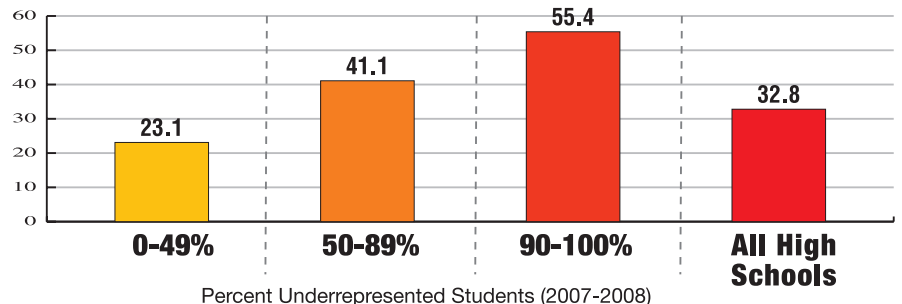
Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

Sometimes schools offer college preparatory courses without providing high-quality instruction in those courses. For example, in 22.8% of California's high schools, more than 20% of college preparatory courses are taught by teachers teaching outside their subject area expertise. Many California students attend schools facing this problem.

Intensely segregated minority high schools are more likely to have large numbers of teachers teaching college preparatory math courses without the appropriate credential than high schools where less than half of the students are underrepresented.

## High School Racial Composition and College Preparatory Math Teacher Shortages 2007–2008

Percent of High Schools With Severe Shortages of College Preparatory Math Teachers

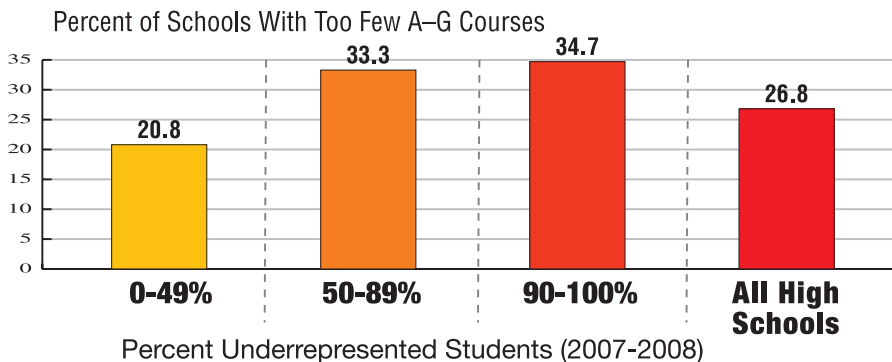


Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

## California Schools Have Limited and Unequal Access to High-Quality College Preparatory Curriculum

The California State University and the University of California have the same basic course requirements for admission, commonly referred to as the A-G requirements. To be eligible to attend any public four-year university in the state, students must take a minimum of 15 A-G courses—approximately two-thirds of their high school courses. Accordingly, to provide every student with the opportunity to satisfy these college eligibility requirements, California high schools must ensure that at least two-thirds of their courses meet the A-G requirements. In schools with high rates of college-going, it is common for more than three-quarters of the school’s courses to satisfy the A-G requirements.<sup>5</sup>

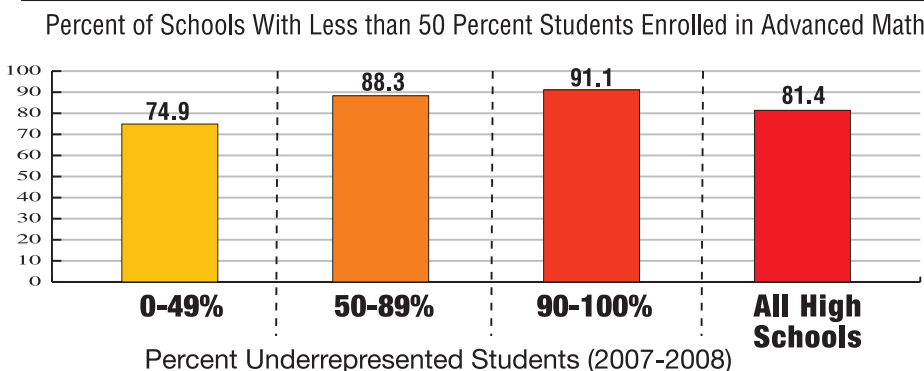
### School Racial Composition and Access to the College Preparatory Curriculum 2007–2008



Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

According to a U.S. Department of Education study, enrolling in a rigorous high school curriculum is vital to increasing a student’s chances of earning a bachelor’s degree.<sup>6</sup> The study also found that taking high-level mathematics courses is important for college success. The study also reported that taking rigorous high school courses had a greater impact on African American and Latino students than on white students. Despite some recent increases, the proportion of students enrolled in such rigorous math classes remains quite small in most California high schools.

### High School Racial Composition and Enrollment in Advanced Math Classes 2007–2008



Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

*In 81.4% of California high schools, less than 50% of students enroll in high-level math classes. Students in schools serving majority African American and Latino students are more likely than those in majority white and Asian schools to experience this problem. These shortages mean that it is far more difficult for African American and Latino students to complete the A-G math and science requirements during their four years of high school.*

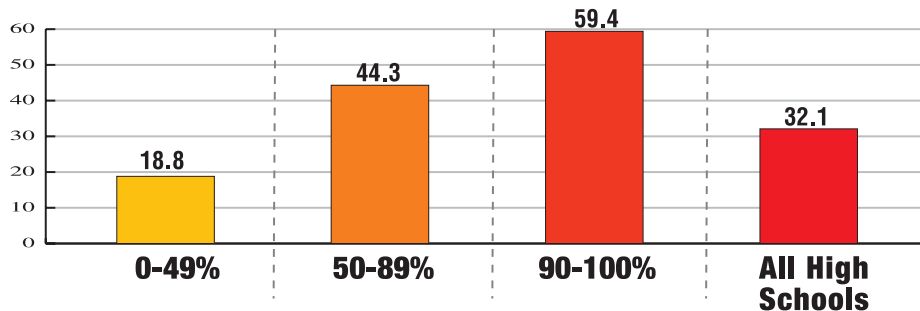
<sup>5</sup> We provide data about the percentages of A-G courses and rates of college-going separately for each high school through our online search-engine available at [www.edopp.org](http://www.edopp.org).

<sup>6</sup> C. Adelman. (2006). *The Toolbox Revisited: Paths to Degree Completion from High School Through College*. Washington, DC: United States Department of Education.

An even smaller proportion of California's high school students enroll in Advanced Placement (AP) mathematics classes (AP Statistics and two AP Calculus classes) the most rigorous math courses offered. In the chart to the right, we compare the number of 9th graders in 2004-05 to the number of 12th graders enrolled in AP math at the same school in 2007-08. We find that in almost one-third of California high schools, less than 10% of 9th graders enroll in AP mathematics four years later. Intensely segregated schools are almost three times more likely than majority white and Asian schools to experience these low rates of AP enrollment.

### High School Racial Composition and Enrollment in Advanced Placement Math 2007–2008

Percent of Schools With Less than 10 Percent of '04-'05 9th Grade Cohort Enrolled in AP '07-'08



Percent Underrepresented Students (2007-2008)

Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)





## Rigorous and Relevant Coursework?

A growing number of public schools in California are seeking to prepare students for a wide range of postsecondary opportunities. Schools throughout the state are implementing an approach to high school reform many are calling “Linked Learning” or “Multiple Pathways.” Linked Learning programs are multi-year, comprehensive programs of integrated academic and professional or technical study organized around a broad theme or interest area (e.g., engineering, biomedical and health sciences, technology, arts, media and design, global studies) that provide both the academic and real-world foundations students need for advanced learning, training, and preparation for responsible civic participation. In *Beyond Tracking*<sup>7</sup>, Jeannie Oakes and Marisa Saunders argue that through an integrated curriculum, students “learn more and better” since “they can apply academic knowledge and skills to real-world situations and problems.”

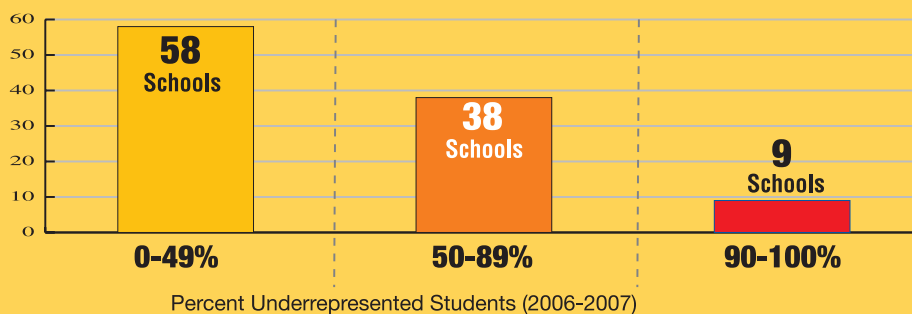
Linked Learning programs not only vary in their theme or career focus, but can also vary in how coursework is organized and integrated. As such, a comprehensive study that identifies how many California high school students have access to this integrated approach is not available. However, we can continue to report on a singular strategy aimed at achieving this integration: offering courses that fulfill both Career Technical Education (CTE) and A-G requirements. For a CTE course to be approved by the University of California as meeting the “g” elective requirement, it must “connect academic content knowledge with practical or work-related applications” and satisfy the following conditions:

- Provide high-quality, challenging curricula that use and advance concepts and skills in the “a-f” subject areas;
- Integrate academic knowledge with technical and occupational knowledge;
- Include tasks that are rich in opportunities to develop knowledge of tools, processes and materials; to engage in problem-solving and decision-making; and to explain what one is doing and why.

Although the number of CTE courses that meet one of the A-G requirements has markedly increased in the last few years, these courses represent a small fraction of the total number of “traditional” A-G or CTE courses offered in the state. Most of these courses satisfy the “g” (college preparatory elective) or the “f” (visual and performing arts) requirements. The number of CTE courses that satisfy the “a” (history/social science), “b” (English), “c” (math), “d”(laboratory science) and “e”(foreign language) requirements remains relatively small. This uneven distribution of courses across the curriculum makes it extremely difficult for students to enroll simultaneously in a CTE path and fulfill UC/CSU admissions requirements. In 115 high schools in the state, 25% or more of CTE courses meet one of the A-G requirements. These 115 high schools are not representative of the state as a whole; a disproportionate number of these schools enroll majority white and Asian student bodies. Since broad-scale efforts to combine A-G and CTE are still in their infancy, it will be important to document whether and to what extent these new programs are made accessible to a broad cross-section of California’s students.

### School Offering CTE Courses that Meet A-G Requirements 2006–2007

Number of Schools Where at least 25% of CTE Courses Meet A-G Requirements



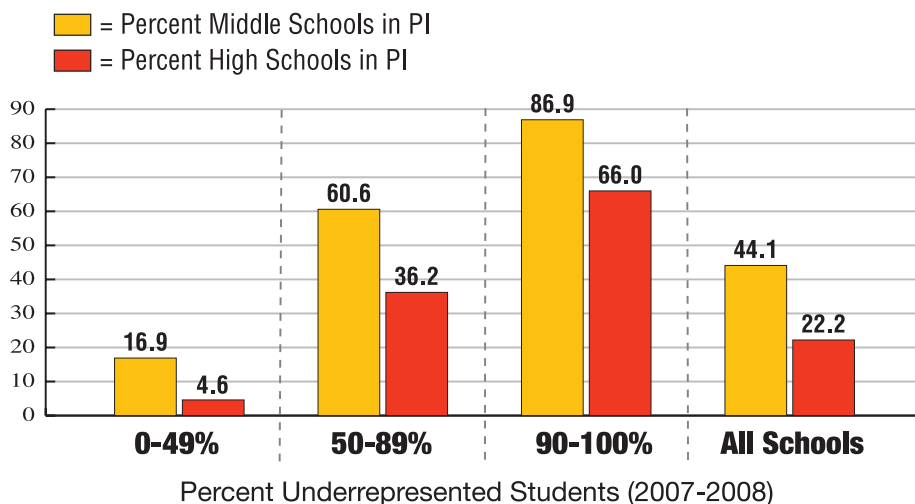
7 J. Oakes and M. Saunders. (2008). *Beyond Tracking: Multiple Pathways to College, Career, and Civic Participation*. Cambridge, MA: Harvard Education Press.

### III. Unequal Outcomes: Intensely Segregated Minority Schools are Far More Likely to Face State Sanctions

California’s legislature has adopted a set of standards and tests of student proficiency that many have deemed as among the most rigorous in the nation.<sup>8</sup> Following the requirements of No Child Left Behind (NCLB), the California legislature has enacted accountability measures that tie punitive consequences to these standards and tests. Schools are designated as “Program Improvement” (PI) schools if they fail to meet the state’s test-score-increase goals for two or more consecutive years.<sup>9</sup> As the analyses in the previous sections make clear, California has not invested in the conditions necessary for schools to achieve these high standards and meet the requirements of the state’s tough accountability mechanisms.

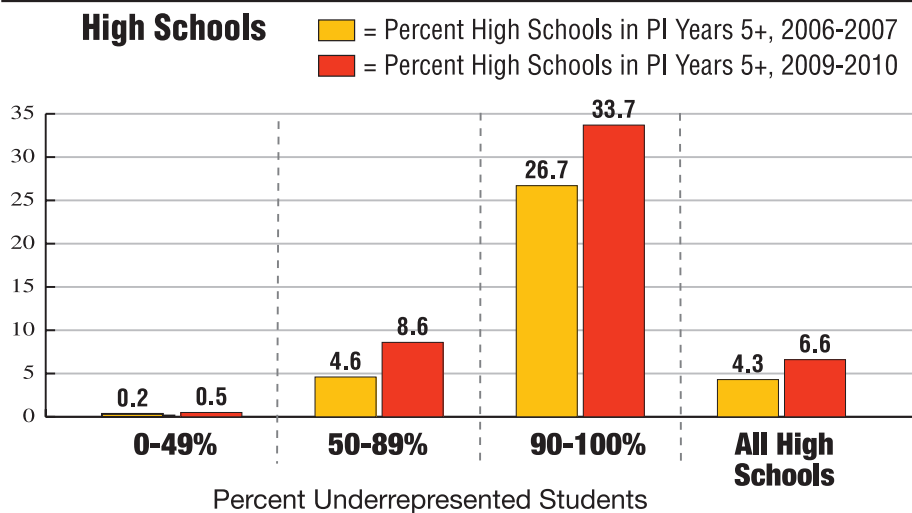
*Intensely segregated high schools are more likely (66% to 4.6%) as majority white and Asian high schools to be designated as PI schools.*

**School Racial Composition and “Program Improvement” Status 2009–2010**



Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

**School Racial Composition and “Program Improvement 5” Status**



Source: California Basic Education Data System, available at [www.cde.ca.gov/ds/sd/cb/](http://www.cde.ca.gov/ds/sd/cb/)

*Some California high schools face serious sanctions because they have been in Program Improvement status for at least five years. NCLB requires districts to close or “reconstitute” such schools.<sup>10</sup> As the graph to the left shows, almost a third of intensely segregated minority high schools are “PI 5” schools that face these sanctions. Notably, very few majority white and Asian high schools are in this stage of Program Improvement.<sup>11</sup>*

8 Finn, C., Petrilli M. and Julian, L. (2006). The State of State Standards. New York, NY: The Fordham Foundation.

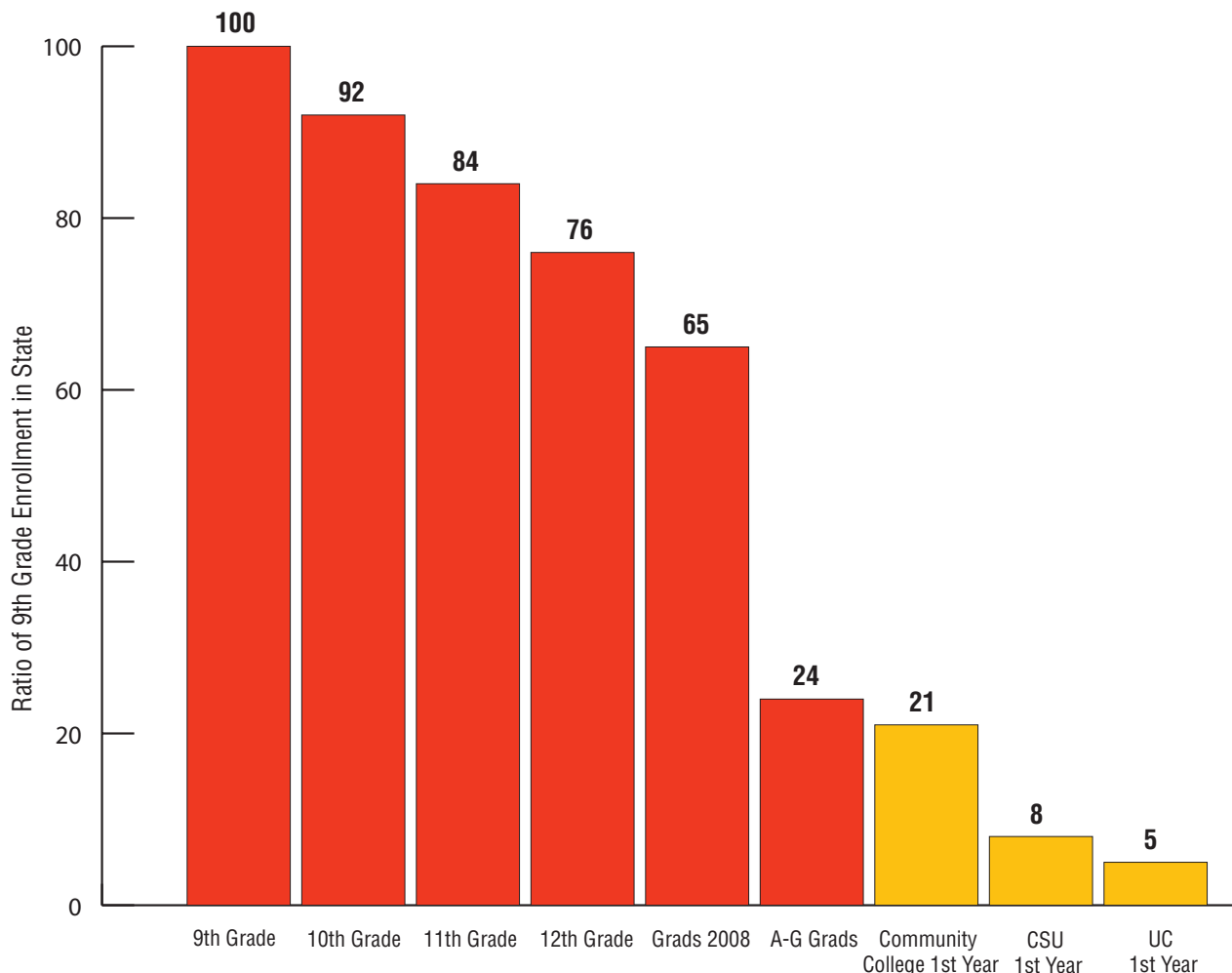
9 NCLB requires that state and school districts annually review the academic progress of all schools receiving federal Title I funds and to identify those schools that do not make annual progress toward 100% proficiency by 2014. Schools are identified as Program Improvement (PI) schools after two consecutive years of not making adequate yearly progress (AYP). 10 United States Department of Education. No Child Left Behind Act: Part A Sec. 1116.b.8.B. Available online at [www.ed.gov/policy/elsec/leg/esea02/pg2.html#sec1116](http://www.ed.gov/policy/elsec/leg/esea02/pg2.html#sec1116).

11 We report here on the number of California middle schools and high schools in at least their fifth year of Program Improvement in the 2006-2007 school year.

## California's Pathway to College 2008

Many California students are not successfully completing their K-12 education and moving on to college. The state's most recent data reports on the progress of the Class of 2008. More than half a million students enrolled as 9th graders in California public high schools in the fall of 2004. In June 2008, 376,000 students graduated. The original class shrunk by more than a third in four years. California now graduates a smaller proportion of its 9th grade class than most other states.

The pathway chart below displays how the cohort of students enrolled as 9th graders in fall 2004 shrank as it moved through the system. The 9th Grade column represents a cohort of 100 students who were California 9th graders in fall 2004. The next three columns show that the number of students in the group diminished every year, until only 76 remained by 12th grade. The Grads 2008 and A-G Grads columns indicate that only 65 members of the original group of 9th graders graduated from high school in 2008 and only 24 of them had completed the "A-G" courses required to attend a four-year state university. The final three columns show how many California public high school graduates enrolled in community college, a California State University, or a University of California in fall 2008.<sup>12</sup>



Source: California Basic Education Data System (CBEDS) and California Postsecondary Education Commission (CPEC)

<sup>12</sup> Data on the graduation rates of students in the Class of 2008 come from the California Basic Education Data System (CBEDS). See Data and Definitions: A Technical Appendix at [www.edopp.org](http://www.edopp.org).

**Principal Researchers**

Sophie Fanelli  
Melanie Bertrand  
John Rogers  
David Medina  
Rhoda Freelon

**Design and Production**

Nery Orellana  
Jared Planas  
Jessie Castro  
Carolyn Castelli



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This report can be accessed online at <http://www.edopp.org>

For information about the sources used for this legislative report, please see the Data and Definitions: A Technical Appendix document online at <http://www.edopp.org>

For further information, contact UCLA IDEA  
phone: (310) 206-8725; fax: (310) 206-8770; email: [idea@ucla.edu](mailto:idea@ucla.edu)