

CONDITIONS OF EDUCATION IN CALIFORNIA 2008



Policy
Analysis for
California
Education

Acknowledgments

This volume represents PACE's effort to sustain public focus on a long-term reform agenda grounded in rigorous objectivity, careful analysis, and innovative policy thinking. This study was funded by the generous support of the William and Flora Hewlett Foundation and the James Irvine Foundation.

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Policy Analysis for California Education (PACE) is an independent, non-partisan research center based at the University of California Berkeley, the University of Southern California, and Stanford University. PACE seeks to define and sustain a long-term strategy for comprehensive policy reform and continuous improvement in performance at all levels of California's education system, from early childhood to post-secondary education and training. To accomplish this goal, PACE bridges the gap between research and policy, working with scholars from California's leading universities and with state and local policymakers to increase the impact of academic research on educational policy in California.

Now in its 25th year, PACE:

- publishes policy briefs, research reports, and working papers that address key policy issues in California's education system.
- convenes seminars and briefings that make current research accessible to policy audiences throughout California.
- provides expert testimony on educational issues to legislative committees and other policy audiences.
- works with local school districts and professional associations on projects aimed at supporting policy innovation, data use, and rigorous evaluation.

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Conditions of California Education, 2008

David N. Plank
Policy Analysis for California Education

IN MARCH 2007, GOVERNOR ARNOLD SCHWARZENEGGER DECLARED THAT 2008 WOULD BE THE “YEAR OF EDUCATION” IN CALIFORNIA. A WISE OBSERVER OF THE EDUCATION POLICY SYSTEM SOON POINTED OUT THAT THE ONLY CERTAIN IMPLICATION OF THE GOVERNOR’S DECLARATION WAS THAT 2007 WOULD NOT BE THE YEAR OF EDUCATION. This proved to be true, and—as it turned out—2008 was not the “Year of Education” either. Some progress has been made on discrete issues including the development of a student-level data system, but the daunting challenges facing California’s education system remain to be addressed.

Most observers of California’s education system agree that major changes will be needed to bring about big improvements in the performance of the state’s schools. The release of the “Getting Down to Facts” (GDTF) studies in 2007 set the table for these

changes, providing a thorough diagnosis of the state’s educational challenges and defining the agenda for systemic educational reform. The Governor’s Committee on Educational Excellence (GCEE) released their own report early in 2008, proposing a thoughtful and comprehensive strategy for reform that promised dramatic improvements in the performance of California’s schools and students.

Both the GCEE and the directors of GDTF recognized that improving the performance of California’s education system would require a large increase in the quantity of resources that the state provides for the education system. They also agreed that simply putting more money into the state’s present system would not lead to dramatic improvements in system performance. They therefore proposed a grand bargain, under which the state would provide a substantial increase in funding for schools while simultaneously requiring significant changes in the way the education system operates.

The odds that such a bargain would be struck grew longer with the advent of a severe budget crisis at the beginning of 2008, and fell practically to zero when Governor Schwarzenegger walked away from the GCEE report. Some lingering hopes remained for progress on relatively low-cost but strategically important changes, including the development of a comprehensive education data system and the consolidation of categorical funding streams, but significant action on even these fronts has also been deferred.

The most significant policy development of 2008 was instead a new mandate from the State Board of

The need for systemic improvement in California's education system nevertheless remains urgent. The performance of California's students continues to lag behind students in other states, and the achievement gaps that threaten to leave many of the state's young people behind remain wide.

Education that requires all students to be tested in Algebra in the eighth grade. The Algebra mandate exemplifies California's search for "silver bullet" reforms, and further undermines the comprehensive reform strategy laid out by GDTF and GCEE. As the state and local school districts wrestle with the task of preparing all students for a new assessment, they will have even less energy for other, more ambitious reforms.

The need for systemic improvement in California's education system nevertheless remains urgent. The performance of California's students continues to lag behind

students in other states, and the achievement gaps that threaten to leave many of the state's young people behind remain wide. The loss of momentum brought about by the failure of school reform in 2008 raises the stakes even higher, but for now there is little evidence that California is ready to confront the challenge.

Conditions of Education in California

From 1983 until 1996 PACE published the annual *Conditions of Education in California*, which provided a review of recent policy developments in California's education system along with a compendium of data on the performance of the system. At the time, *Conditions* was the leading source for educational data and policy analysis in the state, and its appearance was widely anticipated.

In the intervening decade, sources of educational data and policy analysis have proliferated in California. The roster of organizations and university centers conducting education policy research continues to expand, and new reports addressing different aspects of the educational challenge facing our state appear with startling regularity. A vast array of educational data is available on the web and from other sources. The role that *Conditions of Education* might play in California's education policy conversation has consequently shifted.

In re-launching *Conditions of Education*, we aim to build on PACE's unique strengths to produce a report that keeps the big picture in focus. Educational reform may advance under a variety of banners, including legislative action, lawsuits, and ballot initiatives. No matter how reform moves forward, though, positive change must be based on an accurate diagnosis of the issues facing California's education system, and on a comprehensive strategy for educational improvement. *Conditions of Education* is intended to provide that diagnosis, and to sustain public focus on a long-term reform agenda grounded in the rigorous objectivity, careful analysis, and innovative policy thinking for which PACE is known.

Outline of the Volume

In this edition of *Conditions of Education* we have asked six of the leading academic authorities on education policy in California to address key issues facing the state's education system, focusing their attention on critical indicators of current performance and on specific policy changes that would lead to

sustained improvement. Our goal is to identify benchmarks that can be tracked over time, including indicators of system performance and also indicators of policy progress toward comprehensive educational reform. Subsequent editions will return to these same indicators, to determine whether California's education system is moving in the right direction.

In the first chapter, Patricia Gándara and Megan Hopkins focus on the wide achievement gaps that persist in California's education system. Most white and Asian students perform rela-

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tively well on state and national assessments, while the performance of Latino, African American, and Native American students lags far behind. California's failure to ensure academic success for the majority of the state's students has dire implications not only for the students themselves, but for California's economic and political future.

The most important determinant of student learning is the quality of teaching, and providing excellent teachers in all of California's classrooms should be the top priority for those who seek to improve the performance of schools and students. Susanna Loeb and Marsha Ing present a rich array of data on California's teachers in the second chapter, with a particular focus on the obstacles that must be overcome to ensure that the schools and students with the greatest needs are fully staffed with great teachers.

Bruce Fuller and Lynette Parker look at achievement gaps from a different angle in the third chapter, reviewing performance trends in California's schools and assessing state policies aimed at improving the performance of schools where performance falls short. There has been significant improvement in the performance of schools and students over time, according to California's Academic Performance Index (API), but gaps in performance between schools serving more and less privileged students have not narrowed and state efforts to assist low-performing schools are mostly ad hoc and ineffective.

California nevertheless continues to raise the bar for students. It is now generally assumed that all students should graduate from high school, and there is growing pressure to increase the number of young people who move on to post-secondary education (PSE) and training. In the fourth chapter, Norton Grubb surveys the complex array of issues that must be addressed in order to expand access to PSE and ensure that all students are prepared for college and careers.

Jon Sonstelie offers a brief description of California's complex system of educational finance in the fifth chapter. He shows that California provides relatively few resources per student when compared with other states, and that the amount of resources provided for each student differs significantly but not always systematically across districts with different characteristics, including size and the share of students living in poverty.

Perhaps the main obstacle to comprehensive reform in California's education system is the overlapping network of institutions that share responsibility for educational governance. In the final chapter of the volume Dominic Brewer, Icela Pelayo and June Ahn survey the many ways in which the state's governance system impedes change, and present new data on how California's governance system is perceived by key stakeholders.

A Strategy for Comprehensive Education Reform

Three key themes run through all of the chapters, drawing together a diverse set of policy recommendations:

- California's education system must become a learning system committed to continuous improvement. The key features of a learning system include clear and specific goals; timely, reliable information on performance at all levels; strong capacity to support change; decision-making flexibility; and aligned incentives. Instead of demanding compliance with state mandates, a continuously improving system would support local innovation and experimentation, rigorous evaluation of new policies and practices, and the establishment of networks and partnerships to share information among schools and school districts.
- Local schools and school districts should have additional flexibility to decide how best to use resources to address the needs of their students. The proliferation of categorical funding streams and policy mandates from the state imposes large compliance burdens on local administrators. Removing these burdens and allowing schools and school districts to respond to local circumstances would open the door to improved performance, especially as the state develops mechanisms to share knowledge more widely.
- Additional resources must be targeted to the schools and students who need them most. California's future prosperity relies on a sufficient supply of qualified workers, and on an engaged and productive citizenry. The performance of all of the state's students must be improved, but California needs to focus especially on the young people who are now farthest behind.

The authors of the chapters that follow suggest many steps that the Governor and the Legislature can take now to improve the educational opportunities that California provides for our young people, while advancing the long-term goal of comprehensive educational reform.

Together, these three themes represent the key elements of a long-term strategy for systemic change and dramatically improved performance in California's education system. Consistency with these principles is a key criterion for evaluating whether specific reform proposals can be expected to move California closer to, or further from, the goal of comprehensive educational reform.

Looking Forward

The “Year of Education” remains in California’s future, and all signs suggest that it won’t arrive soon. The grand bargain foreseen by GDTF and GCEE has been postponed, but the urgency of comprehensive educational reform has not diminished. The authors of the chapters that follow suggest many steps that the Governor and the Legislature can take now to improve the educational opportunities that California provides for our young people, while advancing the long-term goal of comprehensive educational reform. PACE remains committed to that goal, and the revival and regular publication of *Conditions of Education* is a key part of our strategy for accomplishing it. In future editions we will track California’s progress toward the restoration of an education system that keeps the promise of future prosperity for young people, and for our state.

Benchmarking Improvements for Students of Color¹ and English Learners

Patricia Gándara
Megan Hopkins
University of California, Los Angeles

CALIFORNIA IS IN TROUBLE. AS IN OTHER STATES, THERE IS A WIDE GULF IN STANDARDIZED TEST ACHIEVEMENT LEVELS BETWEEN LATINOS, AFRICAN AMERICANS, AND ENGLISH LEARNERS WHEN COMPARED TO WHITE AND ASIAN STUDENTS. IN CONTRAST TO MOST OTHER STATES, HOWEVER, THESE LOWER ACHIEVING GROUPS COMPRISE THE MAJORITY OF

CALIFORNIA'S STUDENTS. Without significant improvements in the academic achievement of these groups, the social and economic welfare of the state is at risk, along with that of the students.

Test scores have improved slightly among all student groups over the last few years, but there has been little to no improvement in achievement gaps in English Language Arts and Mathematics. Gaps also remain in access to specialized programs such as Gifted and Talented Education (GATE), passage of the

California High School Exit Exam (CAHSEE), drop out rates, completion of college preparatory courses, and college attendance rates. To put California on a path to greater equality of educational opportunity, and improved academic outcomes for the state as a whole, will require that we set benchmarks and invest resources to support systematic academic improvement for disadvantaged racial/ethnic groups and English Learners. It will also require that policies be set to improve these students' access to educational opportunity and that the necessary resources be dedicated to implementing those policies.

This chapter reviews existing state achievement data; shows evidence of significant inequalities in educational opportunity; and suggests critical ways in which these inequities can be addressed.

Current Conditions of Education in California

In 2007, almost 57 percent of all K-12 students in California were African American, Latino, or Native American—the three racial/ethnic groups that fare least well in our public schools. One quarter of the student body, or 1.56 million students, were English Learners—the students among all racial/ethnic groups who fare most poorly of all.

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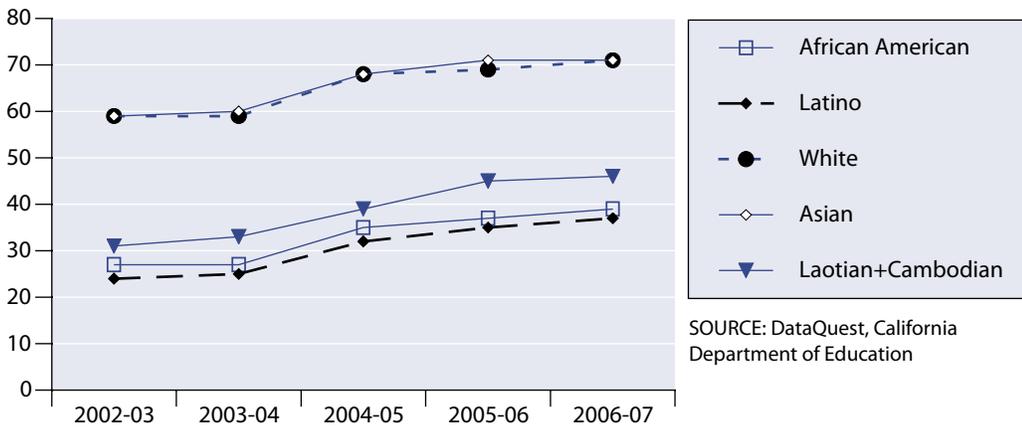
Performance on the California Standards Test (CST)

While only 39 percent of African Americans and 37 percent of Latinos scored proficient or higher in fourth grade on the CST in English Language Arts, 71 percent of both white and Asian students scored this high in 2007. (See Figure 1.) Looking cross-sectionally from 2003 to 2007, there appears to be a modest narrowing of achievement gaps, though the distance between the two groups remains very large. A quasi-cohort analysis, however, in which we assume that most fourth graders in 2003 became eighth graders in 2007, shows virtually no closing—and even some widening—of the achievement gaps. For example, the gap in English Language Arts scores between white and

Asian students as compared to Latino students was 35 percent for fourth graders in 2002-2003, and 36 percent for eighth graders in 2006-2007. The gap between white and Asian students as compared to African American students in this cohort increased by three percentage points, and the gap between white and Asian students as compared to Southeast Asian students increased by five percentage points.² (See Figures 1 and 2.) We do not include English Learners in Figures 1 and 2 because data on English Language Arts for English Learners cannot be considered reliable.

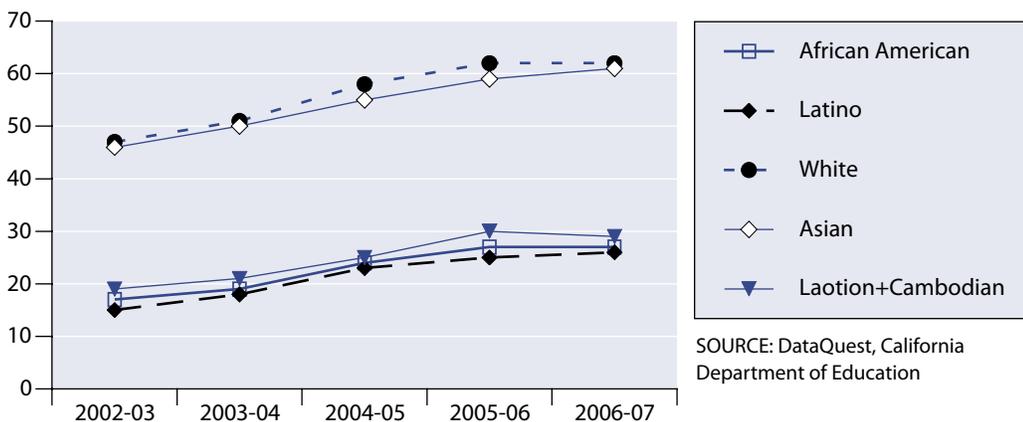
The gaps between groups on the CST in fourth grade Mathematics are similarly wide—83 percent of Asians and 70 percent of white fourth grade students

FIGURE 1. Percent Scoring Proficient and Advanced, Fourth Grade English Language Arts CST



SOURCE: DataQuest, California Department of Education

FIGURE 2. Percent Scoring Proficient and Advanced, Eighth Grade English Language Arts CST



SOURCE: DataQuest, California Department of Education

FIGURE 3. Percent Scoring Proficient and Advanced, Fourth Grade Mathematics CST

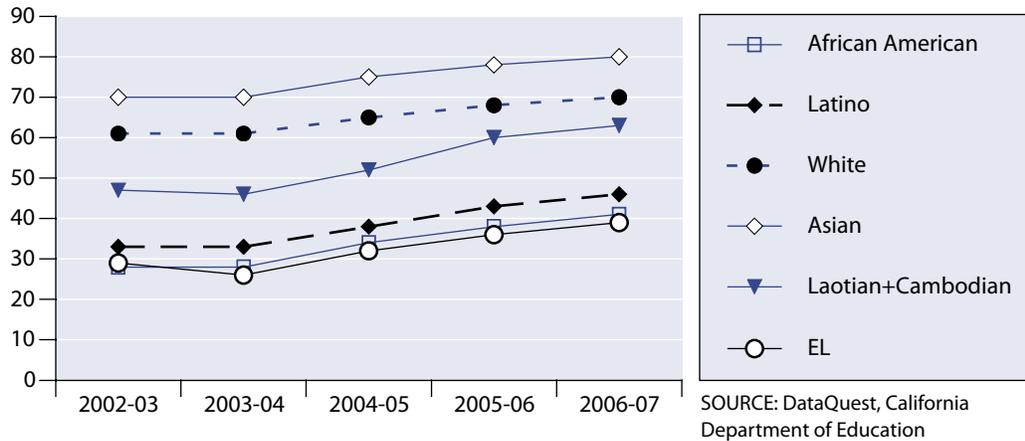
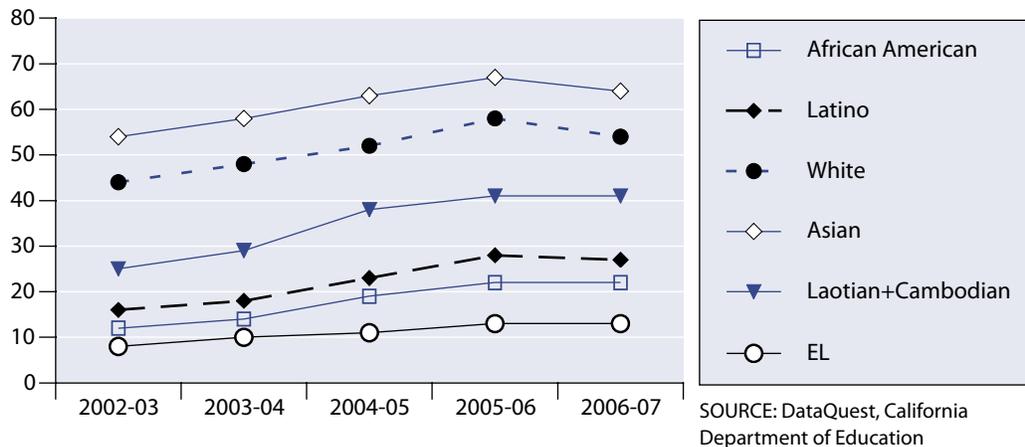


FIGURE 4. Percent Scoring Proficient and Advanced, Seventh Grade Mathematics CST



scored at least proficient, while only 46 percent of Latinos and 41 percent of African Americans in the same grade scored similarly well. (See Figure 3.) Here we also include rates for English Learners, whose math scores are less affected by language proficiency than their English Language Arts scores. English Learners scored the lowest of all groups, with only 39 percent proficient or higher.

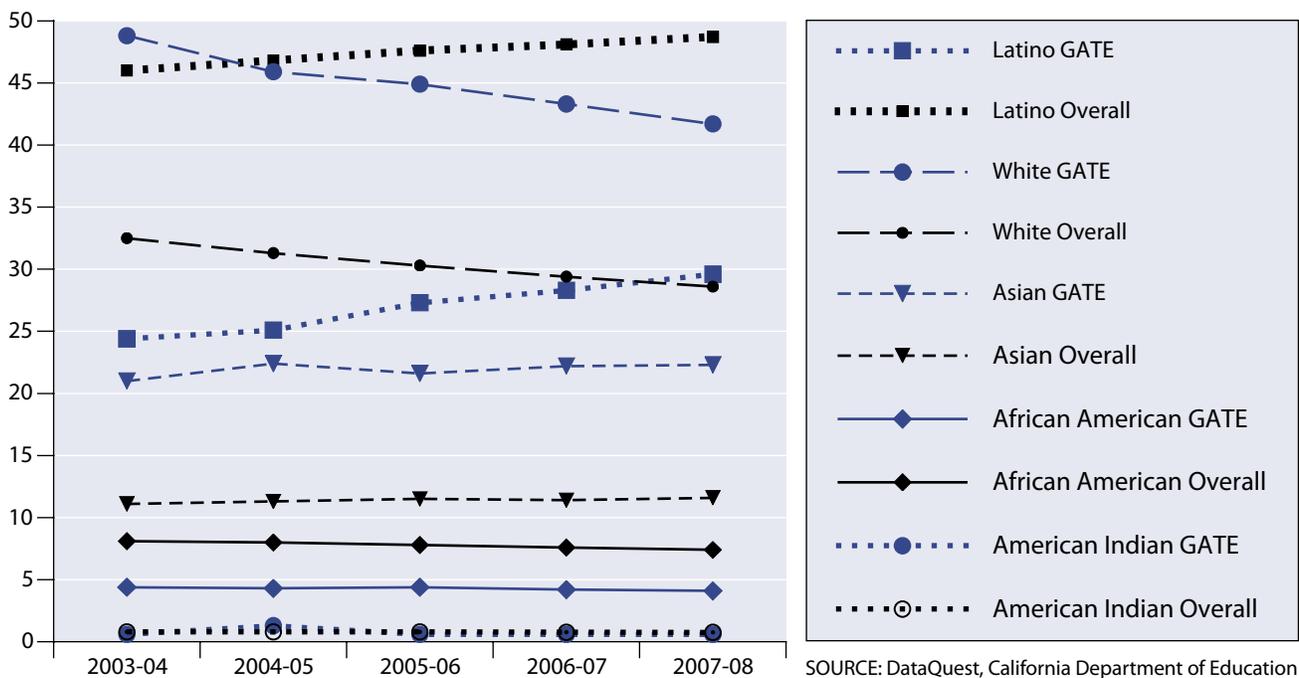
A quasi-cohort analysis of these data on mathematics achievement reveals a trend as disturbing as that for English Language Arts. For purposes of this analysis, we assume that most fourth graders in 2003 were seventh graders in 2006.³ As fourth graders in 2003, 28 percent of African Americans and 29 percent of English Learners scored proficient or above on the CST in math. As seventh graders in 2006, only

22 percent of African Americans and 13 percent of English Learners scored proficient or above. (See Figure 4.) The scores of Asian and white students also declined between the fourth and seventh grades, but by smaller amounts.

Enrollment in Gifted and Talented Education (GATE) Programs

Another measure of both achievement and access to educational opportunities is enrollment in GATE programs. For students identified as gifted and talented, these programs have been shown to predict strongly for early access to algebra and college preparatory class placement.⁴ However, not all groups are equitably represented in gifted and talented programs, thus barring equal access to these educational

FIGURE 5. Enrollment in Gifted and Talented Education Programs, with Overall Enrollment Comparisons



SOURCE: DataQuest, California Department of Education

opportunities. Figure 5 shows the differential rates at which groups of students are selected for participation in the program.

White and Asian students are overrepresented in these programs, by as much as 100 percent, relative to their representation in the population. Latinos and African Americans are very seriously underrepresented, by about 40 to 50 percent. These rates of representation have remained stable over

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the last four years. The state education code requires that students be selected for GATE on the basis of multiple criteria; academic performance should not be the sole factor determining selection, nor should it even be implicated in all cases.⁵ Yet evidence from national studies has shown that teachers

have great difficulty identifying talents other than academic achievement, and so students from groups that normally do not perform at high levels on academic achievement tests are persistently under-identified for participation in GATE.⁶

High School Students and the California High School Exit Exam (CAHSEE)

There has been even less evidence of academic improvement for California’s high school students than there has for elementary school students. Test scores have remained relatively flat, with large gaps between racial/ethnic groups. For example, in 2007, 55 percent of white and Asian students scored at the level of proficient or advanced in English Language Arts on the CSTs, but less than half that many (23 percent) of African American and Latino students scored proficient or advanced on the test.

The California High School Exit Exam (CAHSEE) is another important benchmark. While the overwhelming majority of white and Asian students pass these exams in the tenth grade, many Latinos and African Americans do not. (See Figures 6 and 7.) English Learners are the least likely of all students to pass the exam. Evidence has been mounting, moreover, that performance on the CAHSEE is correlated with higher drop-out rates among those students who do not pass, or who fear not passing. National studies have shown a clear link between high school exit exams and increased drop out rates.⁷

From 2004 to 2007, there was a general upward trend for all groups, with the exception of English Learners, in the percent of tenth graders passing the CAHSEE. Nevertheless, of those students in the

Class of 2008 who have yet to pass the English Language Arts CAHSEE, 62 percent are English Learners, 75 percent are Latino, 13 percent are Black, 5.8 percent are white, and 4.2 percent are Asian. Among the students who have yet to pass the Mathematics CAHSEE, 44 percent are English Learners, 70 percent are Latino, 17 percent are Black, 9.8 percent are white, and 0.1 percent are Asian.⁸

Drop-Out Rates

Drop-out rates are another indicator of how well students are faring in the state’s education system. Exact rates are difficult to track, but they are exceedingly high for students of color and English Learners. Recently released statewide student-level data suggest a graduation rate of 67.6 for all California students, and an adjusted four-year derived drop out rate of

24.2 percent. These new data also reveal “disturbingly high”⁹ drop-out rates for African American and Latino students, two to three times higher than among white and Asian students.

A-G Coursework Completion¹⁰

Completion of A-G coursework—the required courses to gain access to four-year public colleges in California—is another critically important benchmark. Only 4 percent of Bachelor’s degrees from California’s public institutions went to African Americans in 2006 although they represented 7.8 percent of the 18 to 24 year-old population; and only 17 percent of these degrees were awarded to Latinos even though they made up 43 percent of that age cohort.¹¹ A primary reason that more students of color do not complete Bachelor’s degrees is because they are not in the pipeline

FIGURE 6. Percent Passing in Tenth Grade, English Language Arts California High School Exit Exam

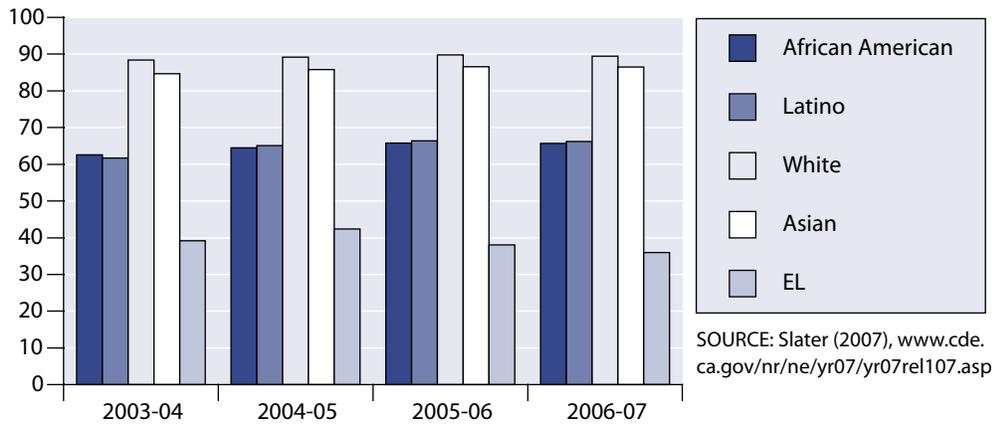


FIGURE 7. Percent Passing in Tenth Grade, Mathematics California High School Exit Exam

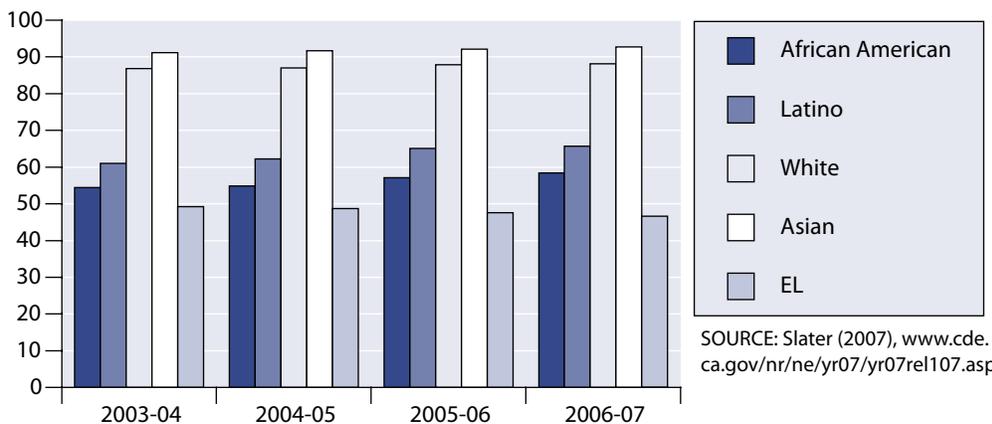
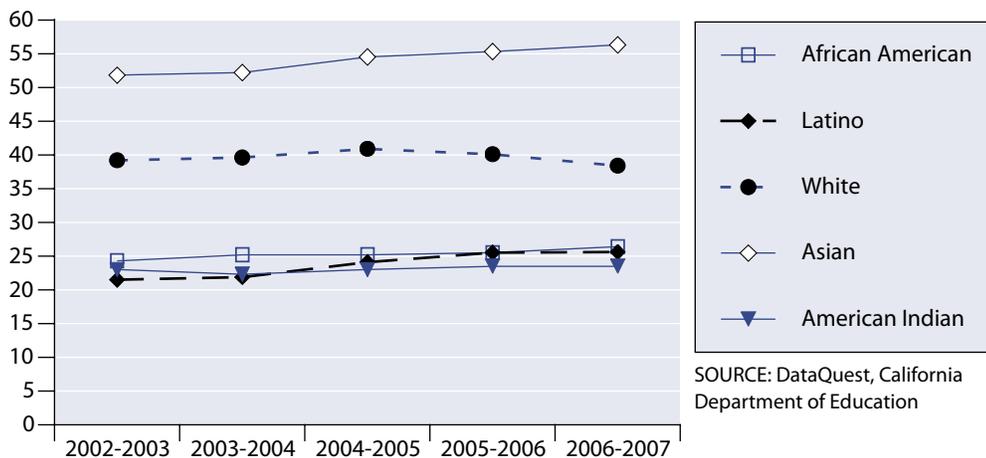


FIGURE 8. Percent of High School Graduates who Completed A-G Required Courses



for college attendance. The most important indicator of a trajectory toward higher education is whether students complete the required A-G courses. Figure 8 shows the very large and consistent discrepancies among racial/ethnic groups on this measure. Data are not available for English Learners.

Conditions and Consequences of Inequitable Opportunity

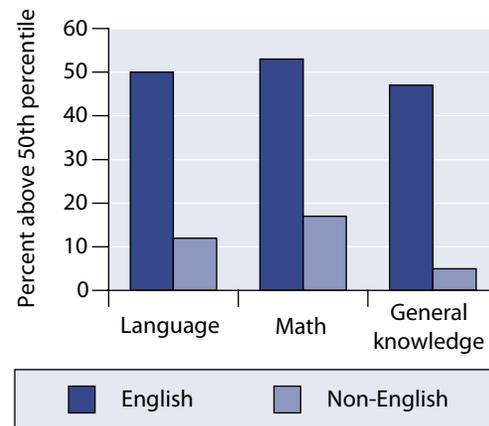
The reasons for the very large disparities in educational achievement between groups of students are myriad. They are certainly related to the vast differences in education and income among families of students from different racial and ethnic groups, which translates into differences in the availability of out-of-school resources and supports for students. Almost one-third (27.8 percent) of African American children and one-fourth (24.6 percent) of Latino children in California are living below the poverty line set by the federal government. This compares to 8.2 percent for white children and 10.8 percent for Asians.¹² The effects of poverty on school readiness among students from all racial and ethnic groups are well-documented.

Figure 9 shows the disparities in kindergarten readiness for California’s English Learners (currently more than 40% of the entering kindergarten class) as compared to students for whom English is their first language. English Learners and low-income children arrive at school substantially behind other students, and few schools are able to provide them with the additional time and resources they need to catch up with their more advantaged peers.

Differences in educational outcomes are also highly correlated with the learning opportunities

provided in schools. The schools that are attended by African Americans and Latinos have been shown to be inferior to those attended by white and Asian students along a number of different dimensions—curricular offerings, percent of students in poverty, and—perhaps most importantly—the percent of teachers who are highly qualified and experienced in the subjects they teach. For example, Latinos and African Americans are much more likely than white students to be taught by teachers who are teaching subjects different from those in which they were certified—two and half times more likely for Latinos, and over four times more likely for African Americans.¹³ Latinos and African Americans are also four times more likely than Whites to attend schools that are in Program Improvement status.

FIGURE 9. Cognitive Skills of California’s entering Kindergartners, 1998



Note: Results are weighted (C1CW0).
SOURCE: ECLS base year data for California public school kindergartners (N=2826). Gándara et al 2003.

English Learners are even more disadvantaged. These students are more likely than other students to attend schools with inferior facilities, to have teachers who are not prepared to teach them (and who receive little or no professional development to aid them in this task), to be in racially and linguistically isolated settings with other English Learners (thus limiting their opportunities for language acquisition), to lack adequate materials and text books, and to be tested with assessments that are unreliable and misleading.

Many high-achieving African American and Latino students begin disengaging from school in the elementary grades.¹⁴ English Learners are a special risk category for disengagement because of feeling marginalized when they cannot fully participate in the classroom with English speaking peers. There is great debate about the nature and causes of school disengagement among youth, but certainly attending schools with insufficient resources and high rates of teacher turnover (inhibiting the development of deep relationships with students) must be contributing factors.

Policy Recommendations to Address these Inequities

California expects all of our students to meet the same high standards, but it will take more effort and require more time to help some of our students to meet those goals. Simply exhorting students and teachers to do better without the tools to accomplish the task is unlikely to produce significant gains. We therefore argue for two key changes to policy—and for the resources necessary to realize them—that must be in place before we can expect any significant closing of achievement gaps.

1) California should set benchmarks to measure progress on equalizing resources and closing achievement gaps.

Although multiple resources will be needed to address the problem of inequity in California's schools, we recommend that the state focus on three crucial areas: (1) delivering high quality, culturally and linguistically appropriate preschool instruction for low income, African American, Latino and English Learner students; (2) securing a more equal distribution of appropriately qualified and experienced teachers (e.g., teachers with the expertise to address the specialized needs of English Learners) who are nominated by their peers as superior teachers; and

(3) adding sufficient instructional time and targeted summer enrichment so that students who are behind can catch up with their peers who face fewer learning challenges.

There is now a strong movement to provide universal preschool. In our view, however, it is important to target high-quality all-day preschool for the most academically disadvantaged students first, in order to ensure that these children have adequate resources to succeed. Moreover, if parents are to be enlisted in supporting their young children's education, it must be culturally and linguistically appropriate, building on home language and cultural practices.

A better distribution of teachers will almost certainly require creating more attractive working conditions at schools wishing to attract a greater share of highly-qualified, experienced teachers. Improved working conditions include the provision of strong leadership and the creation of collaborative professional learning communities at school sites, within which teachers can build on each others' strengths and teach one another. Such collaborative opportunities are also likely to reduce teacher turnover.¹⁵ Those schools with the greatest needs should be prioritized in the distribution of materials and facilities funds, and the schools should be provided with flexible use of that funding. Consolidating federal and state funds, such as Program Improvement and QEIA funds, could enable the purchasing of additional instructional time for those students who need it most. This could sometimes include the creative use of experts other than classroom teachers.

Measurable targets for closing achievement gaps on a wider variety of indicators must also be set and monitored. For example, the state should monitor graduation rates, A-G coursework completion, enrollment in GATE programs, and enrollment in post-secondary institutions to ensure equitable representation by ethnicity.

It is both reasonable and advantageous to students and to the state to measure students' growth in English proficiency. The California English Language Development Test (CELDT) provides important

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*An engagement index
can point to where
connections to school are
breaking down, creating
an early warning signal
for future schooling
problems and providing
specific data for
schools to act on.*

information about students' progress in developing English language proficiency. It is important, however, to recognize the limitations of the CELDT for predicting command of academic English. For example, in 2007, 32 percent of tenth grade English Learners were able to pass the CELDT at a level equivalent to "proficient," but only 4 percent of English Learners in the tenth grade were able to meet the "proficiency" standard in English Language Arts on the CST. The CELDT should not be considered a good measure of students' ability to manipulate the English language in academic settings, and students who score proficient on CELDT should not be expected to succeed in non-English Learner classrooms and tests without additional language development support. Furthermore, the pressure to simply reclassify students as non-English Learners more rapidly, without gauging the effects on their longer-term academic outcomes, must be moderated. One recent study in California conducted in a large urban district found that students who were reclassified in K-8 fared no better than those at similar CELDT levels that were not.¹⁶

Although the CELDT suggests that all English Learners can be expected to attain full proficiency in English within five years, a significant body of literature has now established that this timetable may not be realistic.¹⁷ In some cases it may require at least two years at each level to move from basic to proficient and from proficient to advanced levels. This needs to be taken into consideration in accountability formulas and in setting benchmarks for English Learner student progress.

2) California's accountability system should be improved to include multiple "opportunity measures."

A strong accountability system will necessarily play an important role in charting the state's progress, but it is critical to consider whether it makes sense to have an accountability system that punishes schools and teachers for failing to do things that they have neither the resources nor the know-how to accomplish. We should also be careful of an accountability

system that punishes students for failure to pass tests that they cannot fully understand because of limited English proficiency. To date, California's accountability system has focused almost exclusively on achievement score gains on the California Standards Tests (CSTs) and the CAHSEE to chart the progress of its students. In our view, several other accountability measures should be added or substituted at the K-8 and 9-12 levels if California is to make significant progress with the students our schools most need to reach. Currently, Latinos, African Americans, Native Americans,¹⁸ and some Asian groups (most notably Laotian, Cambodian, and Hmong) perform at significantly lower levels than other students in the state. Many educators are extremely concerned about this lag in performance and have focused efforts on meeting test score targets so intensively that other important aspects of grade-level curriculum have been overlooked.¹⁹ Such an exclusive focus on raising reading and math scores risks shortchanging these students' education and increasing the likelihood that they will drop out. Some of the things that engage students most in school—for example, the arts and athletics—are often the first things to be cut in a high stakes test-driven accountability system.

Decades of research have shown that even very high-performing students often prefer classes that allow them the opportunity to be creative and to use their hands and bodies. Music, art, theater, and career-technical classes have been shown to increase engagement and enjoyment of school.²⁰ Even science, which is potentially the most "hands-on" of the subject areas, and also an excellent avenue for developing language²¹, is given very little attention in California's elementary schools. Because teachers under the existing accountability system are obliged to focus on what is tested, it is critical that accountability measures tests take account of all aspects of the curriculum that we think are important for students to learn, including arts, science, and civics. Further, we must ensure that participation in science, arts, and physical education is equitable across all student groups and at every grade level. A recent study in California showed that arts education is very inequitably distributed across poor and middle class schools, with low income students having less access to arts education.²²

We thus argue for the state to develop an assessment of, and set of standards for, student engagement

in grades 4 through 12. Other states have designed and administered surveys of this type along with their annual academic assessments. Such surveys allow the state to track the degree to which students are engaged in their schooling, which is a critical predictor of learning and essential to drop-out prevention. An engagement index can point to where connections to school are breaking down, creating an early warning signal for future schooling problems and providing specific data for schools to act on. An accountability system that included student engagement as a measure would ensure that students are at least at a moderate level of engagement in the fourth grade and that school engagement is sustained at each grade thereafter, with particular focus on under-engaged groups.

California should make assessments available in the first language of students where five percent or more of second language students have been instructed in a language other than English. This should include primary English speakers who choose to learn in a second language as well. In cases where students do not have a strong command of English and have not been instructed in a first language, alternative assessments to written tests (such as performance measures) should be used until students reach an advanced level of proficiency in English.

For those students who are learning in or have learned through a second language, it makes sense to include a measure of academic growth in that language in the state's accountability system. Contrary to popular perception, Proposition 227 ("the Unz initiative") did not outlaw bilingual education in California, and about 7 percent of English Learners remain in bilingual programs, in addition to many more students who are in dual language programs. California has made great progress in developing standards and assessments in Spanish, the first language of at least 85 percent of the state's English Learners. We thus argue that the state should offer appropriate assessments—either in students' primary languages, through modified English language tests, or via performance assessments—of the same curricular areas on which all other students are tested. The No Child Left Behind Act explicitly encourages states, where appropriate, to measure academic achievement in languages other than English, and several states with large numbers of English Learners are already doing so. Finally, we argue that California's accountability

system should recognize schools that are integrating multiple languages into instructional offerings, and should reward students who are working toward bi-literacy. This would allow California to highlight the academic strengths of some students who have been overlooked.

Conclusion

It is impossible to imagine that schools alone can close the entire achievement gap that results from great inequalities in income, housing, health care, and access to middle class social capital in an increasingly polarized economy. However, schools can contribute to reducing rather than increasing that gap if the targets are both realistic and

accompanied by critical resources. In a state reeling from a massive budget shortfall, only recommendations that can be practically supported will be considered, and we argue that what has been suggested here is well within the reach of the state to enact.

The evidence is strong that California's schools need more resources and that they need to be able to use those additional resources in creative new ways. It is not the goal of this report, however, to make that case. Rather, we have set out to challenge the state to use existing resources more equitably, and to develop a broader, fairer, and more meaningful set of academic goals to help close the gulf between what is now the majority of the state's students and their more advantaged peers.

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Endnotes

- ¹ There are challenges in selecting an appropriate term that incorporates all students with educational disadvantages without simultaneously being over-inclusive or appearing to equate academic performance with race or ethnicity. We fully acknowledge that some students of color perform at exceptionally high levels, and some white students struggle in school because of social disadvantage. "Students of color" as we use it is meant to convey *socio-economically disadvantaged* students, without becoming overly wordy.
- ² Unfortunately some Southeast Asian groups, particularly Laotian, Cambodian, Hmong, and Mien, do not fare much better than Latinos, African Americans and Native Americans, but data are not always broken out for these groups. Where possible, we have attempted to look at these students as well.
- ³ Here we compare 4th graders with 7th graders, rather than with 8th graders, because at 8th grade students are channeled into different math pathways, making comparisons among different groups of students very difficult.
- ⁴ See Gándara, 2006.
- ⁵ Section 52200 of the California Education code states that "it is in the public interest to support unique opportunities for high-achieving *and underachieving pupils* [italics added] in the public elementary and secondary schools of California who are identified as gifted and talented."
- ⁶ See Callahan et al, 1995; Forsbach & Pierce, 1999.
- ⁷ See Landsberg, 2008; Warren, Jenkins, & Kulick, 2006.

- ⁸ See Slater, 2007.
- ⁹ For more information, see the July 2008 California Department of Education News Release, <http://www.cde.ca.gov/nr/ne/yr08/yr08rel94.asp>. The student-level data by ethnicity is now available for the 2006-2007 school year on DataQuest.
- ¹⁰ The A-G coursework series, which includes fifteen year-long college preparatory courses, is the set of courses required for admission to any school within the University of California and California State University systems.
- ¹¹ See California Postsecondary Education Commission: <http://www.cpec.ca.gov>.
- ¹² See <http://www.kidsdata.org>. The federal poverty threshold is under \$20,000 annually for a family of four in 2007, an extraordinarily low income for California households where the cost of living is among the highest in nation.
- ¹³ UCLA/IDEA and UC/ACCORD, 2007.
- ¹⁴ See Borman, Stringfield, & Rachuba, 1998.
- ¹⁵ See Ingersoll, 2001.
- ¹⁶ See Robinson, 2008.
- ¹⁷ See Hakuta, Butler, & Witt, 2000; Parrish et al, 2006; Linqanti, 2008.
- ¹⁸ While many studies show Native Americans to be at extremely high risk for school failure and for drop out, the state's data often obscure the gravity of these problems, probably as a result of some distortion in the data due to self-nomination for ethnic group categories. Because numbers are generally small on a state-wide basis and the data apparently skewed, we have not regularly included these figures. In order to track the academic performance of Native Americans, we will need to collect more accurate data.
- ¹⁹ See Dobbs, 2004; Zehr, 2007.
- ²⁰ See Eisner, 1987; Fiske, 1999; Deasy, 2002; Shernoff, Csikszentmihalyi, Schneider & Shernoff, 2003.
- ²¹ See De Avila, 1985.
- ²² See Gallagher et al, 2008.

California's Teachers

Susanna Loeb
Stanford University

Marsha Ing
Stanford University

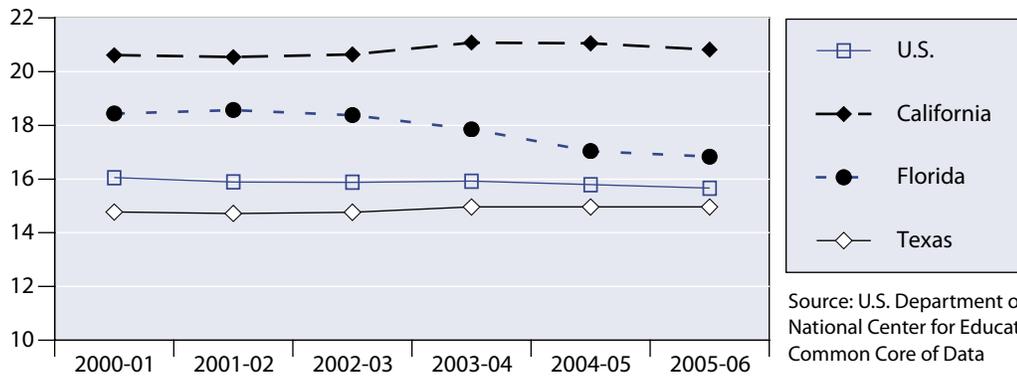
TEACHERS MATTER. WHAT HAPPENS IN CLASSROOMS DETERMINES STUDENT SUCCESS. FINDING WAYS TO RECRUIT STRONGER TEACHERS AND TO SUPPORT TEACHERS IS CRITICALLY IMPORTANT IF CALIFORNIA SCHOOLS ARE TO ACHIEVE THE AMBITIOUS GOALS THAT THE STATE HAS SET FOR THEM. THIS CHAPTER DESCRIBES THE CURRENT TEACHER WORKFORCE IN CALIFORNIA, THE VARIATION IN THAT WORKFORCE ACROSS SCHOOLS, AND TEACHER MOBILITY ACROSS SCHOOLS AND OUT OF TEACHING. We then identify promising policy approaches for improving the quality of teaching in California's schools.

THE TEACHER WORKFORCE

The limited data available on California teachers restricts our ability to describe the teacher labor market, but a number of characteristics are evident. California employs a tremendous number of teachers, but still has fewer teachers per student than most other states. California currently has a higher proportion of novice teachers than it has had in the past, and these novice teachers are concentrated in high-poverty and low-performing schools. High-poverty and low-performing schools also are less likely to employ fully certified teachers, though this difference has diminished over time, as the proportion of emergency certified teachers has dropped throughout the state. Schools have a particularly difficult time recruiting math, science, special education, and bilingual teachers. Salaries for teachers in California are high in comparison to teachers in other states, but they are not nearly as high when compared with workers in other occupations in California, because Californians, on average, receive higher wages.

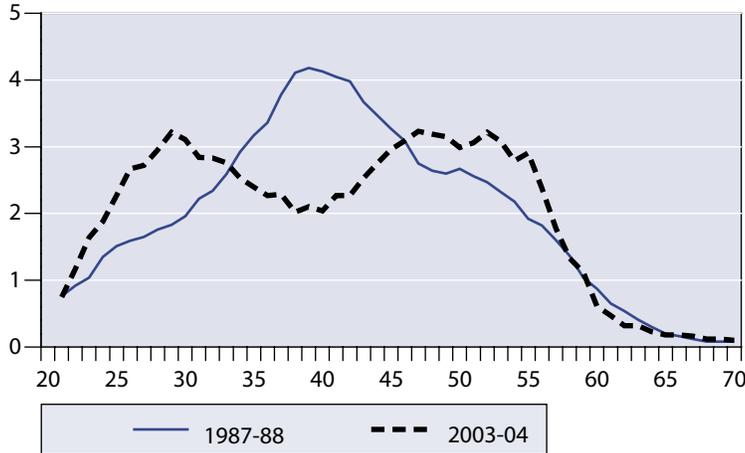
Salaries for teachers in California are high in comparison to teachers in other states, but they are not nearly as high when compared with workers in other occupations in California, because Californians, on average, receive higher wages.

FIGURE 1. Pupil Teacher Ratio by State



Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

FIGURE 2. Age Distribution Over Time for Teachers in California (three-year rolling averages)



Source: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey

Fewer teachers per student in California than in other states

California employs over 300,000 public school teachers, but, as Figure 1 shows, California has a substantially and consistently higher pupil to teacher ratio (21.4) than other states, even comparable states such as Florida and Texas.¹

A bimodal distribution of teachers by age and teaching experience

Figure 2 shows that the age distribution of California teachers has changed dramatically in recent years. During the 1987-88 academic year, the distribution of teachers by age was bell-shaped, with an average age in the early 40s. Sixteen years later, many of those teachers had retired and new teachers had been hired. The current distribution is bimodal, with substantial numbers of relatively young teachers in their early thirties, and similar numbers of older

teachers in their late 50s. These older teachers will be retiring over the next 10-15 years, and the need to replace them will create a very strong demand for new teachers. This demand will be even stronger if California seeks to bring pupil to teacher ratios into line with national averages.

An under-representation of Hispanic, Black, Asian, and male teachers

As Figure 3 shows, the share of female teachers is much larger than the share of female students, and the share of non-white students is much larger than the share of non-white teachers. For instance, the proportion of African-American, Hispanic and Asian students (7, 49 and 8 percent respectively) is far higher than the percentage of African-American, Hispanic and Asian teachers (4, 16, and 5 percent respectively). The imbalance is especially large among Hispanics.

Recent increases in the percent of fully certified teachers

Teacher certification is required in California, as it is in all states. Figure 4 shows the change in the certification status of teachers during the past 10 years. We see a steep decline in the percent of emergency-certified teachers, beginning even before the passage of the No Child Left Behind Act of 2001. In the 1997-98 school year, 87 percent of California's teachers held a full credential. By the 2007-2008 school year this number had risen to 93 percent.

Particularly difficult to fill vacancies in special education and math

Not surprisingly, the supply of teachers in some fields is higher than in other fields. As Figure 5 shows,

FIGURE 3. Gender and Race/Ethnicity of Teachers and Students in California

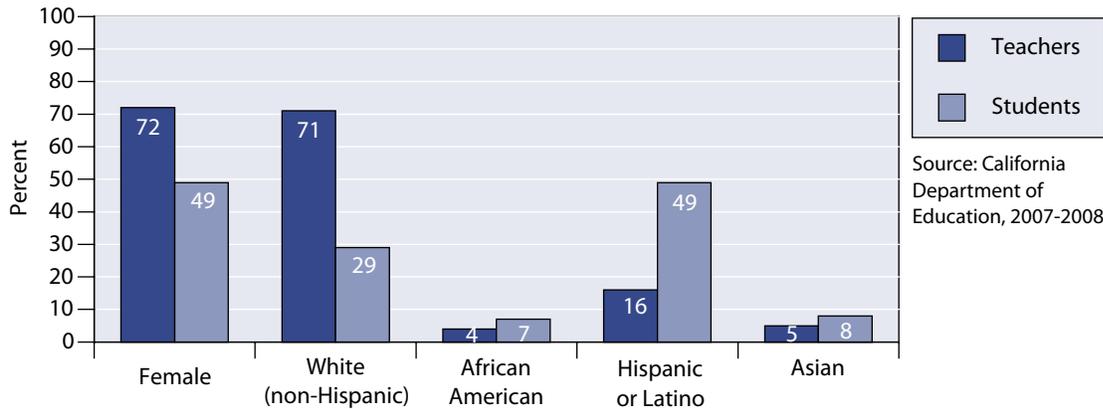


FIGURE 4. Certification Trends Over Time for Each Type

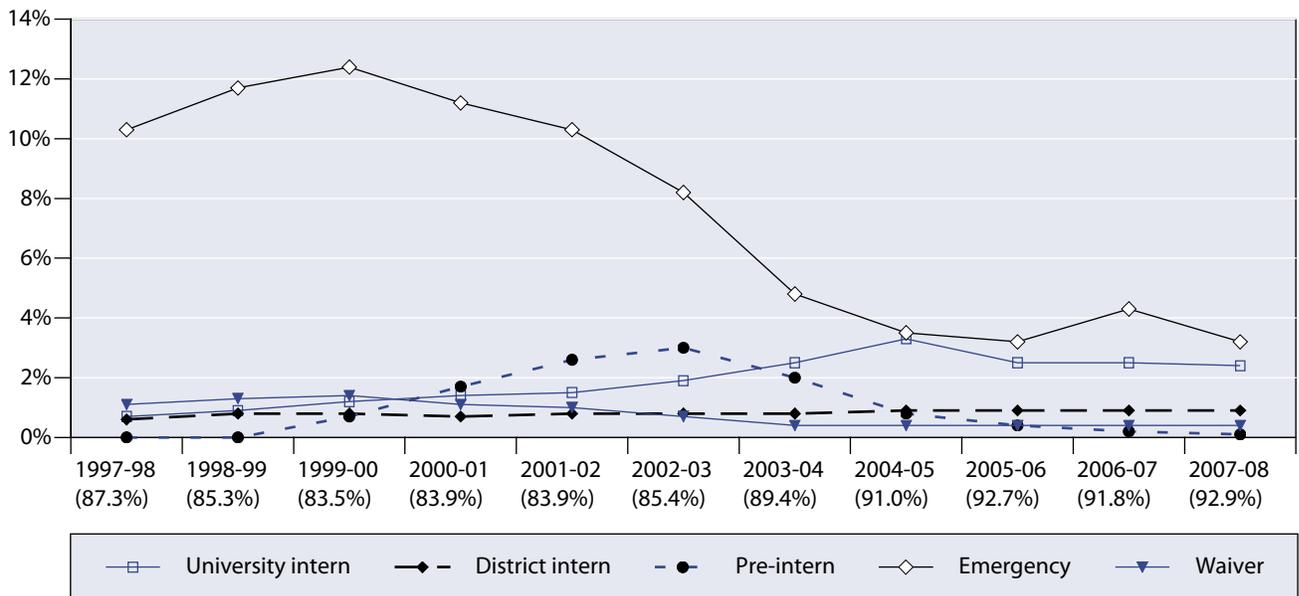


FIGURE 5. The Difficulty of Filling Vacancies by Field

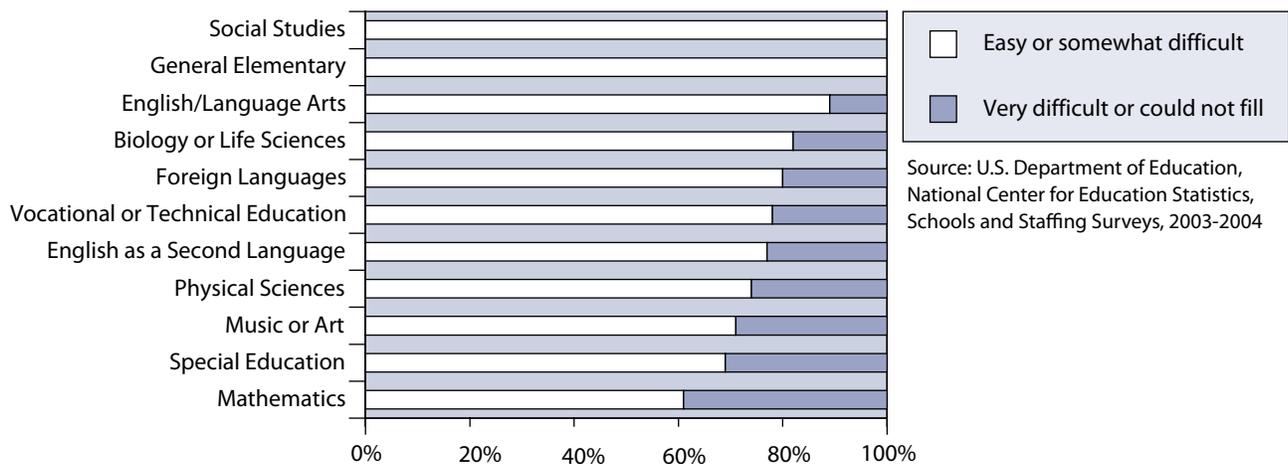


FIGURE 6. Mean Annual Wages

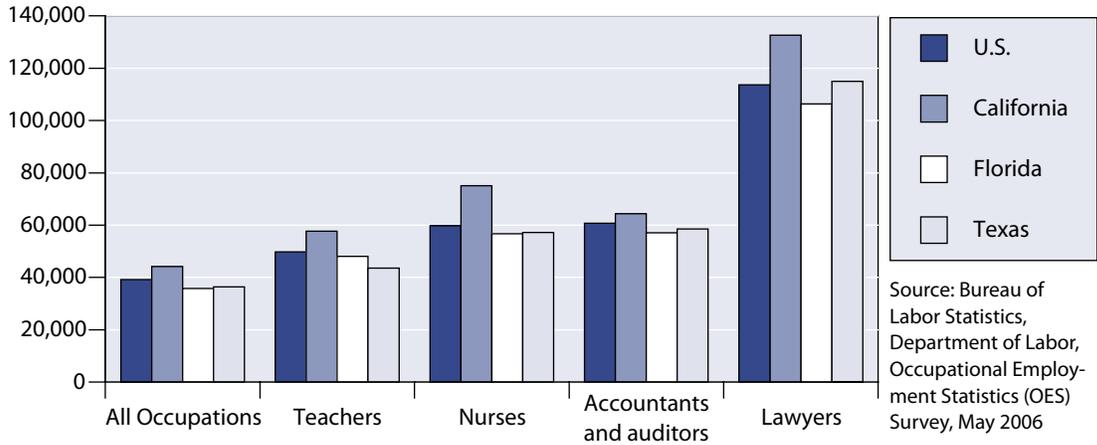


FIGURE 7a. First and Second Year Teachers by Free Lunch School Categories

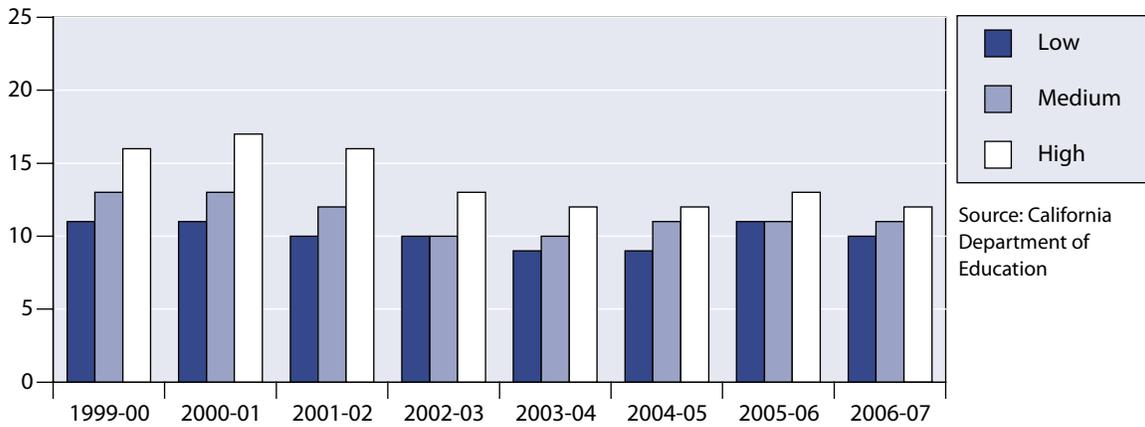
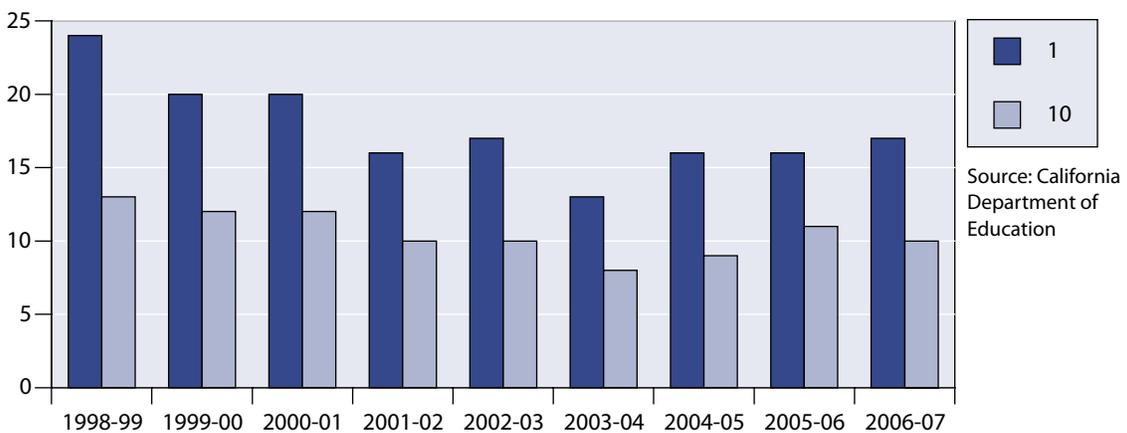


FIGURE 7b. First and Second Year Teachers by API



California schools report particular difficulties in hiring for special education and math positions, but school districts face difficulties in finding teachers for science, vocational/technical and foreign language positions as well.

Teacher wages in California are above average compared to the rest of the nation, but are not competitive with many other occupations.

As Figure 6 shows, teachers, on average, earn less than workers in many occupations employing college graduates, including nurses, accountants and auditors, and lawyers. The figure also shows that wages are higher in California across all occupations than they are in any of the comparison states, and that California's teachers earn more, on average, than teachers in most other states. Because teachers choose between teaching and other occupations, however, the difference between teachers' wages and wages in other professions is important to individuals who are trying to decide whether to enter teaching. The relative wage of teachers when compared to wages in other occupations is lower in California than in many other states. When the wages of teachers are compared with the wages of registered nurses, for example, California ranks 18th out of the 50 states and the District of Columbia. When compared with accountants and auditors, teachers do better.

Systematic variation in teacher characteristics across schools with less experienced teachers more likely to work in higher-poverty and lower-performing schools.

The description of the teacher workforce above masks substantial variation in teacher characteristics across schools and school districts. Nationwide, schools with the highest minority enrollment, largest low-income enrollments and the most academically struggling students are also the ones most likely to have teachers with the weakest qualifications. California is no exception. Figure 7a shows the proportion of novice teachers (in their first or second year) in schools with low, medium, and high proportions of students eligible for free lunch, a measure of poverty. Low poverty corresponds to the bottom quartile of schools; medium poverty, to the middle half; and high poverty, to the top quartile.

Figure 7b similarly plots the proportion of novice teachers by whether the school has an Academic Performance Index (API) ranking of 1 (low achieving) or 10 (high achieving) relative to schools serving similar student populations. In both cases, we see a far higher proportion of novice teachers in schools with the students most at-risk of low performance. During the 2006-07 academic year, API 1 schools had 17 percent novice teachers compared with ten percent in API 10 schools. Schools with high proportions of minority students and students designated as English language learners also have consistently higher number of novice teachers. In the 1999-2000 school year, for example, schools with high minority student populations had almost twice as many first and second year teachers as schools with low minority student populations. Differences between novice teachers at schools with high and low minority student populations decreased over time, but a similar pattern persists.

Similar patterns are evident for teacher certification status. High-poverty and low-performing schools employ a higher proportion of emergency certified teachers. The changes over time here, however, have been quite dramatic. In the early part of the decade almost 20 percent of the teachers in high-poverty schools held emergency certificates. In the 2006-07 school year, this number had dropped to well under 10 percent.

Nationwide, schools with the highest minority enrollment, largest low-income enrollments and the most academically struggling students are also the ones most likely to have teachers with the weakest qualifications. California is no exception.

California does not collect the data necessary to effectively analyze teacher turnover.

Across the United States, the magnitude of teacher turnover is not very large. Between 2003-04 and 2004-05, for instance, 83.5 percent of current teachers stayed in the same school, while only 8.1 percent transferred between schools and 8.4 percent left teaching.² Nevertheless, there are systematic

differences across schools in teacher turnover, as reflected by the higher proportions of teachers who leave schools with many low-income and/or low-performing students.

Figure 8 uses data from the 2003-04 Schools and Staffing Surveys and the 2004-05 Teacher Follow-Up Survey and plots the percent of teachers who moved across schools and the percent who left teaching between the 2003-04 and the 2004-05 school years. The figure presents data on teacher turnover for the nation as a whole, and for California and comparison states. Data are presented separately for all teachers and for teachers in their first and second years of teaching. Approximately six percent of all California's teachers and just over ten percent of first and second year teachers left teaching during the year, which is somewhat higher than the national attrition percentage. California does not make available the data that would allow us to calculate precise rates of attrition and turnover within the state.

Implications for Students

These characteristics of the teacher workforce in California have implications for student achievement. The dramatic decline in the number of emergency-certified teachers may have benefited students, particularly in difficult-to-staff schools. At the same time, however, novice teachers consistently have been shown to be less effective, on average, than more experienced teachers, and novice teachers are concentrated in schools with high numbers of low-performing students.³ Thus, the influx of large numbers of new teachers to the system may hurt student

achievement if schools do not compensate for their lack of experience by providing additional support including mentoring and professional development.

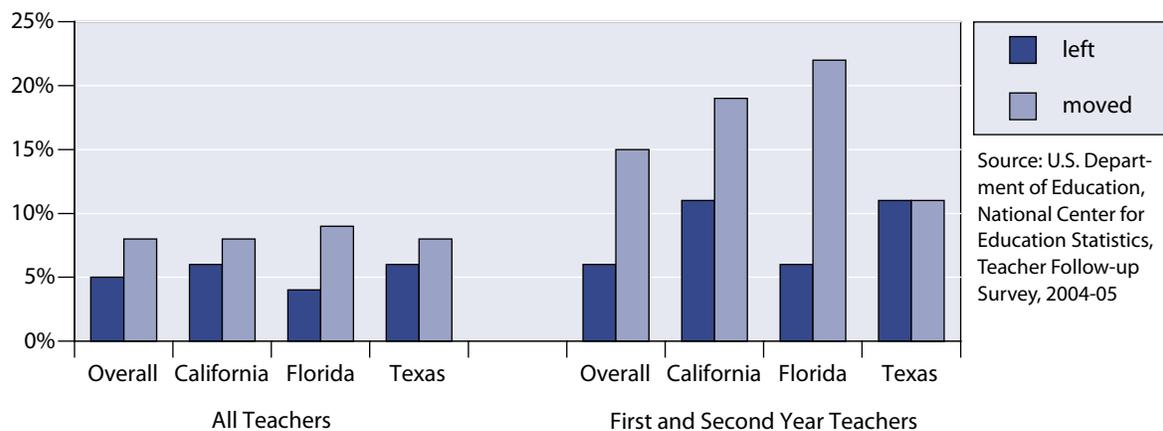
POLICY APPROACHES TO ENHANCE THE TEACHER WORKFORCE

Designing policies to enhance the teacher workforce in California requires an understanding of how individuals choose whether or not to teach, where to teach, and how to teach. Their choices are influenced by wages and benefits, working conditions, entry requirements, and school location, among other things. Designing good policy also requires an understanding of factors governing hiring practices within the education system. In the following section we address a number of policy approaches aimed at enhancing the teacher workforce.

1. Target traditionally difficult-to-staff schools.

As Figures 7a and 7b show, there are systematic and striking differences in the distribution of teachers across schools in California, with the least-experienced and least-qualified teachers concentrated in the schools facing the biggest challenges. A variety of factors lie behind these differences, including wages, working conditions, location, and hiring practices. Working conditions in these schools are likely to be particularly salient, with the quality of leadership in the school playing a key role. Working conditions are often difficult to change, however, and policies to address the challenge of making difficult-to-staff schools more appealing places to work should also

FIGURE 8. Percent of California Teachers Who Left or Moved



rely on more immediate and straight-forward changes including monetary incentives. District hiring processes often confound the difficulty of attracting and retaining highly effective teachers in difficult-to-staff schools, and changes in these practices can help to improve the teacher workforce.

a. Monetary Incentives. Many states and a large number of school districts are pursuing alternative compensation strategies to recruit and retain highly qualified teachers. Retention bonuses are the most widely used of these methods, but some states offer housing incentives and a few offer signing bonuses to new teachers. Most of these policies are not targeted to high-poverty or low-performing schools. Only five of the 35 states providing retention bonuses for teachers in 2003 targeted teachers in high-need schools.

Only a small number of programs that create monetary incentives for teachers in difficult-to-staff schools have been convincingly evaluated, and the evidence either in favor or against these programs is not yet convincing.

There is, however, strong evidence that teachers respond to wages in their career decisions, and thus a well-designed program supported by a long-term revenue stream could help to improve the supply of teachers in the schools where they are most needed.

b. Improve working conditions—the important role of leadership. Working conditions are important for all workers, but they play a particularly important role in the teacher labor market. Working conditions, including the quality of leadership and the presence of a collegial environment, vary dramatically across schools, while salaries vary much less. The quality of school leadership is particularly important to teachers in their decisions as to whether or not to remain in a school, and policies that improve the capacity of school leaders may therefore be one of the best ways to improve the appeal of teaching. Such policies might include systematic approaches to recruitment, including monetary incentives to strong school leaders, to make it attractive for them to work in difficult-to-staff schools, along with enhanced professional development to

support them in their work. Another approach to influence the quality of school leadership is to hire additional staff for operational tasks so that principals can shift their focus to students and teachers.

c. Professional development. Policy makers and educational leaders can also affect the teacher workforce through policies that support teachers' development. Sustained professional development that focuses on the curriculum and on teachers' needs can benefit students. Such opportunities can encompass traditional workshops, in-services, graduate coursework, school-based teacher study groups, mentoring relationships, and advanced credentials such as that provided by the National Board for Professional Teaching Standards (NBPTS). It takes good leadership and school organization to make the best use of professional development opportunities, including the assurance of collaborative time for teachers to work together on curriculum and instructional planning. Mentoring and induction programs may be particularly important in schools with large numbers of new teachers.

2. Target traditionally difficult-to-staff subject areas and under-represented groups, particularly Hispanic teachers.

The same policies for targeting difficult-to-staff schools could be used to target difficult-to-staff subject areas and under-represented groups. However, there are some additional approaches that are worth pursuing. Reducing the cost of entering teaching, by reducing preparation time or paying teachers while they prepare, can increase the supply of teachers

The quality of school leadership is particularly important to teachers in their decisions as to whether or not to remain in a school, and policies that improve the capacity of school leaders may therefore be one of the best ways to improve the appeal of teaching.

Evaluating traditional and alternative routes into teaching in order to identify the essential features of effective programs and providing support for high-quality alternatives could help to expand the pool of candidates for teaching positions in California schools.

with specific skills or backgrounds. Targeted recruitment of these individuals is best done before individuals make the choice of whether to enter teaching, not after they have made a career choice.

instead of working, matters even more. These costs can be particularly salient for individuals with strong alternative occupational choices, such as those with strong science training and those with meaningful financial constraints. In an attempt to reduce the cost of entry for college graduates interested in teaching, many states now allow them to pursue alternative route programs that require fewer courses prior to beginning teaching. This approach has the benefit of increasing the pool of interested teaching candidates, but may also have negative consequences if new teachers enter without the preparation that they need to be successful. In California, more than a third of new teachers already enter the profession via alternative routes (Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2008). Evaluating traditional and alternative routes into teaching in order to identify the essential features of effective programs and providing support for high-quality alternatives, could help to expand the pool of candidates for teaching positions in California schools.

b. Recruitment. Selective alternative routes into teaching, including Teach for America, put substantial effort into recruitment, such as visits to college campuses. School districts also have been experimenting with various strategies to recruit people into teaching, especially minorities and

people from neighborhoods where there are difficult-to-staff schools. Typically, these involve partnerships between K-12 school districts and local colleges to encourage students to enter teaching or scholarship and loan forgiveness programs for candidates who commit to teaching in targeted schools for a certain period of time (Jacob, 2007).

3. *Strengthen schools' capacity to monitor teacher effectiveness to provide the needed support for teachers, aid in the recognition and retention of excellent teachers, and counsel out or dismiss ineffective teachers.*

Improving California's teacher workforce will require an increase in the supply of teachers, but it also will require building local capacity to monitor teachers so as to identify those in need of additional help to succeed in the classroom. Entry requirements including certification reduce the probability that very poor teachers will enter the education system, but they do little to identify which of the teachers who pass this low bar will be successful in the classroom. Many teachers consequently enter the profession without the knowledge and skills they need to help students reach the goals California has set for them. Some of these teachers can be successful with additional mentoring, support and professional development, but some should be counseled out of the profession.

Currently, school leaders do not appear to have the capacity to effectively monitor teachers. There are fewer school administrators in California than in other states and the administrators we do have often have had very little preparation in how to identify teachers' needs and prescribe professional development opportunities that will best address these needs (Darling-Hammond & Orphanos, 2007). Nor do these leaders appear to have the skills to counsel out persistently ineffective teachers. This lack of administrator capacity is likely to be a particular problem in difficult-to-staff schools.

School leaders do not need to have sole responsibility for the process of teacher evaluation. Peer assistance and review programs that involve teachers in the monitoring and support of other teachers (as described in a recent PACE Policy Brief by Julia Koppich) are a promising approach, but they have not gained traction in most California districts.

4. *Improve data collection and data access in California so that Californians have a clear picture of who their teachers are and of how effective different policy approaches and programs are at helping us to meet our goals.*

Research on the effectiveness of different policy approaches to improving the quality of California's teaching force remains sparse. The state has been slow to compile the information needed to describe, much less evaluate, the teacher workforce and teacher workforce policies. In addition, policy implementation is rarely carried out in a way that would allow us to learn from experience. Designing policy experiments and adopting graduated implementation, for example, would create opportunities to evaluate policy choices. Support for policy innovations combined with systematic data collection will help to increase our understanding of teacher labor markets and strengthen our ability to improve teaching across all California schools.

California will need many new teachers in the next few years. Getting them into the classroom with the knowledge and skill they need to be successful is the most powerful instrument that we have to ensure success for California students, especially those who face the biggest challenges.

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Endnotes

- ¹ Student-teacher ratio is not the same as class size because not all teachers have their own classrooms. California has an average overall class size of 27 students, which has been relatively constant in recent years. Class size varies by grade level with the earlier grades—kindergarten, grades 1, 2, and 3—having substantially smaller class sizes of 19 or 20 students than the upper grades, with class sizes of 26 to 29 students.
- ² New teachers are more likely to leave than more experienced ones. While this might be because teaching turns out to be somewhat more difficult than expected, it is important to note that data on recent college graduates show that young workers tend to switch jobs more, regardless of occupation (see Marvel, Lyter, Peltola, Strizek, & Morton, 2006).
- ³ Multiple studies have estimated the effects of teaching experience on students' learning, though few have looked at the effects of teachers' age. Using data on New York City schools, Donald Boyd, Hamilton Lankford, Susanna Loeb, Jonah Rockoff, and James Wyckoff (2008) found that, on average, first and second year teachers did not add as much to student learning as more experienced teachers did. Gains accrued thereafter, but stopped being substantial after the fifth year. This is similar to studies in Texas and New Jersey (see for example, Eric Hanushek, John Kain, and Steven Rivkin, 2004; Jonah Rockoff, 2004). Using a North Carolina longitudinal dataset, Charles Clotfelter, Helen Ladd, and Jacob Vigdor (2006) found that the more experienced a teacher was, the more student test scores increased over the course of a year. Compared to a teacher with no experience, the benefits of experience rose continuously with experience peaking at 21-27 years of experience. They too found that more than half of the gain occurred during the first couple of years of teaching. All of these studies suggest that experience matters for student learning, but that, on average, the gains to experience are greatest in the first couple of years of teaching. Thereafter, the gains to experience plateau.
- ⁴ See Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2008.
- ⁵ See Jacob, 2007.
- ⁶ See Darling-Hammond & Orphanos, 2007.

Lifting Low-Achieving Students and Schools

Bruce Fuller and Lynette Parker¹
University of California, Berkeley

AIMING TO EQUALIZE STUDENT ACHIEVEMENT, CALIFORNIA POLICY MAKERS HAVE FOCUSED SPECIAL RESOURCES ON LOW-ACHIEVING STUDENTS AND THEIR SCHOOLS SINCE THE 1960S. MANY CALIFORNIA STUDENTS, INCLUDING THOSE AT THE LOWER END OF THE ACHIEVEMENT SPECTRUM, HAVE MADE DISCERNIBLE GAINS SINCE THE APPROVAL OF THE PUBLIC SCHOOLS ACCOUNTABILITY ACT (PSAA) OF 1999, BUT LARGE ACHIEVEMENT GAPS PERSIST. Despite a variety of state and federal programs that focus on raising the learning curves of low-achieving students, standards-based reforms have produced modest gains for all children, leaving differences in achievement largely unchanged.

In this chapter we detail which low-achieving students have benefited from state and federal reform efforts, in which grades and subject areas. We then report on three state programs that aim to further buoy low-performing students and the schools they disproportionately attend. Hard evidence remains sketchy on which of these targeted efforts significantly boost the achievement of children who attend school in poor communities.²

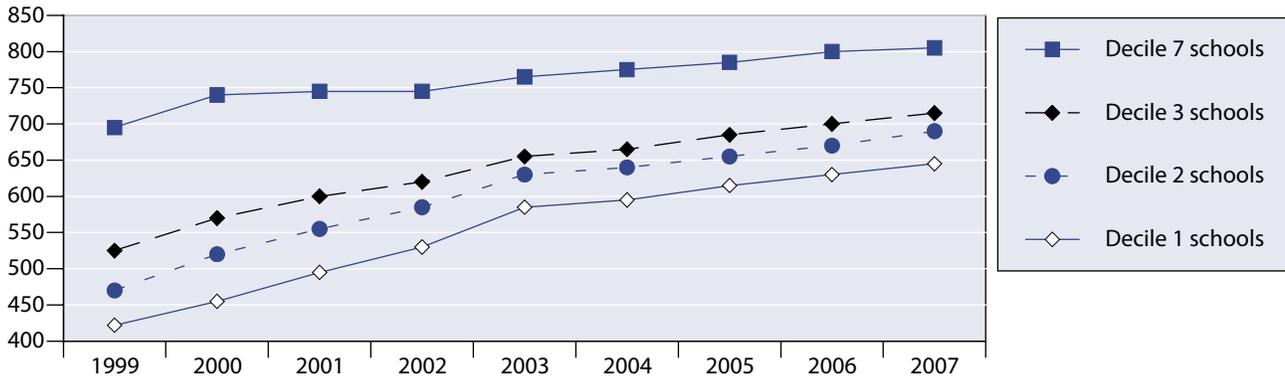
We conclude by proposing specific steps that Sacramento and school district leaders can take to better track the performance of low-achieving students and schools. We also suggest that the governor and legislature should seriously assess the effectiveness of the fragmented programs that share the worthy goal of lifting the performance of low-achieving students.

Tracking Student Performance

The phrases, *low-performing school* or *failing school* have gained much currency in education circles and in the media. Most often these terms refer to schools that serve predominantly low-performing *students*. Unless one is looking at the growth in learning for a particular set of students followed over time (*value added model*), we cannot estimate whether the school organization itself is raising achievement or not.

Since the state cannot yet track individual students over time, we provide a quasi-cohort analysis reporting the progress made by students who occupy certain grade levels in a certain year. For example,

FIGURE 1. State Estimated Academic Performance Index (API) Scores Have Grown for Elementary Schools in the Lowest Three Deciles, 1999-2007



we can report whether the performance of California’s fourth-graders is moving up or down over time. Or, we can illustrate the share of students attending schools in poor communities who achieve at proficient levels from year to year. This is less precise than following a constant cohort of students over time, but state data cannot now support these kinds of longitudinal analysis.

Dwindling Gains for California’s Low-Achieving Students

State API trends. The API is calculated for each public school (excluding small charter schools and programs), based on the percentile rank of each individual student’s test score and the academic growth achieved by each student. The scores are aggregated to the school level and calibrated so that each school receives an annual API score that ranges between 200 and 1,000.

Students with low initial scores whose scores improve are weighted more heavily than students with higher initial scores who achieve the same increment of growth. This stems from a progressive policy decision: students and educators in poorer communities should be rewarded when they succeed in raising performance. In contrast, federal policies under the “No Child Left Behind” Act (NCLB) do not even recognize student growth at the low-end. Schools gain no credit unless a student clears the bar that indicates proficiency. So, children and educators in the most resource-poor communities can make considerable progress that goes unrecognized under the federal system.

Each school is awarded an API score after spring testing. State education officials sort each school into one of 10 deciles, ranking every school from the highest to the lowest API score. Sacramento also groups schools located in communities with similar

social-class attributes to assess how well students in each school are performing when compared with similar student and family populations.

Figure 1 shows growth in average (mean) API scores in 1999 for elementary schools that began their journey in decile 1, 2, or 3. This was the baseline year following Gov. Gray Davis’ enactment of PSAA. We also include decile 7 schools as a comparative benchmark.

We see strong growth in mean API scores for each decile grouping of schools. All boats appear to be rising. Low-achieving students seem to be doing better in 2007 than in 1999, but achievement gaps have failed to narrow. Students in decile 3 schools in 2007, on average, had climbed just above the performance level of decile 7 schools in 1999.

The trend lines also show that API gains for schools were strongest during the initial years of implementing PSAA, and most pronounced between 1999 and 2003. Since the implementation of NCLB began in 2003-04, progress has slowed. This diminishing rate of growth is seen more clearly when we examine the percentage of students deemed proficient, as defined by state procedures. (See Figure 2.)

Similar plots for high schools paint a less upbeat picture. API scores climbed significantly as PSAA accountability policies were implemented, largely through 2005. Over the past three years, however, API scores have been flat for students attending decile 1 and 2 schools. Some growth is discernible between 2005 and 2007 in middle-decile schools, but at a slowing rate of progress.

Proficient achievers. Figure 2 reports the share of elementary students that tested *proficient* in English language arts (ELA) after grouping schools into their decile ranking in fall 2001. The share of students testing at proficient in decile 1 schools, for

FIGURE 2. Gains in the Percentage of Elementary School Students Testing Proficient (state definition) in English Language Arts by School Decile

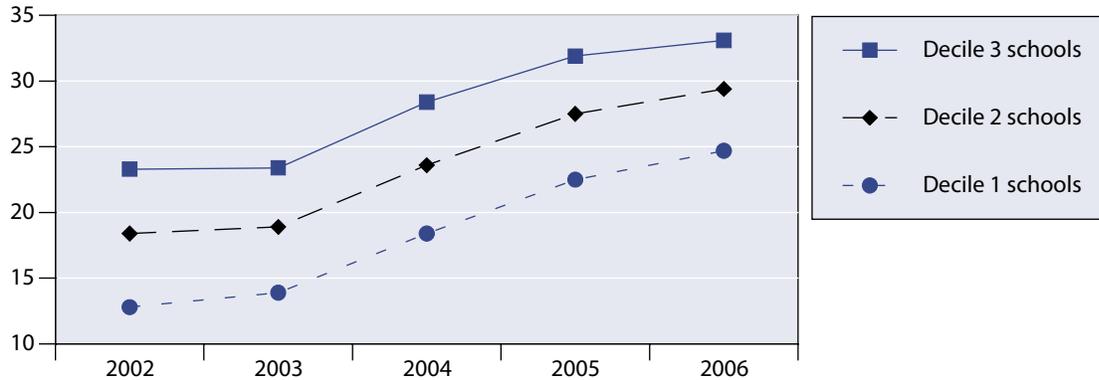
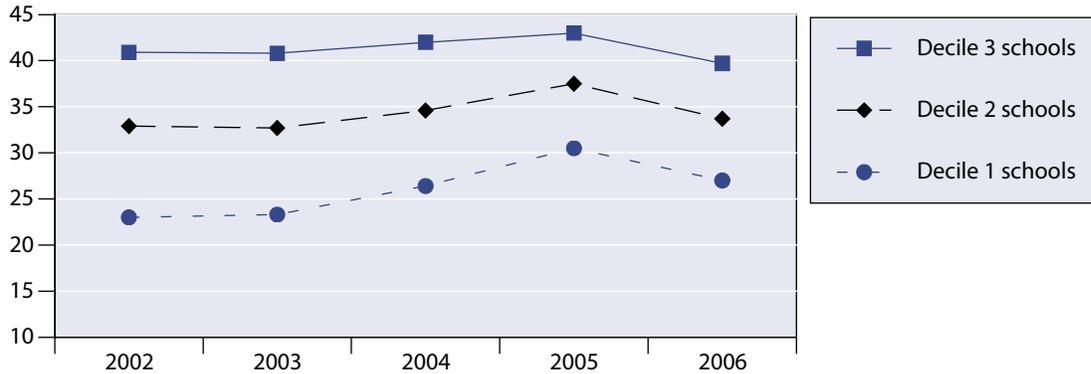


FIGURE 3. Percent Proficient in ELA by Original Decile—Secondary Schools



example, climbed from 13 percent in 2002-03 to 25 percent in 2006-07. For students attending schools that fell in decile 3 in fall 2001, the average share proficient in ELA increased from 23 percent in 2002-03 to 33 percent in 2006-07.

Figure 3 reveals modest progress for students attending high schools in the first three deciles, and declines in 2005-06 and 2006-07. Overall, we do see upward movement in the percentage of students judged to be proficient by state education officials, yet the overall buoyancy is more modest, compared with the robust growth we saw for API scores. And recent declines for students in decile 1-3 high schools are obscured when examining API trends, which are inflated by the bonus points awarded low-performing students. This also highlights how the share of students testing at the proficient level can be declining, while mean API scores are holding steady or even rising.

Schools do move from one decile ranking to another. Figure 4 shows how many schools have climbed

FIGURE 4. Many California Schools Climbed One or More Deciles, 2001-2006 (44 percent of 1,538 schools that began in lowest 3 deciles)

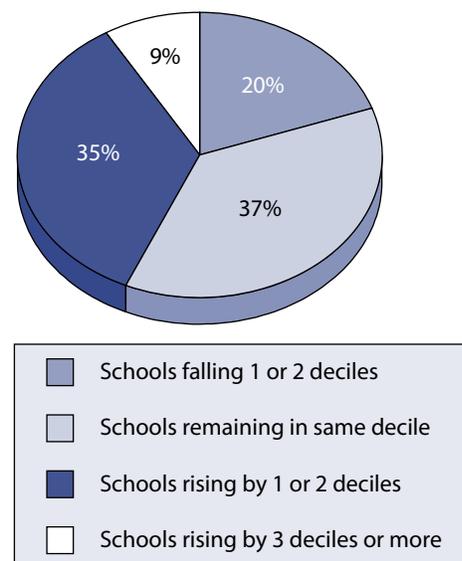
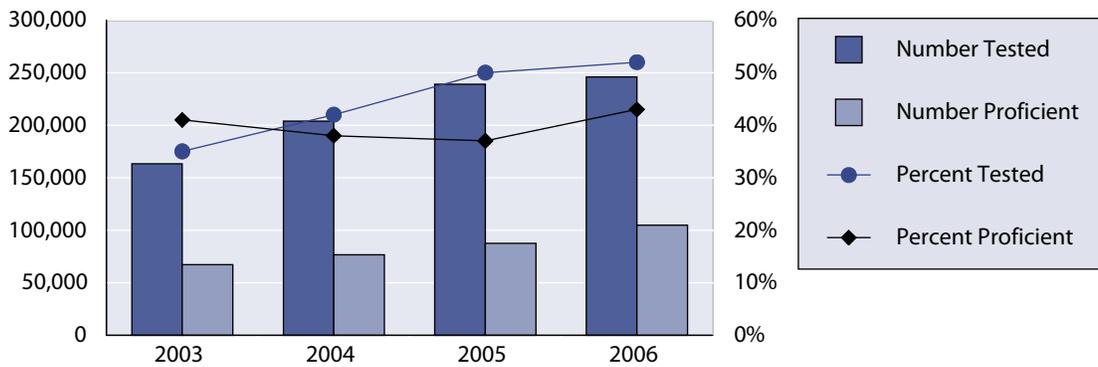


FIGURE 5. Students Taking and Passing Eighth-Grade Algebra, 2003-2006



in their decile ranking, compared to their position in 2001. Among the 1,538 schools that were placed in decile 1, 2, or 3 early on, 324 schools had moved up by two deciles or more by 2006. Just over one-third (568 schools) failed to move, and 302 fell one or two deciles over this period. This analysis combines elementary and high schools, and excludes middle schools.³

Performance indicators can also be linked to discrete policy interventions that shift students' course-taking behavior, usefully expanding the opportunity to learn. For example, Figure 5 shows a sharp increase in the number of eighth-grade students who completed algebra and sat for the state exam. The number of students tested in eighth-grade algebra climbed by almost 100,000 students between 2003 and 2006. The percentage who tested at proficient remained at about 42 percent. This is notable, given that student selectivity presumably declined as more sat for the exam.

Federal NAEP indicators of achievement change.
One lesson in gauging student progress over time is that multiple indicators should be compared. Advo-

cacy groups and journalists report test score results episodically, rarely placing state scores in the context of federal results. A more sobering picture emerges when examining how California students perform on federal NAEP exams, administered in the fourth and eighth grades. Figure 6 details trends in the percentage of California students who score at *basic* or *below basic* levels on the NAEP. That is, these are shares of students who are not achieving at proficient levels, according to the federal standard.

The top curve shows a significant decline in the percentage of fourth-graders who achieve at low levels (basic or below) in mathematics. In 1997, fully 88 percent of California fourth-graders were achieving at basic or below. This share had fallen to 75 percent by 2003, declining markedly during the initial years of the state's accountability reforms. A modest reduction in the share of low-achieving students is apparent for eighth-grade math, with the percentage at basic or below declining from 84 percent in 1992 to 76 percent in 2007.

FIGURE 6. Uneven Progress of California Students on the National Assessment (NAEP), Percentage Not Proficient by Grade and Subject, 1992-2007

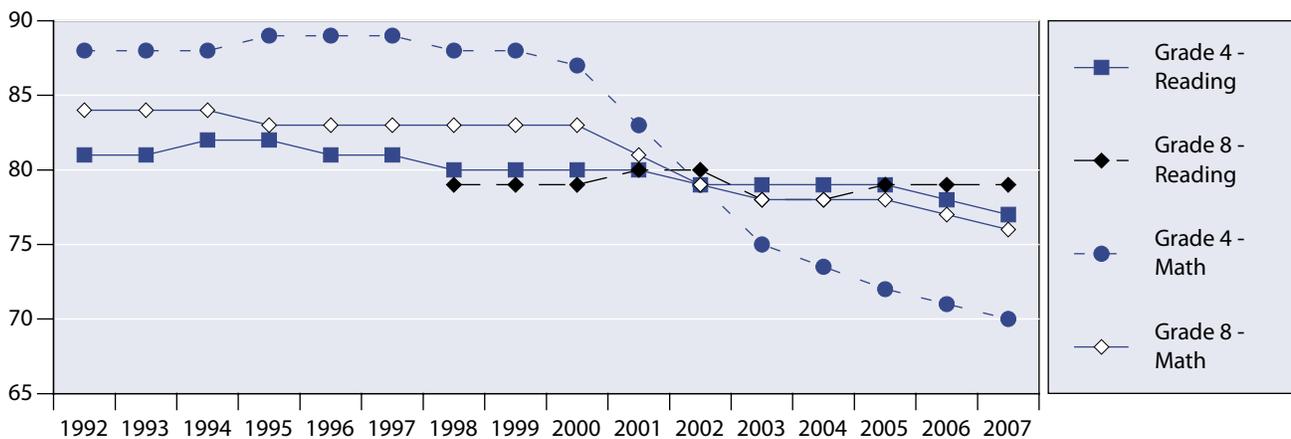


FIGURE 7. Uneven Progress of California Students on the National Assessment (NAEP), Percentage Below Basic Level by Grade and Subject, 1992-2007

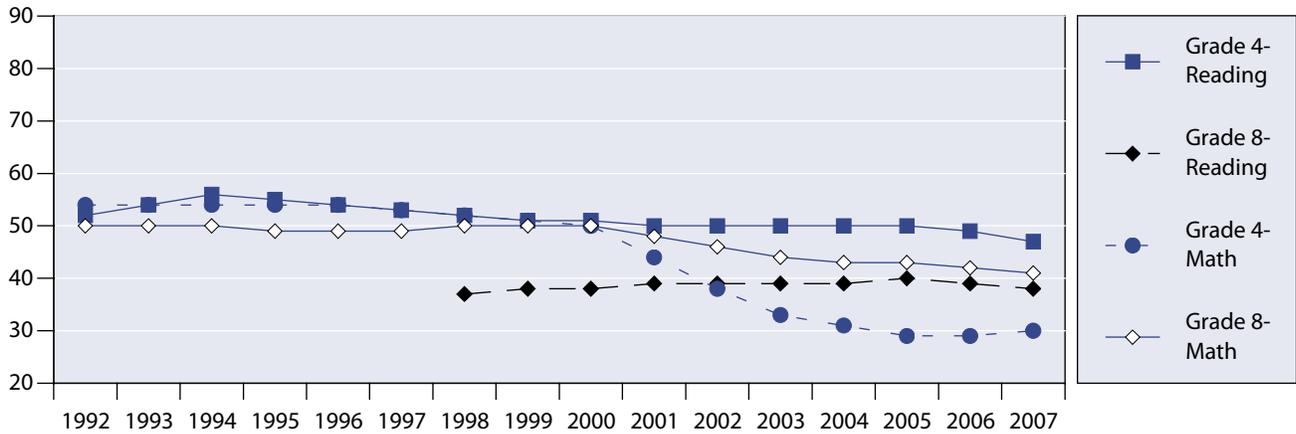
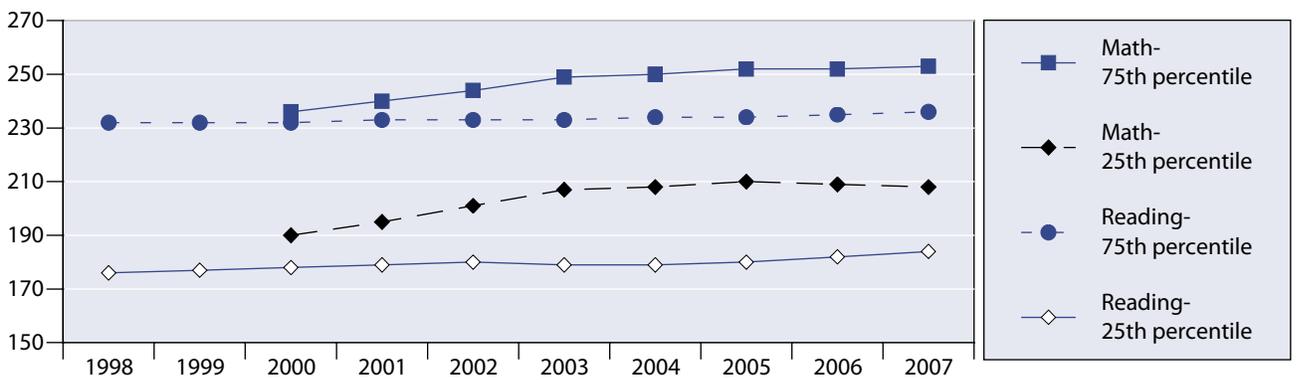


FIGURE 8. NAEP Reading Scores Have Slowly Inched Upward for California Fourth-Graders at the 25th Percentile, yet Have Stalled in Math



When it comes to reading, however, progress has been much slower in reducing the share of students achieving at low levels. Among fourth-graders, the share performing at basic or below fell from 82 percent in 1995 to 77 percent in 2007. Among eighth-graders, no progress has been made in shrinking the share performing at low levels over the past decade, according to federal definitions of basic and below basic.

Critics of the federal NAEP assessment argue that the proficiency bar is set too high, and that basic performance should be considered average. But even if we focus on California students achieving at the *below basic* level, under the federal cut-points, the picture does not change discernibly (Figure 7). We see the same encouraging shrinkage of the share of fourth-graders performing at very low levels in math

between 1996 and 2007, and a modest contraction of low performers in eighth-grade math. But little improvement is evident in reading among low-achieving students.

Another way to track progress on NAEP assessments is to follow the mean scale scores of California students who perform at the 25th percentile. That is, the group for which one-quarter of the state's students achieve at lower levels, three-quarters achieve at higher levels. Figure 8 shows that low-achieving fourth-graders at the 25th percentile have slowly improved their reading scores, but progress in math has drifted downward in recent years. One grade level difference equals about 10 scale-score points. So, math gains have been significant since 2000.

At the same time, higher achieving fourth-graders—placed at the 75th percentile—have improved over time. This leaves achievement gaps largely unchanged since the mid-1990s. NAEP testing does not occur annually, so values for missing years are interpolated, assuming linear rates of change. In 2007 the reading gap between fourth-graders at the 25th versus 75th percentile equaled 52 points.

Sacramento's Recurring Search for Effective Reforms

Since the 1960s, a variety of governors and legislators have created programs aimed at lifting the performance of low-achieving students. The programs

include costly efforts to reduce class size, provide special reading instruction, lengthen the school day, and fund school-wide planning efforts, along with a succession of teacher development activities.

New targeted efforts to lift low-performing students and schools have grown from \$35 million in state and federal spending in 1999-2000 to \$446 million in 2007-08.⁴ Currently about 2,400 schools—one-quarter of all the schools in California—

participate in state-funded school improvement efforts. Nevertheless, achievement gains for students in these schools have been uneven in recent years.

The state department of education commissioned careful evaluations of two initiatives: the Immediate Intervention, Underperforming Schools Program (II/USP) and High Priority Schools Grant Program (HPSGP), the latter a successor to the former. Both evaluations found few discernible effects on test scores. Participating teachers and principals reported significant benefits from these incentives for school-wide planning and program development, including inservice training, lengthening instructional time,

and implementing curricular standards. Despite these benefits, however, a 2005 assessment of II/USP found that “the impact of the II/USP participation on student achievement has been negligible. Any small advantage experienced by II/USP schools relative to comparison schools... dissipated before or soon after program completion.”⁵ The first-round evaluation did find that II/USP funding may have significantly boosted student achievement in some urban districts that undertook comprehensive actions to improve instruction, including the San Diego Unified School District.

The legislature attempted to increase the impact of the II/USP with the implementation of the High Priority Schools Grants Program (HPSGP), but a 2007 evaluation of the HPSGP detailed the same disappointing results. “HPSGP schools showed gains in student performance during the period of program implementation,” the evaluation team wrote. “However, the effect of participating in the program on student performance was negligible.”⁶ Surveys of teachers and principals revealed that a majority believed that the HPSGP planning process “prominently guided their reform efforts,” and played a “major role in student achievement gains.” Still, when compared with similar schools enrolling similar students the HPSGP group failed to outperform the comparison schools.

The governor and legislature launched another ambitious effort in 2006, with the adoption of the Quality Education Improvement Act (QEIA). It provides \$2.8 billion over seven years, to be spent primarily in decile 1 and 2 schools. The bulk of funds will go for reducing class size, employing additional counselors, and equalizing teacher credential levels among schools within participating districts. This effort is targeted to schools serving low-achieving students, and is largely inflexible in terms of how local districts and principals can allocate dollars. The 488 participating schools will be held accountable for lifting test scores, or risk losing program support. At present, however, the state has no plans to evaluate whether QEIA funds improve the performance of schools that receive the additional resources.

Next Steps: Consistent Indicators for Low-Achieving Students

Many stakeholders in California's education system are eager to know whether public efforts to lift low-achieving students are working. A firm answer to

QEIA provides \$2.8 billion over seven years, to be spent primarily in decile 1 and 2 schools. The bulk of funds will go for reducing class size, employing additional counselors, and equalizing teacher credential levels among schools within participating districts.

this question requires consistent assessments of pupil progress, but different indicators continue to sketch differing trend lines.

Before California can settle on a simpler, consistent set of achievement indicators, however, three issues must be squarely confronted. First, unrelenting pressure from voters, business leaders, and civic groups for schools to show progress will inevitably push state education officials to devise gauges of student achievement that put current performance in the best possible light. At times, sound policies—such as strengthening incentives for teachers and students in poor communities to show gains on standardized tests—conflict with the aim of unbiased indicators of learning.

Second, one reason why state test scores are likely rising is because teachers are following clearer curricular guidelines and because, in some schools, several weeks are spent preparing students for state assessments. In contrast, the NAEP is a broad-based assessment of reading and mathematical skills; it's less sensitive to test-prep and drilling of knowledge that matches items on state tests. Those who favor the NAEP often emphasize the importance of advancing learning in broader and deeper ways, as opposed to mastering bits of knowledge that fit into multiple choice tests. This cuts to the core issue of how parents, teachers, and policy makers define what constitutes meaningful learning and the central purposes of education.

Third, California and other states have wisely moved toward mastery (or criterion-referenced) gauges of student performance. Rather than ranking students according to national percentiles, the state defines levels of performance (e.g., *basic* or *proficient*) according to knowledge of certain curricular standards. California—which has stuck with more demanding performance standards than most states—has nevertheless defined the *proficient* level of achievement at roughly the same level as the federal definition of *basic*, which further undercuts the credibility of the state assessment program. The California Department of Education (CDE), for example, estimated that 51 percent of fourth-graders were proficient readers in 2007. But just 23 percent were proficient readers according to the more demanding National Assessment of Educational Progress (NAEP). If state cut-points for proficiency are set too

high, however, then the incentives for educators and students to improve performance are weakened in the lowest-performing schools, because learning gains may fall short of the desired standard.

One step toward a simpler, more consistent set of achievement indicators might be to establish an independent score keeper to measure the performance of schools and students. Separating the state's testing office from the education department might help to limit the impact of the conflicting pressures that afflict California's current assessment program. The federal government has done just this, by situating the NAEP assessment under the direction of a non-political governing board.

Alternatively, the legislature could require the CDE to publish NAEP results whenever state test scores are released. Congress has already considered requiring the states to publish both sets of results. This would make it easier for citizens and stakeholders to compare results from the two different gauges of student progress, providing significantly more information about the performance of the state's schools and students.

A stronger data system capable of tracking the performance of individual students over time would also help. The analyses above, for example, are limited to tracking how differing cohorts of fourth-graders perform over time. With a data system that tracked individual students from grade to grade we could estimate their learning curves with greater precision. Recent progress within the CDE on the development of a student-level data system is quite encouraging, but a fully operational system is still years away.

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Finally the governor and the legislature should commit the state to assessing the true effects of the broad and growing array of special programs aimed at lifting low-achieving schools and students.

Finally the governor and the legislature should commit the state to assessing the true effects of the broad and growing array of special programs aimed at lifting low-achieving schools and students. Despite the resources that California has devoted to the worthy goal of improving academic performance

in these schools under programs including II/USP, HPSGP, and now QEIA, the state has little to show for its efforts. Increasing the resources that California devotes to evaluating educational policies and programs would allow the state to identify which interventions make a difference for students, and help to ensure that the state's ongoing investments in school improvement will lead to rising achievement for all students, and especially those who are now furthest behind.

Endnotes

- ¹ We thank Rachel Perry, Eric Zilbert, and their colleagues at the California Department of Education for generous contributions to this analysis. The Hewlett and Noyce foundations have supported our efforts to track the progress of low-achieving students in California and nationally. Special thanks to Amy Gerstein, Kristi Kimball, and Mike Smith for their unflagging support. Daniel Koretz contributed much to our technical knowledge. Portions of the data included in this chapter were gathered by Joseph Wright. All errors and interpretations are solely those of the authors.
- ² Timar (2004)
- ³ A fraction of schools with grade levels that cross-over elementary and middle school-age ranges, or cross-over middle school- and high school-age students, were also excluded.
- ⁴ The Legislative Analyst's Office report (2008) includes a suggestion for a new system for supporting low-performing schools.
- ⁵ Bitter et al. (2005).
- ⁶ Harr, Parrish, Socias, & Gubbins (2007).

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Dreams and Leaks, Reforms and Band-Aids: The Transition From High School to Postsecondary Education

W. Norton Grubb¹
University of California, Berkeley

THE TRANSITION FROM
HIGH SCHOOL TO
POSTSECONDARY
EDUCATION (PSE) — COMMUNITY
COLLEGES, FOUR-YEAR COLLEGES,
SOMETIMES PRIVATE TRADE
SCHOOLS — SEEMS TO BE THE MOST

RECENT CRISIS IN EDUCATION. Scores of reports have been written, dozens of organizations have taken up the cause of improving the transition, and hundred of programs have been created to help students achieve the American Dream through education. Equity is one major concern, as studies conclude that access to PSE is worse for low-income, African American, Latino, and immigrant students. (See Figure 1a-1c, which, in the absence of statewide longitudinal data, presents the best estimates available.) Another worry, especially from the business community, is that the labor force of the 21st century will require more educated workers, and that competitiveness and growth will be undermined by lagging rates of college completion. Finally, a few commentators have emphasized the widespread benefits of PSE for civic, community, and cultural life.

These concerns have been widely echoed in California, but an especially problematic development in this state has been the growing gulf between K-12 education and PSE. Over the past 35 years, citizens, policy-makers, and the business community have allowed California's K-12 education to deteriorate badly. Resources have been stretched to the breaking point, and scores on the National Assessment of Educational Progress are among the lowest in the country. Over the same period, the University of California system has maintained its preeminence among state universities, and many more campuses now have national and international reputations. The California State University campuses are much improved from their days as teacher-training institutions, and have evolved into comprehensive universities with a wide array of professional and graduate programs. The gap between the state's average high school preparation and what its colleges expect has therefore grown wider and wider. This has resulted in demands for reforming high schools through higher standards, "college readiness," "college-going culture," and other systemic improvements.

Unfortunately, the transition from high school to PSE is a problem for which no one is singly responsible — and therefore a problem that no one institution is in a position to solve. State policy might try to improve high schools, but that can't be wholly successful unless colleges are clear about what they require. Community and four-year colleges have developed many practices to improve the transition, but they lack the resources to make these practices ubiquitous

FIGURE 1A. California Class of 2006: All Students

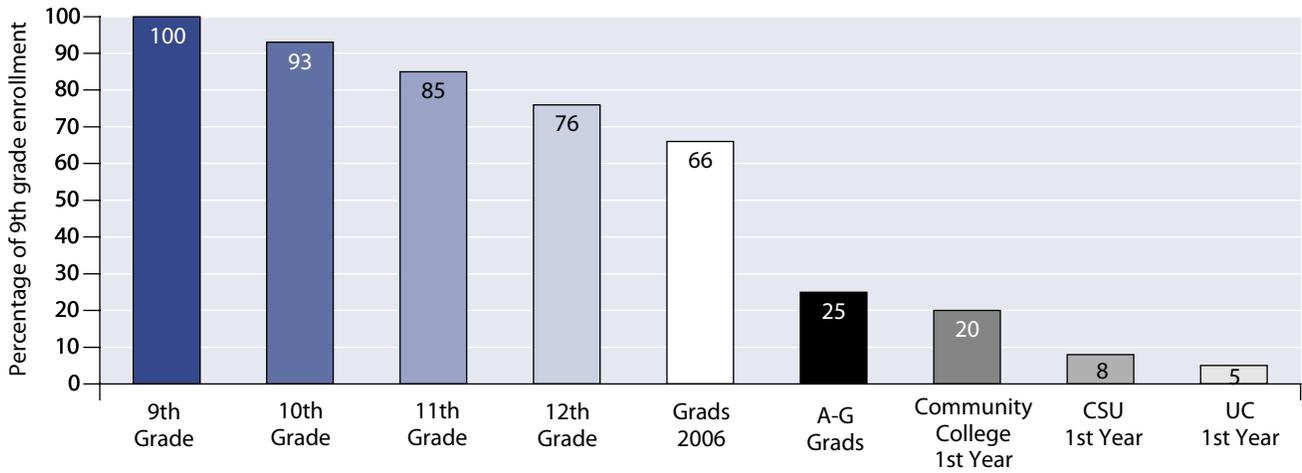


FIGURE 1B. African American Students

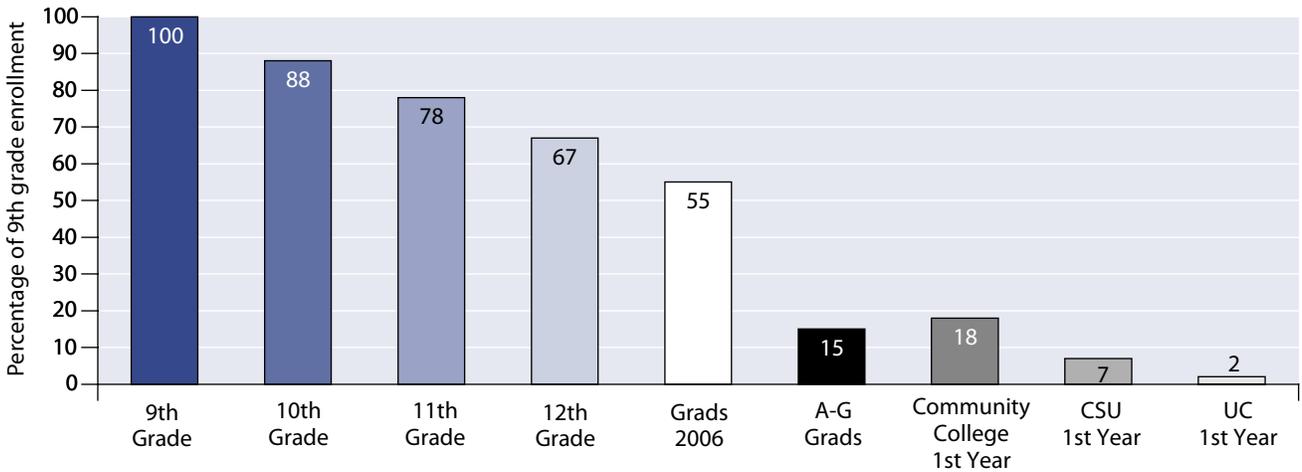
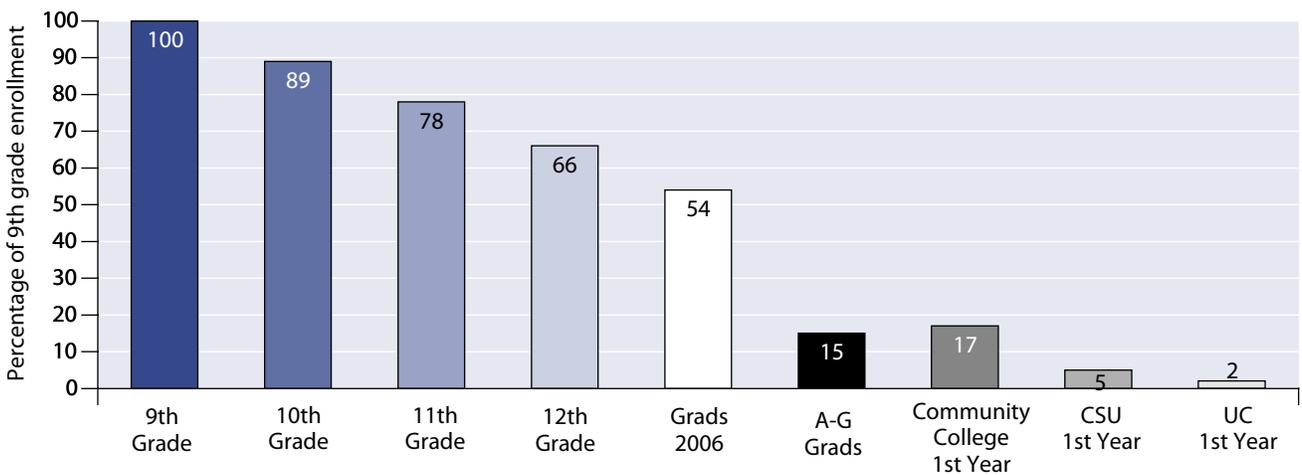


FIGURE 1C. Latino Students



SOURCE: UCLA/IDEA and UC ACCORD, California Educational Opportunity Report 2007

and the power to reform high schools. There is no state agency responsible for both secondary and post-secondary education. Numerous well-intentioned and hard-working private and public programs have developed to assist with the transition between high school and PSE, but they are often short-lived because of funding problems and usually of unknown effectiveness. The transition cannot be substantially improved without a more systemic approach.

Focusing on the transition between high school and PSE, as I do in this chapter, neglects at least two crucial issues. One is the high school dropout rate, since PSE access is usually a concern about what graduates do. A separate analysis might therefore focus on how to prevent students from dropping out, necessarily extending the analysis to middle schools and elementary schools, and on how to re-integrate dropouts into the mainstream, especially through community colleges.

Second, a focus on the transition to PSE neglects the fact that many students gaining *access* to PSE do not *complete* a meaningful program or degree. This is particularly true in a state with a high proportion of public PSE in community colleges, with completion both difficult to define and relatively low, and in CSUs with B.A. completion rates between 30 percent and 40 percent. A more comprehensive analysis of progress through the education system would therefore encompass high school dropouts and PSE success, as well as the transition into PSE.

In this chapter I first focus on the many barriers to PSE access. The next section describes the enormous variety of reforms and programs that have developed in the absence of coherent state policy. The final section presents seven recommendations for policy intended to address the various barriers and to create a systemic approach from the existing pieces.

CONFRONTING THE BARRIERS TO COLLEGE

The dominant metaphor for the transition to college is a pipeline with leaks, or a road with potholes; the standard analysis involves identifying, and then filling, the leaks and potholes. Common as these metaphors are, they assume that there is an obvious road or pipeline in public education. An alternative is to argue that there is no road or pipeline. Many routes into PSE now exist, including those through community colleges, and non-traditional patterns of PSE

attendance have expanded. Middle-class parents with college backgrounds create pathways for their own children through their expectations, advice, pressure, private counseling and test prep, as do some high schools, but for the majority of students no clear road to college exists.

The most obvious barrier to college-going is *college readiness*. Sometimes this is defined as the ability to enter a college without the need for remedial or basic skills instruction. Most often in California, readiness is defined as

completion of the A - G coursework requirements for admission to UC and CSU, and not just as passing the California High School Exit Examination (CAHSEE). However, more sophisticated conceptions of readiness include at least four components:

(1) basic academic preparation as represented by the A - G requirements — that is, academic courses taught to a sufficiently high level, not met by general-track classes or traditional vocational education; (2) conceptual understanding, cognitive strategies, and discipline-based ways of thinking, all poorly taught in conventional high schools but usually assumed in college courses; (3) behavioral capacities including independence, initiative, flexibility, planning and decision-making skills, necessary for thriving in post-secondary institutions that provide few directives to students; and (4) “college knowledge,” or information about the variety of colleges, their expectations, and the procedures for applying to and then negotiating college, lore unavailable to students who are the first in their family to attend college. The first of these requirements is incorporated in conventional efforts

The dominant metaphor for the transition to college is a pipeline with leaks, or a road with potholes; the standard analysis involves identifying and then filling the leaks and potholes. Common as these metaphors are, they assume that there is an obvious road or pipeline in public education. An alternative is to argue that there is no road or pipeline.

A second barrier is a lack of information—about college requirements, admissions procedures, financial aid, desirable careers (and what education they require)—and the inability of students to act on that information.

to enhance the rigor of high school, but the others are rarely addressed even though successful PSE access and completion require all of them.

A second barrier is a *lack of information*—about college requirements, admissions procedures, financial aid, desirable careers (and what education they require)—and *the inability of students*

to act on that information. The ten myths among students described by the Bridge Project at Stanford University—for example, “I can’t afford college”, “meeting high school graduation standards will prepare me for college”, and “community colleges don’t have academic standards”—clarify how a lack of information causes students to behave contrary to their long-run interests. While information is always necessary, however, it is not sufficient for supporting the sophisticated decision-making processes involved in getting to college. Many other factors also come into play, including stable preferences, the ability to consider many alternatives, probabilistic thinking, trade-offs over time, the need to make sequential decisions, adolescent development issues, and the complexities of identity formation

A third barrier often mentioned is the transition itself, after students have left high school. Educational transitions of all kinds involve new and unfamiliar roles, new and often unwritten rules and customs, and new demands of many kinds. When these difficulties are compounded by inadequate college readiness, dropping out during the transition is all too likely. A common statement from community college registrars is that half of all students who declare as seniors that they will enter community college fail to register in August; half of those who register fail to attend any classes; and half of those who start the semester fail to stay in college until the first census in the third week. In four-year colleges, the first year is also a time of high dropout rates.

Finally, there are financial barriers to PSE. Many students and families over-estimate the costs of college (and under-estimate its benefits), and often do not know about financial aid. The process of applying for financial aid is daunting, and financial aid offices that provide help in this process are especially variable in community colleges. Partly as a result, eligible students are less likely to apply for and receive aid in community colleges than in other institutions. While a great deal of financial aid policy is federal and outside of California’s control, the value of state-provided Cal Grants has declined relative to the cost of living, so their role in helping students (including community college students) to cover living expenses has weakened. For those students aiming to enter the UC and CSU systems, increasing and unpredictable university fees present further obstacles.

There are, then, enough barriers to argue that the road or pipeline from high school to PSE doesn’t really exist. This is particularly true for low-income students, students without parents who can guide them to college, those who have been led to believe they are not “college material” or that they can not afford college, and those in under-performing high schools. Multiple institutions and policies are responsible for these barriers, so a *systemic* approach is sometimes difficult to envision.

CURRENT REFORMS AND INTERVENTIONS

Because the transition from high school to PSE lies in the interstices among institutions, a variety of reforms have emerged to make the transition more equitable or to improve it in other ways. Some of these involve basic reforms of existing institutions, while others might be termed “second-chance” interventions that compensate for the failures of other institutions. Distinguishing between the two is important because, despite the importance of second-chance efforts, such practices face profound difficulties that in some cases seem like symbolic band-aids for much larger problems.

High School Reforms

High schools concerned about low college-going rates or inequities in college-going have begun a number of reforms:

Creating a college-going culture typically involves getting all students to complete A - G requirements; preparing all students to take the PSAT and then the SAT; and helping students with the process of applying to college and financial aid. However, there is no consensus on what a “college-going culture” means, and different high schools focus on different aspects of the problem.

Creating higher standards usually means having all students take A - G classes, though some schools promote Advance Placement and International Baccalaureate courses as more rigorous alternatives. Eliminating the general track and traditional vocational education are similar tactics. These reforms focus on the basic academic requirements for college readiness, but not necessarily on the other three components.

Enhancing college and career-oriented guidance and counseling is an obvious antidote to students’ lack of information and inability to act on that information. While this approach requires more resources in counseling — California ranks last among the states in its counselor-student ratio — more innovative approaches may also be necessary. Traditional approaches to providing information usually consist of handing print and web-based information to students rather than helping them develop their own preferences, understand the routes to different futures, and make decisions among the uncertain alternatives they face. A number of innovative practices exist, including distributed models in which a wide variety of faculty and staff participate in counseling and related academic activities, the expanded conception of counselor in the existing Puente program, and a multi-stage developmental model developed at Valencia Community College (called LifeMap) that could be easily modified to fit high schools.

Creating pathways responds to many criticisms of California high schools. Pathways restructure schools by developing schools-within-schools or small learning communities, each with a theme, focus or major. Sometimes these are broadly occupational (such as health or business), serving as an updated form of career-technical education stressing preparation for both college and careers. Sometimes the themes are non-occupational (such as environmental issues, immigration, or the city). Pathways are more consistent with the precepts for motivating and engaging students than the traditional college-prep curriculum.

And when they are linked to similar postsecondary programs, they can create an alignment between secondary and postsecondary programs that can smooth the transition.

Different forms of *co-enrollment in high school and PSE* have become increasingly popular. Some community colleges and four-year colleges have created *early- and middle-college high schools*, locating a high school near a college campus where high school students can enroll in college classes, or have college instructors teach college courses on the high school campus. Through this arrangement, students leave high school with a conventional diploma plus some college credits. In *dual enrollment programs*, high school students receive both high school and college credit for college courses. These options can allow high-performing students access to more demanding courses than their high schools can offer; can develop clear pathways through high school to college; and can get students out of the adolescent culture of the high school into the more adult climate of colleges.

Most of these reforms address basic academic components of college readiness, and some of them deal with the lack of information about college options and application procedures. But they rarely touch the dominant pedagogical approaches within high schools, which have been particularly resistant to change. These tend to follow the most conventional forms of information transfer, and unfortunately contribute to a lack of motivation and engagement among students. Therefore, one strand of college readiness, particularly of enhancing conceptual understanding and cognitive strategies, requires changing pedagogical approaches.

The problem with instituting such changes in high schools, however, is that teachers and administrators in California’s schools have almost no “slack”, or spare time and energy to carry out complex reforms. Many high school teachers are busy keeping up with the demands of 150-180 students each day, plus the responsibility for students passing the California Standards Tests and the CAHSEE. Principals and other school leaders are being asked to be instructional leaders, data analysts to support data-driven decisions, school reformers to improve the test scores of low-performing students, and budgeters who can use school resources wisely — responsibilities for which many have been inadequately prepared. The

The instability of many urban schools in particular, with students, teachers, principals, and superintendents all moving around between schools, makes it difficult to sustain complex reforms. Until California invests more human and financial resources to enhance the capacities of high schools, many of the potential reforms that might enhance the transition to PSE will take place unevenly, if they take place at all.

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Community College Reforms

Any substantial increases in PSE attendance in California are likely to be in community colleges, which already enroll

the large majority of California students (62 percent) who enter PSE. Colleges have introduced a variety of programs aimed at smoothing the transition to PSE. Some participate in *co-enrollment* with high schools, including early- and middle-college high schools and dual enrollment — though it is sometimes unclear what co-enrollment accomplishes, and therefore a need for more evaluation. *Articulation agreements* with local high schools, which specify the courses necessary for college success, often serve the same purpose of alerting high school students about what competencies they must master prior to college enrollment. Other colleges offer *summer bridge programs*, in which students assess and remedy basic academic skills, gain additional “college knowledge” (including information about student aid), receive initial guidance about career and educational trajectories, and begin planning their first year programs. *First-year experience programs* start when a student first

enrolls in college and provide supports similar to those of the bridge programs; they usually include courses like “Student Success” to develop the study skills and personal capacities necessary for success in college.

A few community college districts in the state, including San Francisco and San Diego, have active *non-credit programs* that can ease the transition to college. These options cost even less than conventional programs, are often based in community centers, and provide access to a variety of basic skills, including English as a Second Language (ESL) and occupational courses. When these are connected to credit-bearing coursework, they can ease the transition to regular college programs.

Some colleges engage in *basic skills testing in high schools* to clarify what students need to master to avoid remedial education. Unfortunately, California’s 110 community colleges use 72 different assessments for basic skills, so the messages to high schools are varied and confusing.

Finally, a number of colleges in California and across the nation have tried to *improve the quality of basic skills courses*, as well as ESL for English Language Learners, since so many students enter PSE needing remediation. Although most basic skills courses follow dreary forms of drill and practice, several instructional innovations have developed. These include: learning communities (where students take several coordinated courses at the same time, including basic skills courses with other academic or occupational coursework); courses specially tailored to students, in particular, occupational or academic majors; and a greater use of constructivist or conceptual or balanced rather than remedial teaching methods emphasizing drill and practice. The most recent development in California is the Basic Skills Initiative, which will allocate sums ranging between \$100,000 and \$1 million to each community college to support improvement in basic skills instruction.

Like high schools, community colleges suffer from a lack of resources. Most faculty have full teaching loads of 5 classes per semester, plus advising and committee assignments and (especially for occupational faculty) responsibilities for linking to the employer community. Administration has been cut back, and most administrators, in effect, hold several jobs. The high number of part-time instructors means that many

faculty have no time for college governance or institutional improvement activities. As in high schools, periodic crises and instability — sometimes about funding, sometimes about new accrediting requirements, sometimes caused by turnover among senior administrators — make it difficult to sustain reform over time.

Reforms in UC and CSU

Four-year colleges have adopted similar approaches to the PSE transition. Many create articulation agreements with local high schools; some participate in co-enrollment programs; some have participated in partnerships with high schools to reduce the need for remediation. Some have summer bridge programs, and many have developed “Student Success” courses and first-year experience programs. Virtually all public and many private colleges have outreach efforts to high schools. Some of these are “student-centered,” meaning that they identify students with promise and provide them additional support. Others are “school-centered,” focused on improving the overall quality of feeder high schools, while still others develop regional alliances among educational institutions and employers. These programs may clarify college requirements for students, provide help with application procedures, enhance “college knowledge,” create affinity groups, and otherwise smooth the transition into these large and often anonymous institutions.

The CSU system has developed a particularly interesting way of stressing the importance of academic skills to high school students. The Early Assessment Program (EAP) includes a single assessment used by all 23 campuses to assess basic skills. This assessment, administered to eleventh-graders in participating high schools, provides a consistent source of information about what is necessary to move into college-level coursework in CSU. This is a far more effective model than the 72 assessments of community colleges. High school students who fail the assessment can take the Expository Reading and Writing Course, developed jointly by CSU and high school faculty. This provides additional preparation in academic skills while avoiding the remedial pedagogy of drill and practice. The preliminary evidence suggests that it reduces the need for basic skills instruction by modest amounts, but on-going improvements in the EAP could well increase its effectiveness.

Private and Community-based Reforms

While the majority of reforms and practices mentioned so far take place in public institutions, there are also many efforts by private philanthropists, foundations, and community-based organizations (CBOs) — themselves funded by an enormous variety of public and private resources — to enhance the transition to PSE. Generally, they engage in the same range of activities as public programs do, including academic support, tutoring, information and counseling, trips to colleges, after-school and Saturday programs, and community-based mentors. CBOs are more likely than other organizations to provide services for specific racial or ethnic groups, or targeted to other groups including women or students with disabilities. Many, if not most, of the innovative efforts in public institutions are also partly supported by private and foundation funding.

One question is what implications these private efforts have for the public system. One obvious benefit is that they serve as

sources of experimentation, of novel practices that might be adopted by public institutions if they prove to be effective. Another implication is that there is not enough attention in the public sector to reforms that might enhance the transition. From these perspectives, public institutions ought to learn from private efforts, and every private initiative should be scrutinized for its implications about public institutions. However, an enduring problem with private support is that educational innovation often ends when the private funding ends, so *sustained* reforms with continuous improvement prove elusive.

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Many practices undertaken by colleges and CBOs to enhance access to PSE — including remedial or basic skills instruction, dual enrollment, and bridge programs — can be considered second-chance options, helping students who have not done well in, or who have been failed by, the first-chance option of the public high school.

Furthermore, some private programs suggest tactics that seem impossible in the public sector. For example, some philanthropic efforts have been based on Eugene Lang's I Have a Dream Foundation, established in 1981 to promise college funding to low-income students who perform well in school — suggesting that certainty of college support, badly missing in California, may be necessary. An offshoot of Lang's vision is a program in Richmond and San Francisco called Making Waves,

with some success in helping students from impoverished communities go to college, through such mechanisms as after-school and weekend programs, mental health counseling, test prep, and one-on-one tutoring — supports that many high schools would like to provide but cannot. However, Making Waves costs an *additional* \$12,000 to \$13,000 per student per year, raised from wealthy contributors, in two districts whose average spending is \$8,883 and \$8,190 per student respectively. The implications for the public system seem to be to increase spending to \$20,000 per student, to extract additional tax revenues from wealthy citizens (in a state with a virulent anti-tax movement), to target these funds on individuals with the highest needs rather than spending them equally on all students, and to recognize the great need for additional time and non-academic support. Such private efforts are blessings for small numbers of students, but the implications for state policy seem politically impossible.

Reforms focusing on African American and Latino students

At several levels of the education system, some public and private programs have focused on the most

disadvantaged students, who are often African American, Latino, other racial minorities, or immigrants. The programs that focus largely on students of color sometimes provide additional resources — enhanced counseling, higher-quality instruction, more tutoring — that would be beneficial to all students. Some programs, such as MESA (Mathematics Engineering Science Achievement), provide academic and non-academic support, as well as contacts with employers. Other programs address more specific issues connected to race, ethnicity or culture. For example, Puente includes Latin American and Latino literature to help students construct their histories and identities, and a community college program called Umoja uses literature, critical pedagogy, culturally-responsive teaching, the writing process, and student-centered teaching to help its students — largely African American — to succeed. Some programs provide resources that students of color may have special difficulty accessing, such as affinity groups, mentors and role models from the same racial or ethnic community. Others provide safe spaces or a “supportive climate” free of racial challenge and prejudice on campuses that might otherwise seem threatening and closed. Some address particular cultural barriers to college attendance, like Puente's use of parent groups to persuade immigrant parents of the importance of college. As with other CBO programs, there is little evidence of how well these initiatives work, but at least they take seriously the racial and ethnic differences that often dominate discussions about inequality in college-going.

The Ambiguity of Second-Chance “Solutions”

The United States is rich in second-chance opportunities for acquiring skills and credentials through schooling. Community colleges are sometimes viewed as second-chance institutions, particularly for students with middling academic performance or modest family incomes. In the same way, many practices undertaken by colleges and CBOs to enhance access to PSE — including remedial or basic skills instruction, dual enrollment, and bridge programs — can be considered second-chance options, helping students who have not done well in, or who have been failed by, the first-chance option of the public high school.

The existence of so many second-chance programs is heartening, because they provide individuals

with several chances to succeed. However, second-chance programs almost by definition operate under difficult circumstances. Their students are typically older, and some have family and employment responsibilities that limit their full participation in education. Some have experienced mistreatment or failure in earlier schooling that makes them resistant to PSE as “more of the same.” Peer effects work in counter-productive ways, since second-chance programs bring together cohorts of students who all need second chances, rather than mixing them with more successful and higher-performing students. Teaching academic and conceptual abilities in short periods of time to students who have not learned them in 12 years of regular schooling is self-evidently difficult. Such programs are often asked to make many years of gains in one year or less.

Furthermore, enormous amounts of resources are now being spent on second-chance programs — money, dedication, vision, volunteers, sometimes instructional expertise — rather than applying them to the improvement of first-chance institutions like high schools. An interesting mental experiment would be to add up all the resources — public, philanthropic, and foundation — now being spent to enhance the transition to PSE, and then to ask what might happen if these were spent *thoughtfully* improving high schools. While it would be impossible to carry out this experiment, continuing to expand access programs while high schools and the rest of K-12 education deteriorates — that is, promoting second-chance options while neglecting first-chance institutions — is surely a misguided policy.

III. IMPROVEMENTS AND RECOMMENDATIONS

If every student were in a high school that promoted college readiness in all its dimensions, had sufficient access to sophisticated forms of college and career information and counseling, took the right courses appropriate for a well-informed choice of activity after high school, had access to bridge and transition programs as necessary, and access to adequate support during the first year of college—if these conditions were met systematically for all students in all institutions, the movement from high school to college might be a “seamless transition.”

There are literally hundreds of efforts to enhance the transition to college in California alone, and many thousands more in other states. But the current patchwork of efforts — all well-intentioned, all run by dedicated individuals committed to having their students succeed, all working hard to cobble together the funding and the vision necessary for success — does not constitute a system in any sense. As long as these efforts remain fragmented and incomplete, the transition to PSE in California will remain a problem. Furthermore, the effectiveness of existing practices is for now almost totally unknown.

Recommendation 1: Improving High Schools

High schools keep slipping through the cracks of reform efforts, and seem the most difficult educational institution to change. The current situation, where high schools have been deteriorating while many PSE options have increased their demands, can only exacerbate the problem of transition. Therefore, the state should make it a priority to systematically reform high schools, particularly by ensuring more rigorous curricula connected to college requirements; by changing instruction to enhance conceptual understanding and the motivation and engagement of students; and by strengthening college and career information and counseling, including innovative approaches to guidance such as Individual Transition Plans (now required in special education) and post-high school planning for all students. This will require a decades-long commitment to improving high schools, since the deterioration of high schools (and K-12 in general) has taken place over decades.

Recommendation 2: Creating a State Transition Policy

Currently, the state has no coherent policy on the transition between high school and PSE. Indeed, there is virtually no forum — no state government body, no legislative group, no organization to facilitate discussions among educators — that encompasses high schools and PSE institutions. Partial exceptions include the California Round Table, the Intersegmental Coordinating Committee, and the Alliance for Regional Collaboration to Heighten Educational Success (ARCHES), all of which depend on representation from all segments of PSE as well as

K-12. However, their resources are constrained and their output limited to conventional print materials about college.

One obvious step would therefore be to convene a group specifically to examine the transition in greater detail; to examine what other states have done to improve the transition; and to develop recommendations for improvements in *both* high schools *and* PSE. Such a group could establish benchmarks, like those in Table 1, by which to monitor the progress of individual institutions and the system as a whole. A forum that is always attractive

in California is a Master Plan, though some previous efforts at developing such Plans have failed. To be effective, any new commission would need to focus on the transition to PSE, perhaps emphasizing grades 9–14.

A statewide group could be matched by regional partnerships encompassing high schools and PSE institutions. These could facilitate regional discussions about PSE expectations, problems in transition, needed reforms in local institutions, and also create channels for sharing information across levels of the system

TABLE 1. Potential Benchmarks for the Transition to College

Definition of Benchmark	Unit of analysis	Type of data
Proportion of students passing CAHSEE: by 10th grade, by 11th grade, by 12th grade	HS, District, State	CS
Proportion of 9th graders who have passed Algebra I	HS, District	CS
Proportion of graduates completing (A-G) requirements	HS, District	CS
AP courses offered	HS	CS
Proportion of students taking AP courses	HS, District	CS
Proportion of students taking the SAT/ACT	HS, District	CS
Proportion of students with sufficient credits: For 9th graders, 10th graders, 11th graders, 12th graders	HS, District	CS
Proportion of 12th graders declaring intent to attend: UC, CSU, CCC, private colleges	HS, District	CS
Proportion of 9th graders graduating in 5 years	HS, District	Long.
Percent of HS graduates attending within two years: UC, CSU, CCC, private colleges	HS, District	Long.
Proportion of HS graduates needing remediation and attending: UC, CSU, CCC	HS, District	Long.
Proportion of entering students needing remediation and ESL: UC, CSU, CCC	UC, CSU, CCC	CS
Proportion of (low-income) students receiving grants: UC, CSU, CCC	UC, CSU, CCC	CS
Value of Cal Grants relative to cost of living	State	CS
Proportion of eligible students receiving Cal grants: UC, CSU, CCC	UC, CSU, CCC	CS
Freshman admissions as a proportion of those 18 - 20: UC, CSU, CCC	State	CS
Percent of entering students progressing to the 2nd semester	UC, CSU, CCC	Long.

CS = cross section; Long. = Longitudinal. These data should be collected and reported by race/ethnicity, gender, and measures of income or family background as available.

**Recommendation 3:
Creating an Experimenting Culture**

There are now hundreds of programs intended to enhance the transition to postsecondary education. Some of these are funded out of colleges' budgets, some are supported by foundations and private donors, and some are provided by CBOs and other private organizations. Further developing this fragmented non-system cannot possibly solve the problem of the PSE transition. One way forward would be to use these myriad programs and practices to examine what is effective and what isn't, and to knit effective practices into a more coherent system of transition efforts. This would require the development of an "experimenting culture" in which programs are regularly evaluated for their effectiveness, and evaluations are routinely summarized and translated into recommendations for improvement, expansion, or elimination.

**Recommendation 4:
Confronting Remediation**

The state of California needs to confront and resolve the remediation problem as well as the issue of second-language learning, to address the many students admitted to colleges with deficiencies in basic skills (or, for recent immigrants, in English). As in Recommendation 3, an "experimenting approach" to determine effective practices in the variety of current efforts would be helpful. For example, the current Basic Skills Initiative in the community colleges will probably generate a variety of approaches, and they could be examined for their relative effectiveness. The solution to the remediation problem will surely come in some combination of improved high school instruction and better approaches to basic skills and ESL programs in colleges.

**Recommendation 5:
Enhancing Capacity and Accountability**

California and the federal government are committed to accountability in K-12 education, and there have been early whispers about extending accountability to PSE. One could easily imagine developing a set of accountability measures or benchmarks (as in Table 1) about the effectiveness of the transition from high school to PSE, some that would apply to high schools and some (especially related to progress and completion) that would be measured for two- and four-year

colleges. Such measures would be helpful in identifying strengths and weaknesses in the current non-system.

However, when such measures are used for punitive measures — like the threat of reconstitution or state takeover, or for "naming and shaming" low-performing schools or colleges — then the results are often counter-productive. The development of punitive accountability policies without *first* developing the capacity of high schools and colleges to enhance transition would

simply penalize those institutions with high proportions of low-income and minority students, and those high schools located in regions with relatively few nearby colleges. It would make the performance of high schools a function of factors over which they have no control (like college tuition and student aid); and it would lead, as the current K-12 accountability system does, to teaching to the test, narrowing the curriculum and goals of both high schools and colleges, adopting ineffective curricula in a panic with little thought to longer-run consequences, and possibly to misreporting and cheating.

The alternative is to develop a series of benchmarks like those in Table 1 or (for PSE completion) the "milestones and momentum" benchmarks developed by the National Center for Higher Education Management Systems (NCHEMS) and the Community College Research Center (CCRC). These could be used to monitor the performance of different institutions, to identify areas of potential need and improvement, and to reformulate state and institutional policy to meet these benchmarks — but not to punish institutions before the state knows what it's doing.

**Recommendation 6:
Developing a Longitudinal Data System**

A crucial need is to develop a statewide longitudinal data system, using unique student identifiers that

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could be used in K-12 education, in public and private postsecondary institutions, and (as Florida has done) in the wage record data of the Unemployment Insurance system and other state institutions like the welfare and prison systems. Many other states have managed to resolve the confidentiality issues involved in such tracking of individuals. Only with an appropriately longitudinal data system will it be possible to measure many of the benchmarks in Table 1, and to know whether individual institutions and the entire state are moving in the right direction. Furthermore, longitudinal data would facilitate the evaluation of many educational programs, which is a key part of the “experimenting culture” described in Recommendation 3.

Recommendation 7: Increasing Resources

Any substantial improvement of the transition to college will require more resources, especially in high schools and community colleges. Money is one of these resources, of course, particularly for Recommendation 2 on enhancing dimensions of college readiness and Recommendation 3 on creating a *system* of transition programs, many of which

will have to be newly funded. Some dimensions of financial aid, particularly ensuring that Cal Grants keep up with inflation and that community colleges have adequate financial aid offices, will also cost more money, as will improving remediation and creating a longitudinal data system.

While additional funding will be necessary, however, *it is never sufficient*. Other resources, including vision, leadership, the

energy necessary to engage in institutional improvement, instructor preparation, understanding effective approaches to instruction, stability, and appropriate implementation of reforms are also necessary to make

sure that resources are not spent wastefully. Indeed, some improvements in PSE access do not require much money, like reforming approaches to instruction, adopting more effective forms of guidance and counseling, instituting many dimensions of college readiness, and adopting the attitudes of an experimenting culture. Over the long run, however, if the dearth of public funding continues, many academic and non-academic supports necessary to enhance PSE access will continue to deteriorate, and neither second-chance options nor private funds will be able to make up the difference.

Improving the transition from high school to college therefore requires reforms of the institutions on either side of the transition: some coordination among these institutions; creating long-term plans; developing an “experimental culture” and the evaluation capacity to go with that; confronting remedial problems head on; avoiding policies that could undermine promising efforts; creating a new data system; and providing additional state funding with some vision behind it. It’s a tall order, but all of these changes and more will be required if California is to ensure that all of the state’s young people have opportunities for educational and economic success.

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Endnotes

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Financing California's Public Schools

Jon Sonstelie
University of California, Santa Barbara

CALIFORNIA'S SCHOOL
FINANCE SYSTEM
CERTAINLY HAS ITS
CRITICS. BASED ON THEIR REVIEW
OF RECENT RESEARCH, LOEB,
HANUSHEK, AND BRYK (2007)
CONCLUDE THAT CALIFORNIA'S
SYSTEM IS "EXTRAORDINARILY
COMPLEX AND HAS NO COHERENT
CONCEPTUAL BASIS." In its final report, the
Governor's Committee on Education Excellence
(2007) reached a similar conclusion: "Our current
system is not equitable, it is not efficient, and it is
not sufficient for students who face the greatest
challenges."

While some of these criticisms are surely overblown, just as surely California's system is long overdue for some deep pruning and fundamental reshaping. The system was uprooted in the 1970s by a radical court ruling and a reactionary popular initiative. Since that time, it has grown in fits and starts, with new elements added almost every year. The result is a thicket of programs and policies that tend to obscure

an underlying foundation that can be the basis for a coherent school finance system. The challenge is to uncover that foundation.

This chapter proposes several steps that the state can take to address that challenge. The chapter sets the stage for that proposal with two preliminary tasks. The first is to describe California's school finance system, the channels through which state and local tax revenue flows to the state's public schools. The second is to analyze the flow of revenue from that system and its consequences for school resources. How do the resources of California schools compare to those in other states? How do resources vary among California schools? The final section outlines three general principles that should guide the reshaping of California's school finance system and a few initial steps the state might take on the pathway to reform.

California's School Finance System

California's school finance system has changed over time as new revenue programs are added and existing programs modified. This section describes the system as it existed in 2004-2005, the most recent fiscal year with complete data on all revenue programs.¹ In that year, approximately 6,000,000 students were enrolled in California's more than 9,000 public schools. The schools were organized into 974 school districts: 557 elementary districts, 83 high school districts, and 334 unified districts, which educate students in all grades. The districts varied significantly in size. Los Angeles Unified School District had more

In Serrano, the California Supreme Court ruled that district revenue differences due to wealth differences violated the equal protection clauses of the state and federal constitutions.

than 700 schools and 700,000 students. On the other hand, 99 districts had fewer than 100 students. Most of these districts had just one school.

School districts are overseen by county offices of education in all 58 California counties.

Six counties have only

one school district; the Los Angeles County Office of Education oversees 80 school districts. In addition to their oversight role, county offices educate students who are in juvenile detention centers, who have been expelled from regular schools, or who need an alternative to regular schools to continue their education. County offices may also provide special education services to districts in their county.

A small, but increasing, share of public school students are enrolled in charter schools, which are free of many restrictions in place in other public schools. In 2004-2005, about 3 percent of the state's public school students were enrolled in one of 507 charter schools.

The system that channels tax revenue to these schools, districts, and county offices is a product of court rulings, popular initiatives, and the response of the state legislature to those rulings and initiatives. The most important ruling is *Serrano v. Priest* in 1971. At the time, school districts in California levied their own property tax rates. Because property wealth differed across districts, property tax revenue also differed. In *Serrano*, the California Supreme Court ruled that district revenue differences due to wealth differences violated the equal protection clauses of the state and federal constitutions.

The most important initiative was Proposition 13 in 1978. The initiative capped property tax rates throughout the state and gave the legislature authority to allocate property tax revenue. Armed with that authority and mindful of the *Serrano* ruling, the legislature acted to equalize revenue among districts. Its instrument was a revenue limit it assigned to each district. It then allocated to each a portion of

the property tax revenue raised within the district's boundaries and supplemented that revenue with aid from the state's general fund to make up the difference between the district's revenue limit and its property tax revenue. Revenue limits were initially based on the sum of state aid and property tax revenue in 1972-1973 and have been increased over time. Districts with low per-student limits received larger increases than other districts, tending to equalize revenue per student across districts. In 2004-05, revenue limit funding constituted 62 percent of the \$8,157 per student school districts received from all sources for operating expenses.

Despite efforts to equalize revenue limit funding per student, significant differences remain. Revenue limits were equalized within groups of districts defined by type (elementary, high school, and unified) and by size (small and large). Revenue limits were increased more for districts whose per-student limits were low relative to those of other districts in their group. Leveling up in this manner narrowed differences at the lower end of the revenue limit distribution, but left differences at the upper end. Furthermore, because equalization has occurred within groups, there are substantial differences across groups. In addition, when the state changed its rules for counting student attendance, it raised revenue limits for districts that would be adversely affected by these changes, increasing inequality within groups.

The inequalities in revenue due to inequalities in revenue limits are compounded by various additions to revenue limit funding. Because the per-student expense of operating a very small school is relatively high, districts that must maintain small schools to serve isolated rural populations receive additional state aid. In 2004-2005, more than 13,000 students attended one of these necessary small schools, and 146 districts received additional funding for these schools. Revenue limit funding for necessary small schools averaged \$8,412 per student, more than \$3,000 per student greater than average revenue limit funding for other schools. Other additions in revenue limit funding can be traced to special programs funded by property taxes before Proposition 13. For example, 375 school districts receive additional state aid because of a "Meals for Needy Pupils" program predating Proposition 13. For these

districts, the additional state aid averaged \$46 per student. Finally, the property tax revenue allocated to a district may exceed its revenue limit. In that case, districts retain these “excess taxes.” In 2004-2005, 73 districts had excess taxes, and the average excess tax was \$1,521 per student. Most of these districts were small, however; they enrolled less than 3 percent of the state’s students. Averaged over all districts, excess taxes were \$38 per student.²

Revenue limit funds can be used for any legitimate purpose. Besides these unrestricted funds, several other programs provide districts with revenue for particular purposes.³ In 2004-2005, the state lottery provided 2 percent of school district revenue. Eighty-five percent of those funds were unrestricted; 15 percent were restricted to the purchase of instructional materials.

The biggest restricted (categorical) program was special education, which provides funds for the education of students with disabilities. Funds are allocated in a manner similar to revenue limit funding. Each district has a base rate (a dollar amount per student), and its revenue entitlement is the product of its base rate and the number of students attending the district.⁴ This entitlement is based on the total number of students in the district, not the students requiring special education services. Local property taxes and federal special education aid is subtracted from that entitlement to determine state aid. State aid and local property taxes averaged \$517 per student; federal aid was \$167 per student. Special education funding from all sources constituted 8 percent of district revenue.

As with revenue limits, special education base rates were initially determined by historical allocations and then modified over time to reduce differences in those rates. There are still substantial differences across districts, however, and some districts receive upward adjustments to compensate for unusually high rates of certain disabilities in 1997. In addition, districts and county offices receive funds for students who require placement in high-cost nonpublic schools.

Though special education is the largest categorical program, the state has created many others. In 2004-2005, there were more than 80 of these programs. After special education, the largest was K-3 class size reduction, which in 2004-2005 allocated \$928 to districts for each of their students in kindergarten through third

grade enrolled in classes with 20 students or fewer. About 4 percent of the revenue received by school districts was allocated through that program. Another group of revenue programs provides funds for the education of disadvantaged students. For example, districts with high proportions of English learners and low-income students receive Economic Impact Aid. In 2004-2005, 20 other state programs targeted disadvantaged students. The combined revenue of all state programs targeting disadvantaged students constituted about 5 percent of district revenue. In addition to these targeted programs, another group focuses on specific activities of school districts, such as purchasing instructional materials, maintaining school facilities, and transporting students to schools. There were also programs to reduce class sizes in ninth grade, to provide counselors for tenth graders, and to support programs for gifted and talented students. In total, all of these categorical programs constituted about 25 percent of school district revenue.

The federal government has also established a number of categorical programs for public schools. In 2004-2005, California school districts received about 11 percent of their revenue from these programs.

The largest was Title I, which is targeted for disadvantaged students. About 30 percent of federal revenue is allocated through this program.

Districts also receive local tax revenue. Property tax revenue is typically classified as a local revenue source, and it did constitute 22 percent of revenue in 2004-2005. However, because Proposition 13 sets the property tax rate throughout the state and because the legislature determines the allocation of revenue raised by that rate, in California the property tax is properly classified as state tax revenue. The only significant tax determined by school districts is the parcel tax, a tax on parcels of

In 2004-2005, 20 other state programs targeted disadvantaged students. The combined revenue of all state programs targeting disadvantaged students constituted about 5 percent of district revenue.

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land, not on the value of real property. (A tax on the value of property is subject to the Proposition 13 limit.) Due to provisions of Proposition 13, a two-thirds vote of district residents is required to implement a parcel tax. In 2004-2005, 68 districts imposed such a tax. In 20 of those districts, the tax raised more than \$1,000 per student. None of these

20 districts had more than 10,000 students, however, and districts with a parcel tax constituted less than 6 percent of state enrollment. As a consequence, parcel tax revenue was only \$25 per student statewide, less than 1 percent of district revenue. Other local revenue, such as fees, interest, and leases, was less than 3 percent of district revenue.

The revenue limit concept also guides the system for allocating tax revenue to county offices and charter schools. Like school districts, county offices have revenue limits: a set of limits for the different types of schools they operate and a limit for the administrative task of district oversight. These revenue limits determine a county office's revenue limit entitlement, and the difference between that entitlement and its property tax revenue determines its state aid. Funding for charter schools operates in the same manner, with state aid equal to an entitlement less property tax revenue. A charter school's property tax allocation is a pro rata share of the property tax revenue allocated to the district in which it is located.

The revenue allocated through each of these different channels is determined by the legislature. In the case of revenue limit funding, annual increases are given by statutes dating back to the beginning of the revenue limit system. However, the legislature can always provide more or less revenue than these statutory increases by amending the statutes. Appropriations for the various categorical programs are determined each year through the state's annual budget.

While the legislature has considerable discretion in the allocation of funds through these programs, the total allocation to K-12 education (and community colleges) is subject to a constitutional minimum established by Proposition 98 in 1988. Though there are a number of qualifications, the essence of the Proposition 98 guarantee is that public schools, county offices, and community colleges must receive revenue each year from state and local sources that is at least equal to the revenue they received in the previous year, adjusted for growth in enrollment and per capita income. The revenue counted in this guarantee includes revenue limit funds, both state aid and property taxes, and funds in state categorical programs. It excludes other local and federal revenue. Because most school resources are personnel, because the salary and benefits of personnel tend to increase at the same rate as per capita income, and because the guarantee covers more than 80 percent of district revenue, the Proposition 98 guarantee prevents school resources per student from falling significantly over time.

While this guarantee provides stability in school resources, it also means that legislative decisions about school revenue in one year have consequences for subsequent years. If, for example, the legislature were to increase revenue in one year above the Proposition 98 guarantee, it would be adding that increase to the guarantee for all subsequent years and thus making a commitment to continue that funding increase. Because of these consequences, the legislature must be understandably reluctant to increase school funding above the guarantee.⁵

Revenue and Resources: California Compared to Other States

The revenues provided to schools determine the resources they can employ. Judged by the standards of other states, the California school finance system just described delivers a rather modest level of school resources. In 2004-2005, California schools had just 70 percent of the staff per student of schools in the rest of the country. This deficit is a result of relatively low expenditures per student and relatively high compensation of school district employees.

These implications are detailed in Table 1. In 2004-2005, California schools spent \$8,002 per

TABLE 1. Decomposition of Expenditures per Student, 2004-05

	Current Expenditures per Student (dollars)	Staff Compensation per Student (dollars)	Compensation per Staff (dollars)	Staff per Student
California	8,002	6,489	72,743	0.089
US-California	8,672	7,123	55,031	0.129
Florida	7,392	5,585	47,268	0.118
Illinois	8,444	7,131	57,267	0.125
New York	13,771	11,361	80,743	0.141
Texas	6,948	5,744	41,663	0.138

student. This figure includes current operating expenditures from local, state, and federal sources. It excludes capital outlays. Eighty-one percent of that total, \$6,489, was for the salaries and benefits (compensation) of school district employees. Compensation for school district employees averaged \$72,743, implying a staff-student ratio of 0.89 (\$6,489/\$72,743). In contrast, in the rest of the country, current expenditures were \$670 per student higher than in California. As in California, roughly 80 percent of that total was for salaries and benefits. However, compensation averaged \$55,031 per school district employee, 24 percent lower than in California, yielding a staff-student ratio of 0.129. In the rest of the country, there were 129 staff people per 1,000 students. In California, there were 89 staff people per 1,000 students, a deficit of 30 percent. As shown in Gordon and co-authors (2007), this deficit exists in all major employee categories: teachers, administrative staff, and support staff.

Table 1 also shows the decomposition of expenditures per student for four other large states. Florida and Texas have lower expenditures per student than California, but they also have lower staff compensation. Thus, despite their lower spending, those two states have staff-student ratios that are much higher than in California. On the other hand, New York has higher staff compensation than does California, but it also has much higher spending. As a result, it has staff-student ratios that are nearly 60 percent higher than in California.

California's relatively low school resource levels are due not only to high staff compensation, but also to relatively low expenditures per student. To appreciate the factors affecting that measure, it is useful to decompose expenditure per student into two parts: expenditure per capita and students per capita. Expenditures per capita is a measure of the support taxpayers provide for their schools. Students per capita is a measure of the cost to the average taxpayer of providing a given level of resources to schools. The paths taken by these two measures over the last thirty years have important consequences for expenditures per student.

In the 1970s, before the transition from local to state finance, public school spending per capita was higher in California than in other states. In 1976-77, spending in California was \$1,095 per capita, adjusted for 2005 dollars. In contrast, public

In the 1970s, before the transition from local to state finance, public school spending per capita was higher in California than in other states. In 1976-77, spending in California was \$1,095 per capita, adjusted for 2005 dollars. In contrast, public school spending in all other states was \$952 per capita in 2005, a gap of 15 percent.

FIGURE 1. Current Expenditures on Elementary and Secondary Education per Capita, 1976-2005

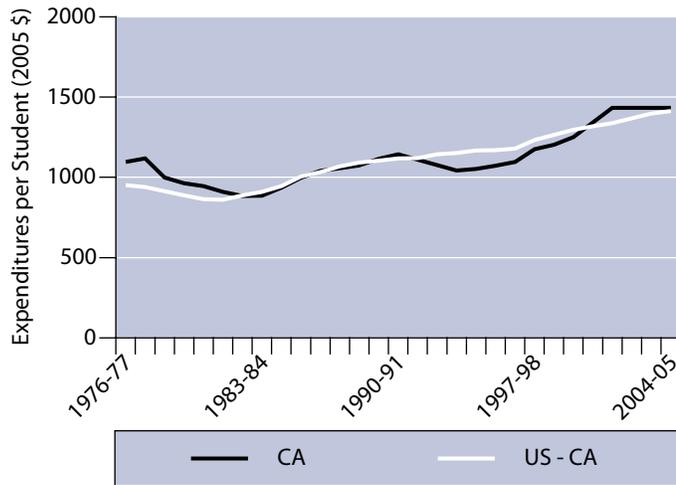
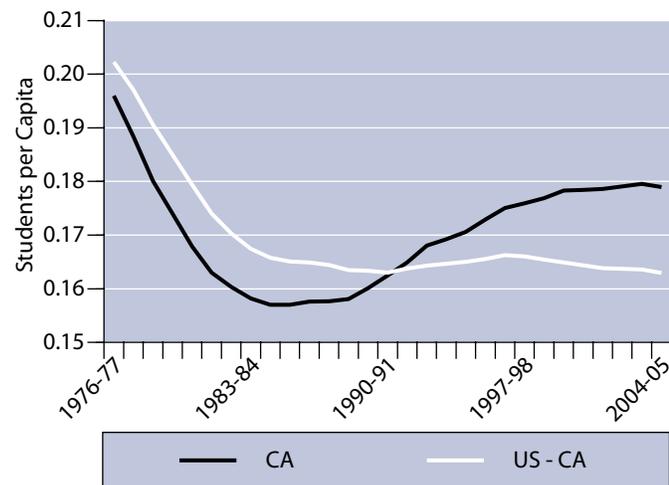


FIGURE 2. Public School Students per Capita, 1976-2005



school spending in all other states was \$952 per capita in 2005, a gap of 15 percent. From this starting point, Figure 1 traces out the evolution of those two measures through the 2004-05 fiscal year. The dark line in the figure is spending per capita in California. The white line is spending per capita in all other states. Both series are adjusted for inflation using 2005 as the base year. In each case, public school spending includes current operating expenditures financed from local, state, and federal sources. Throughout the period, however, federal sources were less than 11 percent of total spending for both California and other states.

For both California and other states, real spending per capita fell in the late 1970s and early 1980s. It

fell faster in California, however, due in part to Proposition 13, reaching the level of other states in 1982-83. From that point, spending per capita followed the trend in other states, rising steadily until 1990-91. This rise ended with the recession of 1990-91, which was felt particularly hard in California. For the next three years, spending per capita fell while it continued to rise in other states. By 1994-95, real spending per capita was 10 percent lower in California than in other states.

This relative decline was reversed in the second half of the 1990s, spurred mainly by the economic recovery and the subsequent growth in state tax revenue. Real spending per capita in other states continued to rise, but it rose even faster in California. By the end of the decade, California was on par with other states. That relative increase continued for a few years in the early 2000's, but was then reversed again in 2003-04 and 2004-05. At the end point in Figure 1, 2004-05, public school spending per capita in California was roughly equal to the level in other states.

Underlying the trends depicted in Figure 1 are fundamental economic forces: business downturns and unexpected budget shortages, economic expansions and sudden fiscal surpluses. Filtering out these cyclical forces, a simple pattern emerges. Before Proposition 13 and state finance, public school spending per capita was about 15 percent higher in California than in other states. After Proposition 13, it was approximately equal to spending in other states.

Though the revenue available for public schools will always be related to economic conditions, the need for revenue is also a factor. If the number of students in a state falls, less revenue will be necessary to provide schools with the resources they need. In fact, as Figure 2 shows, this factor surely explains much of the observed fall in real public school spending per capita in the late 1970s and early 1980s. From 1976-77 to 1984-85, the ratio of public school students to the general population fell by 20 percent in California. Other states experienced a fall of similar magnitude. Consequently, less revenue per capita was necessary to provide schools with the resources they needed.

Relative to schools in other states, conditions for California schools were not so favorable from 1984-85 onward. In California, students per capita rose by

14 percent. In the rest of the country, this ratio was essentially flat. To maintain the resource levels of its schools relative to those in other states, revenue per capita in California would have had to rise considerably relative to other states. As Figure 1 demonstrates, that did not happen.

The result is depicted in Figure 3. With revenue per pupil roughly equal to that in other states and students per capita rising relative to other states, real spending per pupil fell in California relative to other states. In fact, from 1990-91 through 1993-94, real spending per student in California declined each year. In 1993-94, spending was 12 percent lower than in other states. From that low point, however, spending per pupil in California increased at a faster rate than in the rest of the country. By 2004-2005, spending per pupil in California was 8 percent below the level in the rest of the country.

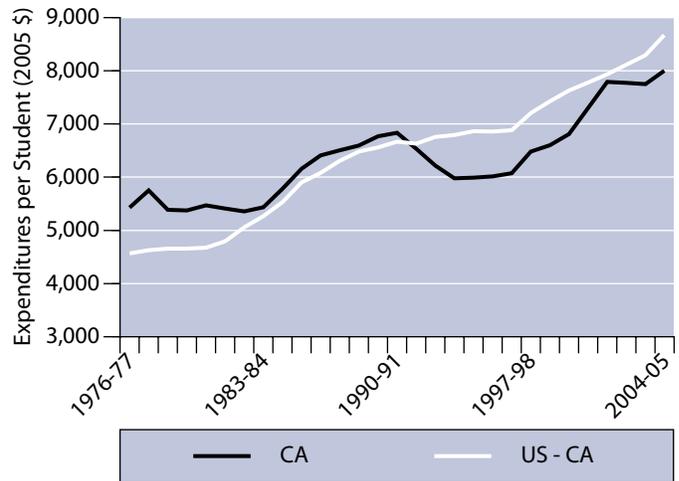
Over the nearly thirty years depicted in Figure 3, the net result has been a fall of more than 25 percent in spending per pupil in California schools relative to schools in other states. In 1976-77, California schools spent 19 percent more per student than schools in other states. In 2004-2005, they spent 8 percent less. This decline was due to two factors: a relative fall in real spending per capita and a relative increase in students per capita. The relative fall in expenditures per student in tandem with high staff compensation implies that California schools have relatively few resources per student.

Revenue and Resources: Variations Within California

Resource levels also vary among school districts within California. As with comparisons between California schools and schools in other states, resources may vary among California districts because revenue per student varies and staff compensation varies. This section briefly considers each of these sources.⁶

To examine variations in total revenue per student, school districts are partitioned into 27 groups based on three factors that are likely to affect total revenue per pupil. The first is district type: elementary, high school and unified. This factor is likely to be important because revenue limits were equalized within groups defined in part by district type. The second factor is district size, which is likely to affect

FIGURE 3. Current Expenditures on Elementary and Secondary Education per Student, 1976-2005



total revenue because of the additional state aid for necessary small schools, most of which are in small districts, because small districts were separated from large districts in the equalization process, and because most excess tax districts are small. To partition districts by size, the districts of each type are broken into three groups with approximately the same number in each group.

The third factor is student poverty, specifically the percent of students living in families below the federal poverty threshold. This factor is likely to be important because many categorical programs are targeted for low-income students and English learners, who are also likely to be poor. Accordingly, districts of each type and size are further separated into three sub-groups: districts with fewer than 10 percent of students living in families below the federal

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poverty threshold, districts with between 10 and 20 percent of such students, and districts in which low-income students are more than 20 percent of total enrollment.

For each of these 27 groups, Table 2 presents average revenue per student in average daily attendance (ADA). For this purpose, revenue includes revenue limit funds, lottery funds, and all state categorical programs except adult education and child development. It excludes local revenue (other than property taxes) and all federal revenue.

The averages presented in Table 2 reveal important patterns in the allocation of revenue. Before discussing those patterns, however, it is important to note that the averages hide considerable variation among districts in the same group. For example, for large unified districts with more than 20 percent of students from poor families, the highest revenue is \$8,110 per student in Los Angeles Unified and the lowest is \$6,550 per student in Hemet Unified, a range of \$1,560 per student. This range is typical for other groups of large districts—7 of the 9 groups had ranges less than \$2,000 per student. However, the ranges are much larger for medium and small

districts. Of those 18 groups of districts, 15 had ranges exceeding \$2,000 per student.

Average revenue per student is clearly related to district size. For example, for elementary districts with fewer than 10 percent of students living in poverty, average revenue per student is \$9,459 for districts with less than 250 ADA, \$7,294 for districts with ADA between 250 and 1,500, and \$6,648 for districts with more than 1,500 ADA. This pattern is repeated for elementary districts with higher percentages of low-income students, and for high school and unified districts of each type and poverty level. The only exception to this trend is for unified districts with more than 20 percent of students living in poverty. For these districts, average revenue per pupil for large districts is slightly higher than for medium-sized districts. More generally, it is the small districts that stand out in these comparisons. Revenue per student is quite similar for medium- and large-sized districts of each type and poverty level.

Revenue also varies significantly by district type. Comparing districts of the same size and poverty level, high school districts tend to have higher funding than elementary and unified districts. Focusing

TABLE 2. Average State Revenue per Student, 2004-2005, By District Type, Size and Level of Student Poverty

	Number of Districts	Percent of Students in Poverty			Implicit Poverty Weight (%)
		0-10	10-20	20+	
Elementary districts					
Small (0-250 ADA)	197	9,459	10,242	9,939	33.0
Medium (250-1,500 ADA)	180	7,294	7,048	6,989	-16.3
Large (1,500 ADA +)	180	6,648	6,752	6,822	11.5
High School districts					
Small (0-1,500 ADA)	27	8,801	8,750	11,238	134.7
Medium (1,500- 6,000 ADA)	27	8,232	7,601	8,005	-13.0
Large (6,000 ADA +)	29	7,837	7,462	7,973	10.7
Unified districts					
Small (0-3,000 ADA)	123	8,594	9,723	8,962	19.2
Medium (3,000- 10,000 ADA)	104	6,833	6,858	6,992	10.6
Large (10,000 ADA+)	107	6,650	6,829	7,112	32.7

particularly on large districts of each type (districts that enroll nearly 80 percent of all students), revenue per student for elementary and unified districts is quite similar, but high school districts receive considerably more revenue per student.

Revenue is also related to student poverty, although the relationship varies by district type and size. Comparing districts in which fewer than 10 percent of students are in families below the federal poverty thresholds to districts in which more than 20 percent of students are poor, average revenue per student increases by \$174 for large elementary districts, \$136 for large high school districts, and \$462 for large unified districts. However, for the analogous comparison, revenue per pupil actually decreases for medium-sized elementary and high school districts. The relationship between revenue and student poverty is far from uniform across groups of districts.

Other states target additional state revenue for low-income students. According to a study of such programs in 2001-2002, California targeted less funds for these students than most other states (Carey, 2002), a conclusion based on a particular method for measuring the impact of targeted programs. The method started by identifying the programs in each state targeting low-income students. It then divided the funds in these programs by the number of low-income students in the state. This ratio was divided by total state funding per student to derive an implicit poverty weight, which may be interpreted as the percentage increase in funding a district experiences for each student identified as low-income. California's implicit poverty rate was 5.5 percent, and the average for all states was 15.1 percent. For the four other large states to which California is typically compared, the weights were 0 percent for Florida, 27.7 percent for Texas, 22.3 percent for Illinois, and 19.6 percent for New York.

While this method of calculating poverty weights is informative, it depends on an accurate identification of targeted programs. This is difficult for California because many programs aim to provide additional resources to disadvantaged students. The study identified the most obvious program, Economic Impact Aid (EIA), but did not include other related programs. A different way to derive poverty weights is to infer them from information like that presented in Table 2. How much does revenue per pupil from all state

programs increase as the percentage of low-income students increases? For example, for large unified districts, low-poverty districts averaged revenue per student of \$6,650 and high poverty districts averaged \$7,112 per student, a difference of \$462. For the former districts, the percentage of low-income students averaged 26.23 percent. For the latter, the average was 6.34 percent. Thus, an increase in the poverty rate of 19.89 percentage points increases revenue by \$462, a rate of \$2,322 ($\$462/0.1989$) per low-income students. Expressed as a percentage of average revenue for low poverty districts, the implicit poverty weight is 32.17 percent ($\$2,322/\$6,650$). The last column of Table 2 lists implicit poverty weights for other district types and sizes.

The revenue differences revealed in Table 2 lead to resource differences. The cost of personnel resources also differ substantially across regions of California, differences documented by Rose and Sengupta (2007). Using data on teacher salary and benefits from 2003-2004, they found that teacher compensation (salary plus benefits) varies by more than 20 percent across regions of the state. In 2003-2004, the average compensation for a teacher with 10 years of experience and 60 units of education beyond the bachelor's degree surpassed \$70,000 in Orange and Santa Clara Counties, but fell short of \$58,000 in Sacramento, Placer, El Dorado, Yolo, and Butte Counties. As expected, teacher salaries are highly correlated with the salaries of non-teachers in a region because school districts must compete with other employers in the market for highly educated workers.

Higher compensation for teachers and other employees imply fewer staff per student. Rose and Sengupta found that, holding other factors including revenue per student constant, a 10 percent increase in the competitive wage in a region increases the average student-teacher ratio in districts by 2 percent and the average

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California may be entering a new era, however, an era in which school enrollment is expected to fall even as the state continues to grow. This fall in students per capita may create some room for new initiatives. California may be able to increase funding per student without increasing the average tax burden of residents.

ratio of students to other certified employees by 6 percent. Because the revenue of California school districts is not related to regional labor market conditions, school districts in high salary regions have lower staff to student ratios on average (Rose, Sengupta, Sonstelie, and Reinhard (2008).

Reforming California School Finance System

The transition from local to state finance in the 1970s was an abrupt and radical shift in policy, a shift

due largely to external events. For the most part, school districts and the state legislature have spent the last 30 years adjusting to this new reality. This adjustment has been particularly difficult because of the rise in students per capita, a rise that strained state tax revenue and left little room for measures to smooth the transition from old policies to new ones.

California may be entering a new era, however, an era in which school enrollment is expected to fall even as the state continues to grow. This fall in students per capita may create some room for new initiatives. California may be able to increase funding per student without increasing the average tax burden of residents.

California has also been presented with a new set of priorities for spending that dividend. Those priorities are implicit in the state's academic content standards and its system for measuring whether students are achieving those standards. Though this accountability system is still a work in progress, it has identified schools and school districts in which improvement is needed. Improvement will require more than additional resources, of course, but additional resources are likely to play an important role. In that sense, California's new accountability system has identified important funding priorities.

The challenge facing the state is to use the fiscal dividend created by falling enrollment to address these funding priorities. Meeting this challenge will not be easy, but attempts to do so are more likely to be successful if they embody three basic principles. The first is to allocate revenue according to need. Schools with many disadvantaged students have substantially lower rates of proficiency on statewide exams than other schools, implying that the state should direct more resources to those schools. Furthermore, schools in high-cost regions have fewer resources than other schools, implying that the state should direct more resources to districts in those regions.

The second principle is to increase transparency in the allocation of funds. California's current system is so complicated that it is quite difficult to know how funds are actually allocated. Furthermore, the wide variation in revenue among districts with similar characteristics has created the perception that the allocation of revenue is fundamentally unfair, a perception that undermines efforts to hold all schools and students accountable to the same high standards.

The third principle is to increase local autonomy in the use of funds. Through its academic content standards and associated accountability system, the state has clearly articulated what it expects schools to achieve. This focus on outcomes means that the state can be less involved in prescribing how funds are spent. It should seize this opportunity. In a state as large and diverse as California, it is unlikely that one particular approach will work well in every school district. In such a state, it makes sense to describe what outcomes schools are to achieve and give districts considerable leeway in how they achieve those objectives.

These three principles are embodied in two recent proposals to reform California's school finance system. The first comes from Bersin, Kirst and Liu (2007), and the second comes from the Governor's Committee on Education Excellence (2007). Though there are differences between the two, both share a common approach. They would collapse the current maze of revenue programs into three simple programs: a base program, a targeted program, and a special education program. The base program would provide for the education of all students and would be allocated to districts in proportion to average daily attendance. The targeted program would be allocated

according to the number of disadvantaged students. The special education program would remain essentially unchanged. Following the first principle, both proposals would significantly increase funds for disadvantaged students.⁷ Following the second and third principles, both proposals would allocate funds by simple formulas and remove restrictions on the use of funds.

Over the coming months, we will surely hear other reform proposals, but no reform is likely unless policy makers can visualize a path from the current system to a better alternative. The specifics of that path will depend on the ultimate destination, but some initial steps are likely to be the same, regardless of the destination. The remainder of this chapter briefly describes three steps that seem likely to be part of any transition, and that can be taken in the near term. These steps are thus mileposts by which California can measure its progress.

One step is to regularize the equalization of revenue limit funds. A district's entitlement to revenue limit funds is determined by the product of its base revenue limit and its ADA. Certain adjustments and additions are then made to this amount to determine a district's final entitlement. For historical reasons, base revenue limits differ among school districts as do additions and adjustments. As a result, the distribution of revenue limit funds, the likely foundation of any new school finance system, seems haphazard and unfair.

When additional funds have become available, the legislature has occasionally increased the limits of low-limit districts, reducing inequalities. However, significant equalization could become a regular part of the annual updating of base revenue limits. Currently, the base limits are updated for inflation each year according to provisions in state statutes. This annual updating also tends to equalize base limits because the same dollar amount is added to the limits of all districts. The equalization process could be accelerated by writing into statute larger annual increases for low-limit districts. As part of this regular equalization process, current additions and adjustments could be folded into base limits that would then be subject to annual equalization.

Other improvements to the equalization process are worth considering. One is to establish targets for the base revenue limit of each type of district and to

accelerate revenue limit increases for districts with limits below their targets. By specifying a target instead of narrowing differences within groups, as is currently the practice, the state might correct inequities across groups. For example, it could increase the base rates of unified districts more rapidly than the rates of elementary and high school districts, correcting an inequity that currently exists. It could also establish different targets for different regions to adjust for regional differences in labor market conditions. Whatever the method, the key idea is to make significant equalization a regular, annual affair, to make slow and steady progress towards a clearly articulated goal.

A second step is to reduce the number of categorical programs. One approach has been laid out by the Legislative's Analyst's Office (2008). The LAO would consolidate 35 categorical programs into three programs. It would also fold into base revenue limits six different funding streams: two categorical programs and four revenue limit adjustments.

Another approach to reducing categorical programs is to establish an annual review process. Each year a group established by the legislature would review existing categorical programs and propose a specified number for elimination. The legislature would then be obligated to vote on motions to terminate each of these programs. Funds for a terminated program could be rolled into the base revenue limit for each district, which would then be equalized over time.

A third step is to expand Economic Impact Aid. EIA is the state categorical program most directly focused on disadvantaged students. It has a long history, dating back to the early days of revenue limits and the state's response to *Serrano*. The formula for allocating EIA grants was revised

Through its academic content standards and associated accountability system, the state has clearly articulated what it expects schools to achieve. This focus on outcomes means that the state can be less involved in prescribing how funds are spent. It should seize this opportunity.

by the legislature in 2006, and the program now has a reasonably clear funding formula. The program is a vehicle through which the state could direct more resources to schools with many disadvantaged students.

Each of these steps is really a process that the state could initiate at any time. None requires a large revenue investment in any one year. However, if followed steadily over time, California would soon find itself with a simpler and more rational school finance system.

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Data Appendix

Figures 1, 2, and 3. Population and current expenditures of public schools in California and other states are from the U.S. Census Bureau's Census of Governments. Public school enrollment in California and other states is from the National Center for Education Statistics, State Nonfiscal Survey of Public Elementary and Secondary Education.

Table 1. Compensation for public school employees is from the National Center for Education Statistics, *National Public Education Financial Survey, School Year 2004-2005*. Employees in elementary and secondary education are from the National Center for Education Statistics, *State Nonfiscal Survey of Public Elementary and Secondary Education, 2004-2005, Common Core of Data*.

Table 2. State revenue per ADA is from the PPIC School Finance Simulation Model described in "Funding Formulas for California Schools: Simulations and Supporting Data," by Heather Rose, Ria Sengupta, Jon Sonstelie, and Ray Reinhard, Public Policy Institute of California, January 2008.

Endnotes

- ¹ For a more complete description of California's school finance system, see Goldfinger (1999), Sonstelie, Brunner, and Ardon (2000), and Timar (2006).
- ² Goldfinger (1999) provides more details about the revenue limit system.
- ³ For more about California's categorical programs, see Timar (2004).
- ⁴ Special education funding is coordinated through groups of districts organized as Special Education Local Plan Areas (SELPAs).
- ⁵ For more on Proposition 98, see Chapter 5 and Appendix D of Rose, Sonstelie, Reinhard, and Heng (2003).
- ⁶ For more on the distribution of revenue and resources across California school districts, see Loeb, Grissom, and Strunk (2006).
- ⁷ They differ, however, on another dimension of need: regional labor market differences.

Revisiting the “Crazy Quilt”: Recent Developments in California’s Educational Governance¹

Dominic J. Brewer
University of Southern California

Icela Pelayo and June Ahn
University of Southern California

WHY DOES GOVERNANCE MATTER? THE COMPLEXITY AND IRRATIONALITY OF CALIFORNIA’S EDUCATIONAL GOVERNANCE SYSTEM IS A CRITICAL OBSTACLE TO IMPROVEMENT IN THE PERFORMANCE OF THE STATE’S SCHOOLS AND STUDENTS. THE STRUCTURE OF THE SYSTEM IS OVERLY HIERARCHICAL AND STATE-DRIVEN, WITH LIMITED ACCOUNTABILITY THROUGHOUT.

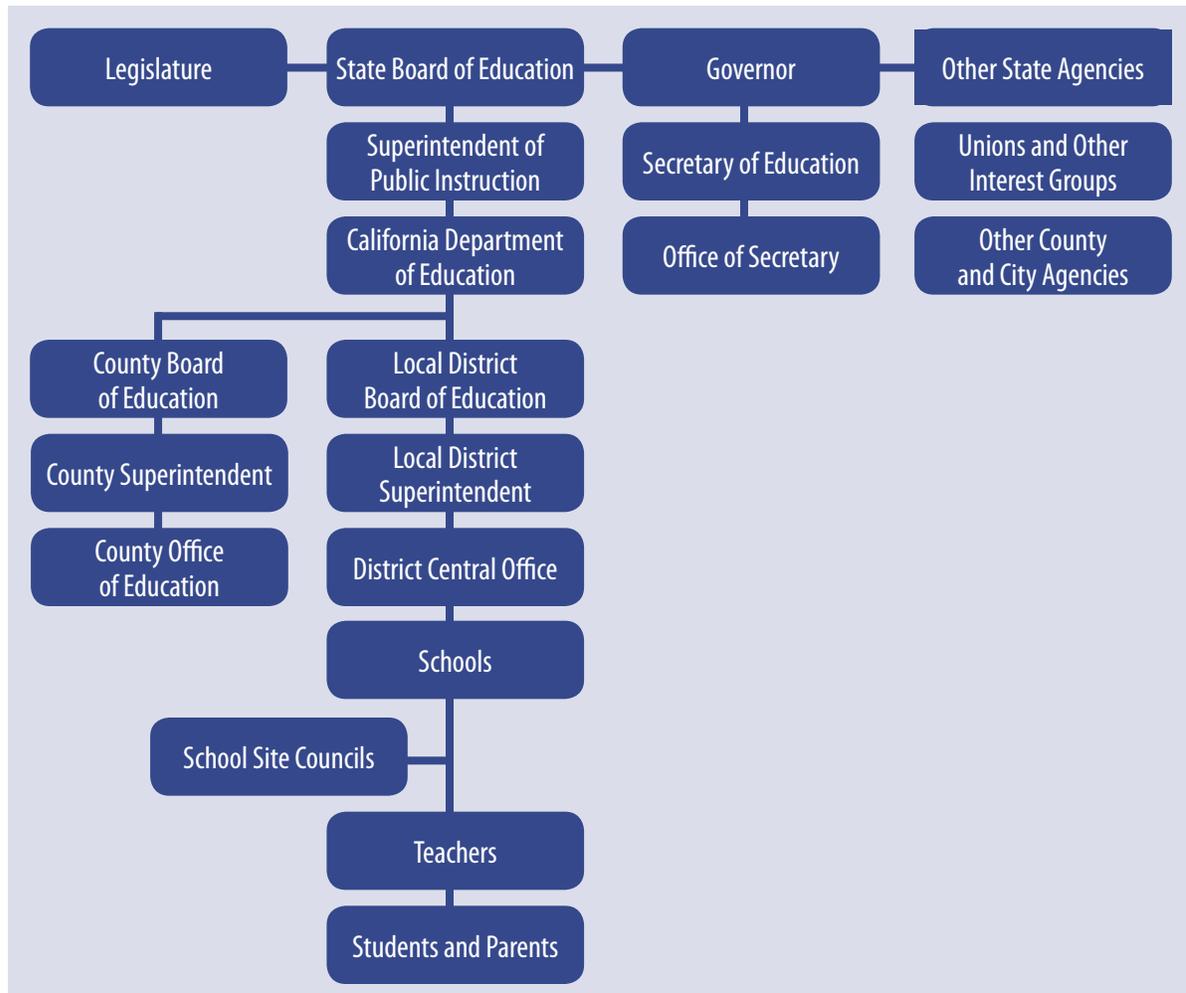
There are too many actors with overlapping jurisdictions and too many categorical funding programs and regulations restricting flexibility. The consequences include a lack of accountability, competition to exercise authority and shift responsibility, and constant battles over

administrative turf, among many others. Institutional distrust pervades the system. California’s governance system offers multiple opportunities to block change, and few opportunities to lead change.

The state’s system of educational governance has developed in an ad hoc manner over the past 150 years, resulting in multiple bodies and complicated interrelationships. Governance in the state is a hierarchy from the state level down to schools, with decisions being transmitted from the state or district to the level below. The system encourages vertical communication, rather than horizontal (i.e., district to district), although formal and informal networks of districts do exist (including, in some cases, the integrating effects of County Offices). Clearly, there is a multitude of bodies that oversee the educational system, but the real power lies with the state (Brewer & Smith, 2006). The state maintains a considerable regulatory framework through the State Education Code as well as widespread use of categorical funding that restricts local school districts ability to use resources flexibly. The state has established a legal framework that requires collective bargaining with employees, and the agreements reached between school boards and

California’s governance system offers multiple opportunities to block change, and few opportunities to lead change.

FIGURE 1. Major Institutions in California's Educational Governance



unions at the local level may further restrict flexibility in the use of funds. (See Figure 1.)

In April 2005 Governor Arnold Schwarzenegger formed an Advisory Committee on Education Excellence.² Several foundations funded an unprecedented research effort designed to inform the work of the committee, which ultimately produced over 20 studies on all aspects of California education (see Institute for Research on Education Policy and Practice, 2008). The Crazy Quilt (Brewer & Smith, 2006), provided an overview of California's fragmented and confusing governance structure. In this essay, we first review the key findings of this study. We add results from an online survey in June 2008, of our original California-based interviewees and a supplementary sample of California district superintendents, asking them how they viewed the state's

governance structures. We conclude with a discussion of the opportunities for improvement.

The Crazy Quilt

The main contribution of Brewer and Smith (2006) was the development of a normative framework to assess five characteristics of effective governance deemed important by prior research and by the stakeholders consulted in our study. These criteria are defined in Table 1.

The main findings of the study are summarized in Table 2. These results are based on a number of data sources. We surveyed numerous secondary sources to assess how California fares on each of these dimensions. We also conducted hour-long interviews with more than 40 respondents in person or by telephone, ranging from state

board members, state department officials, state policy insiders and association leaders, county and district administrators and board members, and national academic experts on governance. As Table 2 suggests, California exhibits great instability in funding levels, frequent policy changes, a lack of cohesiveness among decision-makers, and high turnover in critical leadership positions. Lines of authority throughout the system are unclear, making an accountability system difficult to implement. California's governance system promotes

compliance with state regulations over local innovation, and ties categorical funding to state-determined priorities rather than supporting local decision-making. Our informants also expressed concern over the role of special interests in the governance system, with a particular focus on the power of employee unions.

The findings from our original study were confirmed in a follow-up survey³, where average ratings for all of the indicators ranged from very weak to slightly weak. On every indicator a clear

TABLE 1. Five Characteristics of Good Governance

Characteristic	Definition and Rationale
Stable	A stable governance structure is one in which policy is made and implemented in a way that is known as far in advance as is reasonably possible. Revenue is known in advance for planning. Policies are given an opportunity to work before changes are made. There are few major changes of direction or new initiatives introduced suddenly. Leaders have tenures that allow for knowledge development and on-the-job learning. Stability enables actors in the system to act in a rational and planned way. This is important for the development of expertise and long-term investments in capacity.
Accountable	A governance structure with strong accountability is one in which there are clear lines of authority between the various parts of the system, with limited duplication of functions, so that it is possible to identify the source of decisions. There are consequences for good/bad behavior and outcomes. Actors in a system with strong accountability understand their roles. Accountability gives the right incentives for actors within the system to accomplish their goals. There is alignment between decisions to raise revenue and decisions to spend revenue.
Innovative, Flexible and Responsive	An innovative, flexible and responsive governance structure is one that is adaptable to changing context and able to respond appropriately to new short- and long-term external demands upon it. New approaches are encouraged; many ideas are generated and spread throughout system. Innovation, flexibility and responsiveness are essential for a system to adapt to changing needs and ensure cutting edge knowledge is used.
Transparent and Open	A transparent and open system is one in which it is clear to the public and all stakeholders how decisions are made, who makes them, and participation is encouraged at every level. Transparency allows for the exchange of information between the different levels of the governance system. An open and transparent system is less likely to be subject to 'capture' by special interests, less likely to have corruption and bribery and most likely to encourage public engagement and support of schools. There is an open flow of information, monitoring and evaluation data, and mechanisms to communicate performance to citizens.
Simple and Efficient	A simple and efficient governance structure is one that ensures decisions are made in a timely manner and with minimal overlap or confusion among entities. Decision making is located where knowledge is greatest. Policy is coherent and decisions across multiple domains and levels are coordinated so that there is minimal duplication and waste. The decision making and implementation structure is not burdensome on stakeholders in the system. Costs are minimized.

TABLE 2. Governance Findings for California in 2006

Characteristic	
Stable	<p>Funding (unstable)</p> <ul style="list-style-type: none"> ■ Funds fluctuate according to economic trends. ■ Lower levels of overall funding, increased reliance on categorical funding, lateness of budget, and inability of local fundraising lead to unpredictable financial planning. <p>Policy (unstable)</p> <ul style="list-style-type: none"> ■ Policy fluctuations are frequent. ■ Frequent adjustments in the areas of student assessment and curriculum lead to premature changes in requirements and implementation. <p>State-level decision making (unstable)</p> <ul style="list-style-type: none"> ■ Reduction of staff in state-level agencies and shorter term limits reduce long-term knowledge and expertise. ■ Multiple agencies serving different bosses hinder cohesive decision-making. ■ Lack of student data system obstructs effective decision-making. <p>Leadership (unstable)</p> <ul style="list-style-type: none"> ■ Turnover of state officials, school boards, and superintendents is high. ■ High turnover leads to lack of continuity and stability of programs.
Accountable	<p>Lines of authority (unclear)</p> <ul style="list-style-type: none"> ■ Few interviewees knew who was in charge of different aspects of the system and who was responsible for what tasks. <p>Fragmentation (high)</p> <ul style="list-style-type: none"> ■ Numerous local, regional, and state-level entities with overlapping responsibilities. ■ Unclear understanding of the responsibilities of each stakeholder in the system.
Innovative, Flexible and Responsive	<p>Innovation (weak)</p> <ul style="list-style-type: none"> ■ Sense from stakeholders that the system is highly bureaucratic and concerned with compliance with regulations over innovation. ■ State decision-makers have preferred one-size-fits-all solutions, such as class size reduction. ■ Local entities do not have autonomy to make decisions or attempt innovative strategies. ■ Charter schools are one example of a relatively successful attempt at local autonomy and innovation.
Transparent and Open	<p>Transparency (relatively successful)</p> <ul style="list-style-type: none"> ■ Little concern among interviewees; no widespread evidence of unethical actions or corruption. ■ No evidence that California is any worse than other states in public participation and voter turnout. <p>Special interests (high concern)</p> <ul style="list-style-type: none"> ■ Interviewees showed great concern over the role of special interests in state-level decisions. ■ Particular concern was directed toward employee unions and their influence on system decisions.
Simple and Efficient	<p>Simplicity (weak)</p> <ul style="list-style-type: none"> ■ Instability, confusing lines of authority, and unclear responsibilities lead to an overly complex system. <p>Efficiency (weak)</p> <ul style="list-style-type: none"> ■ Rigid, prescriptive state legislation leads to wasted effort to comply with multitude of mandates. ■ Need for more local authority and flexibility in resource allocation.

Source: Brewer and Smith (2008)

majority rates the state as weak. Table 3 summarizes stakeholder ratings of California along the 5 indicators, from a range of very weak (1) to very strong (4).

Stability. Stability can be measured in a number of ways—for example, by looking at revenue fluctuations, continuity and changes in policy and in the tenure of leaders in all parts of the system. On this criterion, California did not rate highly in our

2006 interviews. In our new survey, 79 percent of respondents rated the state as very or slightly weak on stability. Furthermore, nearly every respondent to our follow-up survey listed the state budget situation as the major influence on instability in California. Numerous political battles and failed attempts at change, along with rapid turnover among state education officials, may also contribute to an overall perception of instability.

Accountability. A governance structure with strong accountability is one in which there are clear lines of authority between the various parts of the system, with limited duplication of functions, so that it is possible to identify the source of decisions and to assign consequences for good/bad behavior and outcomes. Our 2006 sample generally felt that accountability in the state's system was limited, partly because of the fragmentation of functions among many different entities (Brewer & Smith, 2006). Our updated survey reveals that about 71 percent of respondents felt that accountability in California remains very or slightly weak. Although some states have moved strongly to consolidate influence over education policy in the hands of the Governor—for example, by eliminating elected Commissioners or Boards, this has not happened in California.⁴

Innovation, Flexibility, and Responsiveness. Views are split on the extent to which California's educational governance encourages innovations, adapts to unique situations, or responds to needs as they arise. Our 2006 examination of California legislation suggested that the state prefers “one-size-fits-all” solutions, rather than presenting lower level units with an array of options. Approximately 77 percent of respondents to our recent survey felt that the state was very or slightly weak in facilitating flexibility, but a few saw signs of improvement over the last few years.

There may be a growing awareness in the state capitol that excessive state control is a problem, but the number of education bills chaptered continues to increase. These bills range across a variety of areas such as teacher credentialing, school facilities, and

instructional materials. In 2005, 165 education bills were chaptered, 178 in 2006 and 205 in 2007 (California Department of Education, 2007). None of these bills proposed significant education governance reform. Despite wide recognition of the benefit to allow local actors to exercise greater discretion in the ways they use resources, by consolidating categorical funding streams, there has been little progress on this front as well.

Transparency. Public institutions in California operate within a well-developed set of rules requiring fiscal reporting, open meetings, conflict of interest disclosures, free elections, competitive procurement, and so on. A strong, basic set of rules goes a long way to ensuring transparency in education governance, and our survey suggests that this is the dimension of governance rated most favorably by respondents (although the majority view was still one of weakness). Our interviewees in 2006 felt that the state did reasonably well in the transparency of the system, but expressed most concern

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TABLE 3. Ratings of California's Educational Governance System

	Mean (Standard Deviation)	Very Weak	Slightly Weak	Slightly Strong	Very Strong
Stability	1.71 (0.93)	55%	24%	16%	5%
Accountability	2.11 (0.69)	18%	53%	29%	0%
Innovative, Flexible, and Responsive	2.05 (0.67)	18%	59%	23%	0%
Transparent	2.28 (0.76)	15%	44%	38%	3%
Simple and Efficient	1.69 (0.69)	44%	43%	13%	0%

Authors' tabulation of survey responses. Scale: Very Weak = 1; Slightly Weak = 2; Slightly Strong = 3; Very Strong = 4.

The considerable volume of state level prescription over use of funds and programmatic design significantly reduces the flexibility of lower level decision makers to plan allocations that best suit their local needs.

about special interests in the educational governance process.

Simplicity and Efficiency. Finally, there is a widespread perception that California's educational governance system is complex and fragmented. The considerable volume of state level prescription over use of funds and programmatic design sig-

nificantly reduces the flexibility of lower level decision-makers to plan allocations that best suit their local needs. Districts in turn further inhibit the flexibility of resource use at the school level because district-wide collective bargaining ties up the vast majority of resources available for allocation. In our current survey, the ratings for simplicity and efficiency were very poor. Nearly 87 percent of respondents rated California as very or slightly weak, and 92 percent felt the state had either declined or remained unchanged in recent years. About 94 percent of respondents felt that collective bargaining hindered teacher accountability in the state; 78 percent of respondents felt that the California Teachers Association (CTA) was a main barrier to governance reform, which also reflects a general frustration with special interests.

Recent Developments in California's Educational Governance

When we asked our updated survey sample for their view of recent changes (Table 4), the main

concern was the increase in instability in the system, which is mainly attributable to California's recurrent budget crises.

The state's fiscal picture dramatically worsened from a projected surplus of \$635 million in the 2004-2005 budget cycle (Legislative Analyst's Office, 2004) to a \$17.2 billion deficit in May 2008 (California Department of Finance, 2008). Although the state committed to funding education under the Proposition 98 minimum guarantee, school districts were attempting to cut funding by 10 percent or more. In some districts this is being felt in administrative and support services while in other districts teachers are being laid off (UTLA, 2008; Johnson, 2008). According to State Superintendent Jack O'Connell, an estimated 20,000 teachers, counselors, librarians, nurses, and support staff have received pink slips (California Department of Education, 2008). Budget fluctuations, and related changes in staff throughout the system, fundamentally alter the what, who, and how of educational governance. Ultimately, the effects of the fiscal situation will not be fully known until a state budget is adopted.

There have been few changes to the structures and methods of governance over the past two years, reflecting the impasse which seems to pervade the state when it comes to reform. Major ballot propositions that would have generated significant policy changes to teacher tenure and minimum school funding (Proposition 74 and 76) were rejected by voters in a special election in November 2005. And the legislature's attempt (AB 1381) to alter governance in the state's largest district, Los Angeles Unified School District (LAUSD), was ultimately ruled an unconstitutional transfer of authority by the

courts (Blume & Rubin, 2006). Mayor Villaraigosa did not appeal the decision after two candidates, who supported the mayor's position, won election to the LAUSD school board (Smith, 2007). In December 2007, over 19,000 LAUSD parents and teachers approved the mayor's Partnership for Los Angeles Schools program. The initiative manages six low-performing LAUSD schools through a collaborative effort

TABLE 4. Has California Declined, Improved or Remained Unchanged?

	Declined	Improved	Unchanged
Stability	62%	5%	33%
Accountability	21%	10%	69%
Innovative, Flexible, Responsive	28%	8%	64%
Transparent	18%	0%	82%
Simple and Efficient	28%	8%	64%

Authors' tabulation of survey responses.

between the City of Los Angeles and LAUSD (Boghossian, 2007). The partnership is completing its first year of a five-year initial contract.

Prospects for the Future

How the state decides to organize its educational decision-making and delivery structures can have a significant impact on the quality of students' experiences in classrooms, and there is significant room for improvement in California. Diagnosing the problem areas, however, is easier than moving forward with improvements. Recommendations for changes to the governance structure are not in short supply. The Governor's committee, for example (consistent with the *Crazy Quilt* and other studies conducted as part of the "Getting Down to Facts" project), recommended greater local autonomy for school districts over a range of issues and moving away from categorical

funding to allow more flexibility. Further, it suggested the clarification of the roles of key players in the governance system including the Secretary of Education, Superintendent of Public Instruction, and State Board of Education, and the establishment of a regional support system using a network of county superintendents and a school inspection system. Numerous previous commissions and reviews of California's governance structure have made similar suggestions.

As part of our survey, we asked our respondents (mainly district superintendents) to give us their opinion of ten diverse statements regarding educational governance in California, ranging from diagnoses of problems to possible solutions. Table 5 summarizes the results. Although the responses to several items are wide-ranging, a clear majority regard governance reform as important even in the absence of funding increases, and they also believe governance reform is

TABLE 5. Reactions to Issues of Educational Governance

	I Agree	I Disagree	Not Important
The state Department of Education micromanages the education system in California.	50%	45%	5%
Allotting more money for public schools is much more important than any governance reform.	32%	68%	0%
The Superintendent of Public Instruction performs a key role as an advocate for public education.	66%	26%	8%
The California Teacher Association is the main barrier to governance reform.	78%	22%	0%
An elected board of education facilitates effective decision making.	43%	46%	11%
There are clear lines of authority between levels of the governance system.	14%	86%	0%
Mayoral control is a promising governance reform.	8%	87%	5%
There is little hope for improving California's educational governance system.	27%	73%	0%
Collective bargaining hinders teacher accountability.	94%	6%	0%
There should be more charter schools authorized in California.	14%	70%	16%

Authors' tabulation of survey responses.

More optimistically, it may be that a focus on improving state data efforts can beget a fuller conversation about the appropriate role of the state, particularly in regard to building local capacity.

possible. Seventy-three percent disagreed with the statement, “There is little hope for improving California’s educational governance system.”

Where does this leave the prospects for reform? Significant governance changes are hard to enact because they mean shifting authority among

powerful interests, and few want to give up functions, staff or budget. In addition, all actors in the current system are protected by the fragmentation and fuzziness of the existing lines of authority—no single entity can be blamed when things go wrong. Most of the change to the governance structure must be enacted in Sacramento, yet it is there that partisan divisions, special interests and bureaucratic fiefdoms reign. Lack of trust between the state and local level, at least for a generation, make politicians in the capitol reluctant to lessen state regulation and increase local level autonomy. The reality of politics in the state—term limits, diversity in interests by region or local demographics, the role of special interests in aiding election to candidates of both parties, long-term structural budget deficits—make *any* kind of major reform challenging.

Despite these obstacles, two policy changes might help to open the door to improved educational governance in the state. These are likely to help, ironically, because they do *not* focus explicitly on governance. The first is the development of a state data system. Currently making its way through the legislature is SB 1298, the Education Data and Information Act of 2008. This bill would set up a 19-member Education Data Governing Board charged to develop a timetable for a comprehensive data system connecting student records from pre-school to higher education. This development holds promise to improve California’s student data system, although similar plans have been discussed for more than a decade.

Why would efforts to improve state data help educational governance? It is hard to envisage California becoming a “learning system” without good data. It is also hard to develop a long-term, results-oriented,

perspective that can overcome changes in political control and turnover of specific legislators, without a comprehensive data infrastructure that is accepted by all. A longitudinal data system would support clearer measurement of performance both by students and implicitly by the actors within the structure. States like Texas and Florida that have developed a “culture of data” –both its collection and use—tend to have fewer abrupt shifts in policy, more willingness to try new approaches and systematic capacity to evaluate changes (Smith, Ahn, & Brewer, 2007).

More optimistically, it may be that a focus on improving state data efforts can beget a fuller conversation about the appropriate role of the state, particularly in regard to *building local capacity*. Rather than simply rejecting the devolution of authority to lower levels because of a sense that district or school level leaders would be unable to handle increased responsibilities, the state could embark on a systematic effort to build local capacity over several years. This could include the data system, and use of that data system to help identify which districts and schools could be trusted with greater authority and flexibility and which had work to do to get to that point. The state could also significantly enhance efforts to develop tools to aid data-driven decision-making at the district level in support of the accountability system. Many districts have already invested their own resources in this area with some impact (see Datnow, Park, & Wohlstetter, 2007). Other simple capacity-building efforts could include enhanced school board training, and district and school administrator training geared towards creating a cadre of leaders capable of handling increased authority.

The second way educational governance may be improved is through changes to the system of state financing. Calls for the state to allow more local fiscal flexibility are numerous, and there is wide agreement that an effective strategy must include the consolidation of categorical funding streams. Getting agreement on such a change is no easy task, but it may be simpler than tackling governance directly and have as big—or bigger—effects. By lessening the ability of decision-makers at the state level to use funding to mandate “one-size-fits-all” approaches or “pet projects,” and providing opportunities for districts to control a greater share of their own resources, some authority should devolve to lower levels. If changes could also

be made on the revenue side to guarantee greater stability of funding at the local level, that would also help improve governance by allowing longer term planning and less abrupt changes of policy in response to shifts in funding.

It is possible then to imagine improvements to governance through state data efforts and changes to the funding system. The hope would be that over time this may gradually shift the mindset of both state and local level decision makers and lay the ground work for more formal, ambitious changes to governance such as re-aligning the functions of the various actors, creating new or abolishing existing institutions, tackling the role of special interests in educational policy-making, and so on.

California has established a set of curriculum standards for students that are widely regarded as some of the best in the nation, and a regular system of student standardized assessment to collect reliable information on the attainment of those standards. The full promise of standards-based accountability, however, is predicated on the notion that the actors with the most information and the most expertise should be granted autonomy in exchange for the added oversight. California needs to move to implement this approach, by gradually loosening the grip of Sacramento over lower-level actors, while improving information and systematically building local expertise. These changes can help to lay the foundation for continuous improvement in the performance of the state's schools, and ensure that all California students have the opportunity to succeed.

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Endnotes

- ¹ This chapter updates Dominic J. Brewer and Joanna Smith, Evaluating the "Crazy Quilt": Educational Governance in California, a report prepared in support of the California Governor's Advisory Committee on Education Excellence, November 2006. The study may be found at <http://irepp.stanford.edu/projects/cafinance-studies.htm>. See also Brewer and Smith (2008).
- ² Details about the committee, mission, members, and research papers can be found at <http://www.everychild-prepared.org/>. The full committee report can be found at <http://www.everychildprepared.org/docs/technicalreport.pdf>.
- ³ To supplement these findings for this chapter, we designed a brief online survey and administered it anonymously via "Survey Monkey" to the California-based sub-sample of our original interviewees. In addition, we

administered the same survey to a sample of active and retired California superintendents. This group was a convenience sample of USC alumni administrators for whom email addresses were easily available. These individuals lead districts of all sizes and types throughout the state. We received responses from 39 district superintendents, state officials, and other system leaders, with a response rate of roughly 42 percent. We do not claim this is a large or representative sample, but we do believe the responses are useful and interesting.

⁴ The appointment of the Governor's Secretary of Education, Alan Bersin, as a State Board member in 2006, and more recently the appointment of the Chair of the Governor's Committee on Excellence in Education to head the State Board, might be viewed as modest steps towards improved accountability.

Contributors

JUNE AHN is a third-year Ph.D. student and a dean's fellow in Urban Education at the University of Southern California. His research interests include education technology and education policy.

DOMINIC J. BREWER is the Clifford H. and Betty C. Allen professor in Urban Leadership and professor of Education, Economics and Policy at the University of Southern California. He specializes in education policy and the economics of education. He is a Co-Director of PACE.

BRUCE FULLER is a professor of Education at UC Berkeley. His research delves into how local organizations, such as preschools or charter schools, advance the development of children and their families. His new book – *Standardized Childhood: The Political and Cultural Contest over Early Education* (Stanford University Press) chronicles the rising push for universal preschool nationwide. He is a co-director for PACE.

PATRICIA GÁNDARA is a professor of Education at UCLA. She is also the co-director of The Civil Rights Project/ Proyecto Derechos Civiles. Her research focuses on educational equity and access for low income and ethnic minority students, language policy, and the education of Mexican origin youth.

W. NORTON GRUBB is the David Pierpont Gardner professor in Higher Education at UC Berkeley, where he is the faculty coordinator of the Principal Leadership Institute. His research spans the role of schooling in labor markets, reforms in high schools and community colleges, the effects of institutional practices on teaching quality, the interactions among education and training programs, community colleges, the flow of students into and through postsecondary education, and social policy toward children and youth.

MEGAN HOPKINS is a graduate student at the School of Education & Information Studies at UCLA. Her research interests include education policy and language policy as well as the education of English Language Learners and the preparation of teachers of English Language Learners. She is a former bilingual teacher.

MARSHA ING is a postdoctoral fellow at Stanford University. Her research interests include methods for measuring and linking student performance and instructional opportunities, and increasing the instructional utility of student assessments.

SUSANNA LOEB is a professor of Education at Stanford University. She specializes in the economics of education and the relationship between schools and federal, state and local policies. She is a co-director of PACE and director of the Institute for Research on Education Policy and Practice at Stanford University.

LYNETTE PARKER is a graduate student at the School of Education at UC Berkeley. Her research interests include education equality and equity and studying the impact of oppression on student achievement and student behavior.

ICELA PELAYO is a second-year Ph.D. student and a dean's fellow in Urban Education at the University of Southern California. Her research interests include second language learning, education policy and education economics.

JON SONSTELIE is a professor of Economics at UC Santa Barbara. He is also an adjunct fellow at the Public Policy Institute of California. His research focuses on urban economics and public finance.

