

Narrowing the Multiple Achievement Gaps in California: Ten Goals for the Long Haul

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Summary

The multiple achievement gaps in California are problems with long histories and complex causes, and they cannot be reduced overnight. This policy paper outlines ten goals that could guide policy over the long run, and that if followed consistently, would narrow (though not eliminate) many of the achievement gaps. These goals are also interdependent; for example, trying to enhance effective school *resources* (Goal 1) cannot be accomplished without supportive

reforms in school *finance* (Goal 7). Each of these goals is a substantial undertaking, but it is crucial for educators and policy-makers to confront the entire landscape of policies necessary to narrow achievement gaps. Most of them focus on K-12 education, though—consistent with the responsibilities of a P-16 council—both early childhood programs and gaps in access to and completion of postsecondary education are mentioned.

Goal 1: Enhancing School Capacity

The state needs to enhance the capacity of schools with low-performing students. This in turn requires increasing *effective* school resources—the personnel and practices known to improve various outcomes. These include some simple resources, like the pupil/teacher ratio and teacher experience that theoretically can be bought, but more importantly it must also focus on compound resources (like smaller class size *and* well-

prepared teachers who can teach in small classes in innovative ways), complex resources (especially innovative and “balanced” instruction), and abstract resources (like school climate, trust, and stability). Compound, complex, and abstract resources cannot be simply bought; they may require some funding, but they also require vision, leadership, and collaboration.

Goal 2: Recognizing Multiple Gaps and Multiple Strategies

While “the achievement gap” is often defined as the black-white (or Latino-white) test score gap, in fact there are many gaps among California students—not only in test

scores, but also in progress through schooling, in passing the high school exit exam (CAHSEE), in completing high school; in accumulating (a) – (g) credits; in

access to and completion of postsecondary programs. Some resources are beneficial to all of these outcomes, but some outcomes require different resources. In particular, enhancing learning requires shifting from traditional to more innovative and

“balanced” forms of instruction, while improving progress through school requires creating more supportive environments. If the state is to narrow all of these gaps, it must recognize the importance of different strategies.

Goal 3: Reducing Increasing Inequality Over Time

Students come to kindergarten with substantial “gaps” among them, one of the targets of early childhood programs. After kindergarten these “gaps” expand steadily, for many reasons. Furthermore, increases in inequality are not continuous. There appear to be “bursts” in inequality at certain critical transitions: from pre-school into kindergarten; around the 3rd to 4th grade; at

the transition into middle school; at the transition into high schools; and at the transition to postsecondary education. One responsibility of a P-16 council could be to diagnose the reasons why inequality increases, and where and why inequality seems to increase dramatically, and then to propose solutions.

Goal 4: Improving Interventions

Many schools are now trying to improve the performance of low-performing students through “interventions” that are fragmented, poorly chosen, inconsistent, short-sighted, and often based on curricula (including state-approved curricula) of doubtful

effectiveness. The state, with the participation of districts, schools, reformers, and researchers, needs to develop the capacity for more promising interventions as part of its commitment to Goal 3.

Goal 5: Addressing Racial and Ethnic Issues Head On

While the achievement gap is usually stated in racial or ethnic terms, the conventional solutions omit any reference to racial or ethnic issues. Yet there is good evidence from multiple sources that many students, and especially racial and ethnic minority students, are mistreated in schools, with mistreatment including inattention, low expectations, severe forms of correction,

harsh discipline policies, detentions and expulsions, and dismissive attitudes. While there are many ways to reduce these forms of mistreatment, they require explicit attention at the school level, district and state support, and a consensus from the larger community that all students must be respectfully treated in schools.

Goal 6: Addressing the Special Assets and Issues of Immigrant Students

The increases in immigrant students and English Learners (ELs) in California are well-known, and this pattern is not likely to abate. The achievement gap cannot be narrowed without paying special attention to

the language needs and the social integration of EL and immigrant students. Again, there are many promising ways to do this, but they require focusing on educational benefits for students and not on ideological

battles among adults. In particular, the recent research shows the value of teaching in both a student's native language (L1) as well as in English (L2), and suggests a variety of approaches for the substantial differences among ELs. In particular,

research seems to have reached a consensus on the value of incorporating both instruction in a student's native language (L1) and in English (L2), in a variety of ways appropriate to different groups of ELs.

Goal 7: Providing Support Services

Most schools trying to improve the achievement of low-performing students find that these students have unmet non-educational needs, and try to find support services including health and mental services, family services, substance abuse and pregnancy prevention programs, and other social services. While some districts and some "hero-principals" have been able to find such services, overall they are in short supply. To assure equity and

consistency in their availability, the state should fund such services according to need, either from education funds or from social services. In addition, restructuring schools so they are more supportive of students may be a necessary corollary. Finally, guidance and counseling may be necessary for various purposes, but these specific services have become relatively weak, and the state needs to consider different ways of strengthening them.

Goal 8: Reforming School Finance

The state must reform its system of financing schools to permit these seven goals to be realized. This will involve *both* increasing overall funding in California, which has become increasingly inadequate over the past three decades, *and* revising funding mechanisms by eliminating most categorical programs, by allocating funds among districts in ways more closely aligned with need, and by allowing more local control over revenues. Another

element in reforming finance practices should be to recognize the enormous waste of state resources in past categorical programs—including those for class size reduction, Intermediate Intervention/Underperforming Schools Program (II/USP), and High Priority School Grants Program (HPSGP)—and to find ways to eliminate this waste in future programs.

Goal 9: Reforming Assessment

Stage 1 of the state's assessment system, begun in 1999, has accomplished at least one goal: schools are focused as never before on low-performing students. But the assessment system has had numerous unintended consequences (like narrowing the curriculum) and it violates many basic

principles of assessment. The state should therefore move to a Stage 2 assessment system that places greater emphasis on a variety of outcome measures, that is based on data for individual students rather than school averages, and that uses carefully developed value-added approaches.

Goal 10: Reforming School, District, and State Governance and Organization

Schools able to reform themselves and respond to external accountability have reshaped their internal organization and governance in ways variously described as distributed leadership, internal alignment, learning communities, and organic management. Similarly, there is some evidence that successful districts have also found a balance of district and school control, ways of incorporating schools into district decision-making, and supporting schools in the decisions they make. While it isn't clear what leverage the state has on district and school organization, the state might at least recognize the importance of

alternative organization [for example, in choosing schools for pilot programs like Quality Education Investment Act (QEIA)] and search for ways not to reinforce counter-productive top-down governance.

The emerging model of school and district governance also implies that state governance of education might also need reform. This might include more cooperative decision-making about state policies, less autocratic decisions, and more support to districts and schools, including the establishment of resource centers on effective practices.

NARROWING THE MULTIPLE ACHIEVEMENT GAPS IN CALIFORNIA: TEN GOALS FOR THE LONG HAUL

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Gaps in school outcomes among groups of students have been noted for a long time, at least back to the early 19th century, and some of these gaps—particularly those between immigrant and native-born students—were first quantified in the years around 1900.^b Sometimes these gaps have been defined in racial or ethnic terms, as they frequently are now; sometimes in terms of family background; sometimes as differences between native and immigrant students, or males and females, or students with and without certain disabilities. But the fact that these gaps are of long standing and have complex causes^c means that they are unlikely to be corrected quickly, or with single policy approaches like an accountability system putting additional pressure on schools and districts. So narrowing the multiple achievement gaps in California will require a number of different initiatives, carried out consistently over the long run.

In this policy paper I outline ten goals that, the evidence indicates, could narrow many of the achievement gaps in California.^d This is an attempt to be relatively comprehensive, to outline the complete “landscape” of policies necessary for reducing achievement gaps. (In contrast, many existing analyses mention relatively few policies.)^e Each of these ten goals is itself complex, and they are interdependent.

For example, the first seven goals outline changes in schools that need to take place. Then Goals 8 and 9 call for changes in the finance system and in the state’s assessment system to permit the first seven goals to be realized. Goal 10 argues that changes in the organization and governance of schools and districts have been part of the changes in the most successful schools, implying that reorganization may be necessary to achieve the first 7 goals. Similarly, enhancing school capacity (Goal 1) must be done in different ways to address different types of gaps in outcomes (Goal 2). The changes called for in this paper are broad and complex, and it is difficult to know how to establish priorities among these goals. All of them are necessary to reduce achievement gaps substantially, and one purpose of this paper is to clarify how large the challenge is. If I personally had to choose, I would say that Goals 1, 3, and 5 are the most important, together with the funding changes necessary to achieve them. But the commentaries on the achievement gaps are full of highly incomplete lists of recommendations, and there’s no point in creating another such list. And that’s why these constitute ten goals for the long haul: it will necessary for California to proceed over time in order to realize these goals.

Overall, developing policies to implement these goals would be a worthy and wonderful aim for the state of California: it would

narrow the many achievement gaps in California, enhance the efficacy and equity of the state's education system, and restore

California to the prominence among states that its education system enjoyed in the 1950s and 1960s.^f

Goal 1: Enhancing School Capacity and Resources

The existing accountability system has certainly achieved one of its goals: schools are now paying attention to low-performing students as never before. The combination of state accountability and federal accountability through No Child Left Behind means that virtually all schools are obsessed with their statistics on students who are below basic and far below basic, and most are targeting these students with several kinds of special efforts—often called “interventions”—to improve their test scores. The problem, then, is not a lack of motivation, but a lack of capacity for many schools to help such students. The state's first priority should therefore be to enhance the resources in schools with low-performing students, so that they can improve the quality of instruction and the supporting environment for all students.^g

Enhancing resources does not mean simply increasing funding, though Goal 1 will require some additional expenditure (in Goal 7). The resources, broadly interpreted, that enhance educational outcomes include *simple* resources that can be readily bought, like smaller class size, more experienced teachers, more books and computer facilities and science labs.^h But they also include:

- *compound* resources (like computers plus teachers trained to use them plus regular maintenance, or class size reduction plus teachers trained to teach differently in smaller classes);
- *complex* resources requiring extensive professional preparation and

development, including innovative and “balanced” pedagogical approachesⁱ and specific practices to support racial and ethnic minority students in Goal 5;

- *abstract* resources, often embedded in a web of personal relationships within schools, like trust, curricular coherence, school climate, and stability.

All of these have demonstrable effects on different outcomes [10], but compound, complex, and abstract resources cannot be readily bought—that is, more money does not lead to higher levels of these effective resources [11]. Instead, they must be constructed by teachers and school leaders—and often students and parents—working together in schools to create effective teaching, or to develop a supportive climate, or to coordinate approaches to an issue. So the first task of this goal is to recognize the variety of resources that affect schooling outcomes, and to move toward providing these resources in all schools.^j

Among the most effective resources are teachers, described not necessarily in terms of their credentials but rather in terms of how they perform in the classroom.^k The most effective teachers are those who have moved away from traditional and behaviorist teaching toward innovative methods, sometimes described as student-centered or constructivist but more appropriately described as “balanced”—that is, incorporating elements of both behaviorist and constructivist teaching, rather than following one side or another of the “math wars” or the “reading wars”.^l In turn, this

requires that teachers master not only content knowledge (and teach in their area of preparation), but also pedagogical knowledge and pedagogical content knowledge—the understanding of how to apply general principles of teaching to specific subjects, whether math or social studies or business.^m This can be done through pre-service education or in professional development, particularly through “new” forms of professional development that work with communities of teachers over extended periods of time to master pedagogical content knowledge.ⁿ The Beginning Teacher Support and Assessment (BTSA) program in California provides one way to enhance professional development, though its quality seems to be uneven.

Principals are the second kind of resources widely thought to be crucial to successful outcomes—especially principals prepared to be instructional leaders, and those prepared to work with diverse student populations in urban schools.^o Indeed the roles of principals have expanded to include responsibilities for evaluating assessments, basing decisions on data, developing ways to allocate funds, and serving as instructional leaders in their schools. The quality of principal preparation in California now varies widely, and there are virtually no induction programs for principals (parallel to BTSA) aside from those run by UC Berkeley and the Santa Cruz Teachers’ Center. California might therefore support efforts to prepare principals as instructional leaders of diverse schools by establishing coaching and induction efforts for principals in schools with low-performing students.

In addition, effective schools have usually transformed themselves by moving toward “distributed leadership” and learning communities where teachers and administrators work collaboratively to

develop school policies (see Goal 10). Rather than diminishing the importance of principals, they are crucial in helping schools make this shift and in leading teachers to play more active roles.^p

In addition to these school personnel, a large number of other practices and school conditions affect outcomes. As the usual expression goes, there are no silver bullets, but a large number of practices to consider. In particular:^q

- Reducing teacher turnover is surely important, especially in urban schools. This in turn requires increasing salaries; providing teachers (especially new teachers) with support; giving teachers a voice in schools; providing them with appropriate materials; improving the “working conditions” in schools, an aspect of discipline and school climate; and finding more teachers from the communities where students come from.^f
- Certain curriculum tracks—especially remedial tracks, “general” tracks, and conventional vocational tracks in the high school—are uniformly detrimental, and should be replaced either by academically-oriented tracks or by well-conceived “pathways” through middle schools and high schools.

School climate—both a climate supportive of learning, and the absence of negative events like stealing, physical threats, and fights—are important to various outcomes. A school’s overall attendance rate is also important, and may reflect one aspect of climate.

- The way time is used affects outcomes. Teachers who spend more time on group work, individual instruction, and labs are more effective, while time on administrative tasks, tests, and discipline reduces students’ learning. Increasing *engaged* time spent on academic tasks

enhances outcomes, not simply time on task. And there is evidence that single-track year-round schedules enhance learning and limit the kinds of negative summer effects that are especially detrimental to low-performing students, though there is little sustained evidence that longer days or school years are effective.^s

- Other abstract resources that have been found to improve performance include trust; the coherence of the curriculum; and consistency among teachers and students in approaches to instruction.^t Stability seems to be an especially important resource: students who move do worse than their peers, as well as disrupting the classrooms into which they move.^u Some urban schools are so plagued with mobility of teachers, of principals, of district policies and superintendents that sustained reform becomes impossible.
- Some school services—especially access to counseling, academic help, extra-curricular activities, and certain social services—improve outcomes for students.^v These not only provide help with specific needs, but also serve to connect students more closely to the school.
- Small schools have become popular, but school size itself does not seem to be effective. Instead, small schools appear to be effective only if they use their small size to enhance teaching

innovation, teacher retention and experience, school climate, and other resources that are more directly effective.^w Similarly, magnet schools and charter schools have become popular, but again the evidence on their effectiveness is mixed. It appears that when magnet schools and charter schools can create distinctive approaches, with innovative and coherent teaching, themes or approaches that motivate students, and supportive climates, they are more effective.^x But the structure of a school by itself is not sufficient to improve outcomes.

An exhaustive list of practices that improve outcomes—and for which there is systematic evidence aside from anecdotes and stories—would uncover other effective resources. The important point is that the nature of effective resources varies considerably, and goes well beyond the simple resources that are the conventional focus of state policy. Many resources cannot be easily bought, and instead the development of some effective resources requires collaboration and construction at the *school* level, rather than the development of district or state policies imposed on schools. Enhancing the capacity of schools with large numbers of low-performing students therefore requires investment in school-level personnel, of course, but also the information, the educational support, the stability, and the financial resources from district and state levels to enable schools to enhance their own capacities.

Goal 2: Recognizing Multiple Gaps and Multiple Strategies

The achievement gap has most often been defined as the black-white (or Latino-white) difference in test scores, as measures (sometimes crude) of learning. However, there are other gaps that are just

as, if not more, important, especially to the future abilities of students to earn their livings, participate politically, and become contributing members of their communities. Progress through schooling,

as measured by suspensions and retentions in grade, is unequal among racial and ethnic groups; dropout rates from high school, which are particularly detrimental to future employment as well as college going, are higher for Latino and African American students; completion of the (a) – (g) requirements necessary for attending CSU or UC is unequal; and rates of college-going and completion are unequal as well. A P-16 council might concern itself with all of these gaps.

However, the important point here is that narrowing different gaps in K-12 education requires different strategies. To be sure, some school resources affect virtually all types of outcomes; these include placement in general or remedial tracks, school climate, and access to counselors. But the majority of resources influence some outcomes but not others. In particular, as mentioned in Goal 1, several kinds of evidence suggest that improving learning (and therefore test scores) requires explicit attention to the quality of teaching, including the use of innovative and “balanced” approaches; but enhancing the quality of teaching has generally little effect on progress through schooling.^y

Conversely, progress through school is enhanced by a number of school resources that enhance personal contact and student support, including more adults per student, help with academic subjects, and extra-curricular activities. As corroboration, several whole-school reforms have been

successful in increasing attendance, credits earned, aspirations, and other measures of student engagement, but they have not improved test scores. Only reforms that put special emphasis on reforming instruction, like First Things First, have been successful in improving both progress and learning.^z The implication is that improving *both* progress *and* learning requires *both* student support and personalization *and* the improvement of instruction. But one kind of reform without the other will fail to narrow some of the many gaps within California schools.

We can extend this argument to other kinds of gaps. Access to college surely requires better guidance and counseling, since many students—including too many African American and Latino students—do not have access to reliable information about college requirements, costs, and subsequent benefits.^{aa} College-going also requires greater attention to costs, tuition, and grants than is now the case, since parental income matters more for college attendance than for other kinds of progress. And the issue of college completion is a separate subject, surely appropriate for a P-16 council but beyond the scope of this policy brief.

For the moment, the important point is that efforts to address only test score differences may leave other achievement gaps untouched. If California intends to narrow the gaps in both learning and progress, then it will need to support a broad variety of reforms.

Goal 3: Reducing Inequality Over Time

Children start their formal schooling, usually at kindergarten, with unequal capacities—both cognitive abilities (like knowledge of letters and numbers, vocabulary, sophistication of language) and non-cognitive capacities like conceptions of what

school is about and patterns of interactions with adults.^{bb} These differences are usually attributed to the effects of families and communities on young children, and narrowing these differences is usually viewed as the responsibility of early

childhood and parent education programs. Additional investments in such programs have been seriously debated in California over the past few years, and such efforts should play a substantial role in narrowing achievement gaps.

However, providing better and more widespread early childhood programs cannot by itself narrow achievement gaps.^{cc} Unfortunately, the differences that children come to school with tend to widen over time.^{dd} There are many reasons for this, including the psychology of learning (where “knowledge begets further knowledge”); the possibility that young students become discouraged by initial low performance and then become disengaged; the continuing effects of family background; the allocation of school resources, where the most effective resources tend to be allocated to the best-performing students; and differences in the ability of teachers in different schools to keep up with grade-level norms and state standards. In addition, summer effects—the finding that middle-class children continue to learn over the summer, while working-class children seem to lose ground—has explained a large amount of the divergence in test scores in a number of school districts,^{ee} implying that year-round schools may be a help. If all of these operate to some extent and reinforce one another, this might explain why schooling outcomes diverge over time so consistently.

Furthermore, there’s no reason to think that learning trajectories are smooth and continuous. Instead there are transitions where there may be sharp increases or “bursts” of inequality. At the transition into high school, for example, some students drop out and fail to learn further; some are placed in remedial or general tracks where their subsequent progress is low; some get into AP or honors tracks where their learning accelerates. Figure 1 illustrates such

patterns, showing a burst of inequality from grade 8 to grade 9.

But there are surely other points in the trajectory of schooling where such increases in inequality occur: at the transition from early childhood programs to kindergarten; sometimes in the third or fourth grade, where many schools shift from “learning to read” to “reading to learn,” leaving behind those students (including many ELs) who have not yet learned how to read in facile and sophisticated ways, including many ELs; at the transition into middle school, with multiple teachers and subjects and often with students assigned to different tracks.^{ff} So the achievement gaps we see by grade twelve are really the result of an extended and dynamic process, in which both differences in rates of learning and periods of transition or “bursts” of inequality are responsible.

One worthy goal of a P-16 council would be to understand—through research and testimony—the dynamic process that creates the various achievement gaps by grade twelve. Then a council could begin to create solutions that attacked the problem at its causes—rather than, for example, waiting until students fail the early stages of high school exit exams, when test-prep courses can at best allow them to pass the exit exam but cannot in a short amount of time make up for the gaps that have developed since the early grades. Some of these solutions would be similar to those already outlined; for example, equalizing the resources that different students receive (Goal 1) would be part of the solution. Similarly, a variety of support services (Goal 7) would be a strategy to counter the effects of low income or inadequate access to health and mental health services. Efforts to reduce the discouragement and progressive withdrawal from schooling would surely include the mechanisms for

alleviating the mistreatment of students, including a disproportional number of racial minority students (Goal 5). The approach of year-round schools is a potential solution for summer effects and has been shown to enhance school performance;^{gg} a number of schools in California with single-track year-round schools might be models for others to follow.

A different set of solutions would focus on the transitions among levels of the schooling system and potential “bursts” of inequality at those points. For example, in examining the transition from early childhood programs into kindergarten, the principal along with teachers can play a crucial role in creating welcoming environments and mechanisms of transition (like visiting the school before the school year begins).^{hh} Some schools have apparently developed mechanisms where students in upper elementary grades who have not yet mastered basic reading and mathematical skills continue to be taught basic skills through techniques like differentiated instruction, even as they

continue to learn grade-level material. Some high schools have developed ninth grade academies or schools-within-schools or mentoring by upper-grade students to smooth the transition to the more anonymous high school, to provide basic skills instruction to those who need it, and to provide other services (especially guidance and counseling) to be sure that students understand high school and college requirements and the consequences of falling behind. Surely there are other schools, in California and other states, that have addressed some of these transitions, and whose experiences could provide other suggestions of effective mechanisms for reducing dynamic inequality.

For the moment, this role for California and for a P-16 council would require the state to accumulate information about potential solutions to increases in inequality over time. At some subsequent point it might be appropriate to support promising practices through pilot projects or supplementary funding.

Goal 4: Improving Interventions

As noted above, schools are currently under great pressure to improve the performance of low-performing students. Schools in California have adopted a wide variety of practices in their own efforts to help these students. Unfortunately, the quality of these efforts varies widely, from school to school and district to district.ⁱⁱ Some schools have adopted relatively thorough reforms that have the potential for enhancing student success over the long run, and which try to improve the core instruction of a school rather than just adding small interventions here and there. For example, some schools have adopted a technique called differentiated instruction, which is intended to enable all teachers to reach students with

a broad range of abilities. A few others have adopted a practice known as Learning Centers, which assess *all* students as they enter the school; then the Learning Center Team meets at least three times a year to consider the case of *every* student and develop plans similar to an IEP for *all* those who are below grade level. Such efforts are notable both because they can reach all students and because they have been quite carefully thought-out. Other schools have adopted more limited versions of Learning Centers, but they try to assess students more frequently than in the past and to develop appropriate responses to those who are behind grade level.

But many other schools have adopted limited strategies, under pressure to improve test scores as quickly as possible. Very often these strategies are based on “interventions,” or curriculum materials available from commercial publishers that promise to accelerate learning. They have usually chosen such programs because of anecdotal evidence from nearby districts, or because the curricula are on the list of materials approved by the State Board of Education and therefore assumed (incorrectly) to be “proven practices.” While these interventions vary among schools—and therefore students receive inconsistent instruction of varying effectiveness—many are based on drill and practice, tending to focus on the most basic skills in reading and math and neglecting the substantial evidence of the need for “balanced” instruction.^{jj} Some students are in four or five periods a day of English and math, and they will be unable to master the broader range of (a) – (g) requirements required for public universities in California. This is a good example where one particular gap (in basic reading and math) is being emphasized to the exclusion of other gaps, such as the ability to access public universities (see Goal 2). And while some schools have been creative in reallocating resources to meet the needs of low-performing students, many schools lack the resources necessary to provide interventions for all students in need (see Goal 1 and Goal 7).

In addition, many schools with low-performing students have adopted after-school programs and tutoring efforts. However, these are usually taught or supervised by aides or volunteers, rather than well-trained teachers; they are voluntary, and may not reach the students

most in need; they are typically disconnected from “regular” classrooms, so their ability to reinforce the lessons of the classroom is limited. While a consensus has developed on the characteristics of effective after-school and tutoring programs, and there are some model programs that appear to be quite effective,^{kk} the lessons of this research have not been widely followed.

If California is to reduce the achievement gaps, then a more systematic and effective approach to students who have fallen behind is necessary. What districts and the state can provide is surely not a single model or approach or intervention, assuming that “one size fits all.” Indeed, in the limited sample of districts I have examined, where districts have imposed specific interventions on schools, the results have been widely rejected by teachers. What districts and the state could do instead is to develop guidelines for different approaches that also have some evidence of effectiveness, for schools to consider as they develop their own responses to their particular students. Adequate professional development for teachers as well as aides and tutors is another requirement for many interventions, and developing mechanisms to coordinate the various kinds of interventions would reduce the sense of having many fragmented efforts. Additional funding is also necessary (Goal 8), since existing efforts are both underfunded and reach fewer students than need them. And in some cases where districts or schools fail to improve their performance, the state may need to provide more guidance and support.

Goal 5: Addressing Racial and Ethnic Issues Head On^{ll}

The conventional analysis of the achievement gap starts with differences

defined in racial terms, particularly the black-white test score gap, or the Latino-

white gap. Then it moves to a number of potential remedies, but these remedies are almost always stated in race-neutral terms—for example, the need for improved teacher quality, or for more early childhood education—as if there were no specifically racial or ethnic dimension to the achievement gap. However, when researchers have tried to explain away racial or ethnic gaps—by attributing them to difference in family background, for example, or in school resources—there remain racial differences that cannot be explained in any other way, equal to somewhere between 15% and 50% of the overall gap.^{mm}

Unfortunately, there is substantial evidence to suggest that some of this gap is caused by mistreatment in schools—mistreatment that is surely worse for racial minority students than for white students and most Asian-American students. Mistreatment can take many forms. Sometimes it consists of paying less attention to some students compared to others. Sometimes it takes the form of lower expectations, something that has been well documented for African American and other minority students.ⁿⁿ Sometimes it takes the form of fewer adults who can serve as mentors and sponsors. Sometimes students are corrected harshly for use of non-standard English and behavior thought inappropriate to school. Sometimes discipline policies, especially zero-tolerance policies, literally reduce the amount of schooling available to some students as they are kicked out of school, or subject them to further affronts.^{oo}

The evidence about mistreatment comes from many sources, too, some of it academic research, some of it observation in schools, some personal testimony.^{pp} There is a long history of differences between the culture of the school and the culture of the community from which working-class and racial minority students come, differences that manifest themselves in codes of behavior, language, and expectations of schools.

Ethnographic studies of urban schools often reveal a great deal of personal hostility, both between teachers and students and among students.^{qq} There's a substantial autobiographical literature of successful Black and Latino individuals who remember their own schooling as filled with both subtle and overt abuse. The analysis of discipline policies has often uncovered all too many instances where Black and Latino students are treated more harshly than middle-class white students, and the over-representation of Black males in retentions, expulsions, and special education has been a particular concern.^{rr} The concept of “stereotype threat” has documented the extent to which racial minority students turn inward and perform less well if they think they are being stereotyped; a related literature has examined the effects of perceived discrimination on school performance.^{ss} And last of all, my own observations of both schools and community colleges have included numerous examples of mistreatment, somewhat astonishing since it takes place with an observer in the back of the classroom. So the evidence of mistreatment is pervasive, even though it is almost never raised in most policy analyses of racial and ethnic achievement gaps.

The mistreatment of racial minority students is consistent with the steady alienation of some students from school, the kind of progressive disengagement that finally leads to dropping out for a disproportionate number of Black and Latino students. If we believe that all students have the right to be treated decently in schools, then these patterns need to be changed. Fortunately, there are many ways of doing so:

The practice of classroom observation—which appears to be increasing in California—can identify many kinds of teacher behavior, both conscious and unconscious. Observation, reflection, and

discussion of teaching patterns may allow some teachers to see where their behavior is inappropriate, particularly if this occurs within a school with high levels of trust and cooperation.

- Disciplinary policies are often the source of great conflict between educators and students, especially African American and Latino males. The analysis of discipline data has become a more common feature. It often identifies not only which students are responsible for a large proportion of discipline problems, but also which teachers are responsible, potentially alerting administrators to examine their teaching and disciplinary practices.
- There are techniques for correcting non-standard English (including Black vernacular English or Ebonics) as well as teacher behaviors that avoid the harsh corrections of standard practices. These methods involve analyzing the differences in speech and behavior in many settings (“contrastive analysis”) and the teaching children to code-switch, to speak and behave differently in different settings (as all adults do too), and to adopt what is known as repertoires of language practices for different purposes and settings.^{tt}
- Some schools have engaged in efforts to talk more forthrightly about racial issues, as ways of clarifying not only the problems that students face but also the frustrations teachers feel, potentially leading to collective understanding about racial/ethnic dilemmas. These discussions can thereby replace the kinds of awkward “race talk” that often takes place in schools with greater understanding of the codes and patterns of African American, Latino, and immigrant students and others likely to be mistreated.^{uu}

- A vast number of practices have developed under the umbrella of culturally-relevant pedagogy and of multi-cultural education.^{vv} Some of these—modifying the English literature selections in minor ways—are already widely practiced and are not especially profound. Others—cultivating critical racial attitudes—may go further than some schools and faculty may be able to go. But all these practices intend to create the schooling conditions in which racial minority students can do better, and they constitute a portfolio of options for schools that want to improve the learning of minority students.

It’s difficult to know how state policy can encourage the recognition of racial/ethnic mistreatment and then help create solutions. Racial and ethnic issues are among the most difficult and contentious issues in our society, and it’s not surprising that they are difficult and contentious in public education as well. Normally these are issues that need to be addressed at the *school* level, among teachers and leaders who can trust one another (see Goal 10). Districts can sometimes provide their own examples and leadership, as can the state; both districts and the state could be supportive in helping schools understand the dimensions of the problem and in providing information on helpful methods. Funding, to help schools change their internal decision-making (Goal 10) and to support staff development of the right sort (Goal 1), would also buttress this goal. Developing a culture of *supportive* classroom observations and inspections might also help.^{ww} But these are not issues that can be mandated or required or put into a state assessment system or remedied overnight, and so—as important as it is to confront the issue of mistreatment as part of achievement gaps—it is equally

important to take great care in devising solutions.

Goal 6: Addressing the Special Assets and Issues of Immigrant Students and English Learners

The demographic conditions in California are well-known: immigrant students are a high and increasing proportion of public school students, and this trend is almost sure to continue.^{xx} Furthermore, the school performance of immigrant students is, on almost every dimension, worse than that of native-born students, so it is impossible to narrow the achievement gaps in this state without addressing forthrightly the unique needs of these students. Of course, this aspect of public schooling has been extremely contentious, with several efforts and initiatives to limit access for some immigrant students and to constrain bilingual approaches to teaching English. But if we as a state focus on the *educational* issues, and have as a goal the narrowing of the achievement gap for immigrant students too, then it may be possible to rise above these political disagreements and develop a coherent set of policies for the long run.

A first obvious problem is that many immigrant students and English learners suffer from unequal resources—the issue in Goal 1 above. They have less access to teachers who are fully credentialed, who speak their language or understand their backgrounds, and who have specialized training in methods of second language acquisition. Their schools have inadequate professional development to help teachers address the instructional needs of ELs. They suffer from inadequate time to meet a variety of learning goals, especially when they are pulled out of regular classes for ELD (English Language Development) classes or English as a Second Language (ESL). They are more likely to be in dilapidated schools, and they are highly

segregated in schools dominated by ELs, rather than having peers from whom they can learn.^{yy} Some of these problems could be remedied by enhancing the resources of the schools they are in (Goal 1), paying special attention to the quality and professional development of teachers, the use of time, and physical facilities.

A second obvious problem involves the nature of English language instruction, and the balance between the use of ELs' native languages (called L1) and English (the second language, or L2). There is an enormous range of possibilities now being practiced, ranging from English immersion programs where new immigrants are placed in regular English-only classes, to English as a Second Language taught entirely in English, to SDAIE (Specifically Designed Academic Instruction in English) focusing on subject-matter content taught largely in English, to structured immersion with some support in the native language, to maintenance bilingual education, transitional bilingual education, two-way immersion programs where English learners and native English speakers learn in both languages, to bilingual/bicultural education designed to support a student's original language and culture *and* to promote fluid English and understanding of U.S. norms, to newcomer programs designed for recent immigrants. These approaches or “models” vary in the relative use of L1 and L2, in the nature of teachers and other resources required, and in assumptions about language acquisition generally. And even for teachers using English-only approaches (like structured immersion), there are techniques like

frontloading (analyzing the linguistic demands of a task and teaching these demands explicitly and up front), using illustrations, developing graphic organizers and work banks, and using vocabulary intentionally and strategically that can help students learn more effectively in English [87]. Unfortunately, the effectiveness of these different approaches to second-language learning has been extremely contentious, partly because “effectiveness” is measured quite differently in English-only programs versus bilingual programs. A great deal of the debate has reflected political positions rather than educational effectiveness.

However, the most recent review of the research suggests that a rough consensus has developed, one that can be stated in a number of propositions:^{zz}

- A student’s native language (L1) and the language to be learned (L2, or English) are complementary to one another, not antagonists, and specific aspects of L1 enhance oral and literary development in L2. This means that, in general, English-only approaches are less effective than forms of bilingual instruction.
- There are specific aspects of L1 that are more influential in the development of L2—for example, basic literacy skills in the home language. Effective bilingual programs should therefore concentrate on these specifics, and teachers need to learn about the particular elements of L1 that foster L2.
- The best teaching situations involve interactive classes in which direct instruction of L2 takes place, focused on literacy and “academic” use of English rather than “everyday” English. Then ELs are both learning English and learning about the linguistic and analytic conventions of the classroom.
- There are substantial differences among groups of English learners—in first versus subsequent generations, in those from lower-status families versus upper-status families, in Latino ELs versus those from Asian countries, in the differences between those who are literate in their native language and those who are not, in age upon entry into the U.S. and the amount of time they have been speaking English. This means that no one approach to language instruction can work well for all ELs; instead, appropriate approaches must be developed at the *school* level, to meet the needs of the specific groups of students each school has. Indeed, schools that have emphasized programs for ELs typically develop a variety of approaches, for students at different levels of development and with different needs. In contrast, the practice in at least some districts of mandating a specific English-only curriculum is surely ineffective in meeting the needs of diverse students.
- The duration of special language instruction is a significant factor, and later evaluations are more positive than earlier evaluations, since it takes considerable time to master a new language, especially in its academic forms—in one estimate, from 5 to 10 years.^{aaa} This implies that students who arrive in the U.S. in first or second grade may catch up with their native-speaking peers by 12th grade, but it is unreasonable to assume that students arriving during high school can catch up in a short period of time. Furthermore, oral language develops before mastery of reading and writing, so fluency in speaking is not always a reliable guide to full mastery. For school purposes, of course, reading and writing are crucial.

- The consistency of second-language instruction is important, and students exposed to a variety of approaches perform less well than those who have had consistent exposure to the same approach. This in turn implies that, while approaches to language development must take place at the school level, a set of comprehensive frameworks or guidelines from the district or even the state level would be helpful in creating consistency across grades and critical transitions.

Overall, these findings imply that educators need to be able to use a portfolio of alternative approaches for EL students, using both L1 and L2 instruction. Unfortunately, the dominant practice in California is for EL students to be in pull-out programs using English as a Second Language or English Language Development (ELD), which are “subtractive” approaches in at least two ways: students are unable to make progress in the subjects from which they are pulled out; and these English-only approaches tend to substitute English for native languages, rather than treating L1 and L2 as complementary. Given the evidence that students benefit from continued instruction in their native language as well as instruction in English, the great need in California schools is a broader range of approaches to second-language learning, rather than the restricted programs now being used. This in turn will require helping all teachers develop a portfolio of different approaches (since up to 75% of all teachers have EL students in their classrooms), and adopting textbooks and other materials appropriate to levels of development in English—all of which would be facilitated by the funding system outlined in Goal 8.

A third need for many immigrant students (and some second-generation students as well) is for a variety of support services, to help with the non-instructional aspects of

progressing through schooling, including knowledge of American norms, schooling patterns, the value of and access to college, and other cultural lore that immigrants don’t automatically have access to. (This is related to Goal 7, below.) There are several programs in the state that provide models for what schools can do. One is the Puente program, which in addition to improved instruction in writing and math provides non-traditional forms of counseling, which facilitate contact between the school and parents, monitors the progress of students, provides information about the various requirements for college, introduces students to college campuses, and operates in many other ways to create a supportive network for students. Puente and several other programs have also tried to provide mentors to students, though this has often proved difficult.^{bbb} While Puente was developed to meet the needs of Latino students in particular, its approach can be readily modified for other groups of students.

Fourth, immigrant students—like native-born racial and ethnic minority students—suffer many of the forms of mistreatment mentioned in Goal 5.^{ccc} The various mechanisms for addressing this issue, including classroom observations, discussions of race and immigration, and culturally-relevant approaches (as in Puente programs) would therefore help the progress of immigrant students and ELs as well.

Finally, as part of developing a second stage of an assessment system (Goal 9), the state needs to consider what is reasonable to ask of immigrant students. The state’s assessment system, in its efforts to make schools responsive to all students, treats immigrants as it treats native-born students, expecting them to score just as well on English-language tests. When they do not—because no one can learn a new

language in short periods of time—they and their schools are penalized. As a result, a large number of schools with low rankings on Academic Performance Index (API) scores are schools with large proportions of immigrants or newcomer schools. Testing students in a language in which they are not proficient is an invalid measure both of their knowledge and of the quality of the schools they are in, as well as being unethical.^{ddd} Therefore a second stage of assessment should adopt a more sophisticated treatment of language-minority students, drawing on the substantial research that has been conducted on varying assessment practices, rather than continuing to impose school standards that are impossible to meet on students who have recently arrived in this country.

Goal 7: Providing Support Services

Many low-performing students have unmet *non*-educational needs as well as educational needs, ranging from nutrition to health and mental health services to family support services to a range of other social services to guidance and counseling, which I discuss at the end of this section. Adolescents in particular face a variety of perils, including drug and alcohol abuse, teenage pregnancy, family conflicts, and a variety of mental health conditions. Therefore, improving the academic performance of some students requires certain non-academic supports—a fact recognized long ago in school breakfast and lunch programs, since hungry children are unlikely to learn well.

In response, the vision of “full-service schools” has developed, where the school serves as the center where students receive a full range of support services.^{eee} Indeed, many schools with low-performing students try to find various support services, usually by identifying community-based organizations or public organizations willing

In a nation of immigrants, the roles of public schools have been crucial for their children, but their roles have varied: sometimes welcoming and supportive, sometimes trying to assimilate them quickly at the expense of their native languages and cultures, sometime hostile and rejecting. But immigration is a permanent fact of this country, and of California in particular. The public schools are virtually the only institution we have to welcome all children, including the children of immigrants, into our society and to enable them to become productive citizens, workers, and community members, and California should recognize its obligations to these special groups.

to provide services either at the school site or nearby. However, in practice the consistency of such services varies widely. In some communities, cities have teamed with the school district to provide these services. At some schools, “hero-principals” have managed through intense effort to scrounge up services. In still other cases foundations have contributed to various support services, in individual schools or a network of schools. But all of these are inadequate ways to provide these services: some cities provide very little, there are not enough hero-principals to lead all schools, and foundation support is uneven at best. In addition, placing the burden for finding support services on schools and their principals is inappropriate; principals do not necessarily have the right expertise, and the effort takes them away from instructional improvement that should be their primary responsibility.

There are two kinds of solutions that are worth considering. One is for the state of

California to provide explicit funding for support services in schools, directed at those schools most in need. This funding might come through education budgets, or it might come through health and social service budgets. This would relieve educators of the burden of finding such funds, and make the provision of support services more available. To be sure, there still remains a problem of integrating such services into schools and of bridging the different cultures of educators and social service providers.^{fff} But the first challenge is to develop more comprehensive funding for support services.

A second dimension of a potential solution involves the structure of schools themselves. The conventional service model of student referrals to various services deals with problems one student at a time, and assumes that *students* themselves (or their families) are the source of the problem. An alternative, particularly the case in many urban schools, is that *schools* are themselves part of the problem, especially in large impersonal schools (like high schools) where it seems that “nobody cares,” where students are alienated from their coursework, and where experiences of failure—exacerbated by high-stakes tests like the California Standards Tests and the high school exit exam—are pervasive. In contrast, where schools foster feelings of connectedness and being cared for by teachers, other adults, and peers, students are less likely to experience emotional distress, use alcohol and drugs, engage in violent behavior, or become pregnant.^{ggg} This implies that reforming the school climate (part of Goal 1 as well as Goal 9) may be a necessary part of alleviating some of the problems that interfere with learning. This is not, of course, an argument that additional support services are unnecessary, but rather an indication that reforming schools in particular ways *and* providing additional services may be necessary to address the non-educational needs of some students.

A specific support service that is central to students and their educational trajectories is guidance and counseling. Over the past century, guidance and counseling have taken on different roles, moving from career-oriented counseling when the high school became an institution that directed students into different education and employment tracks, to an activity focused more on psychological counseling, to one concerned with administrative requirements and assuring that all students complete requirements—academic counseling rather than career or personal counseling. Furthermore, as a non-instructional service, guidance and counseling have always suffered from constant budget cutting, and counselor-student ratios in many schools are now 750:1 or more. The result is that all too many students—including all too many low-income and racial minority students—have little access to information that might inform them about their options in schools, the crucial role of schooling in our contemporary society, and the post-secondary options they face, including college.^{hhh}

One specific support service that merits strengthening, then, is guidance and counseling. However, simply putting more money into existing programs seems like a weak option—just as many of the effective school resources require more than money (in Goal 1). Fortunately a variety of alternative models exist, including the Puente program with its expanded conceptions of “counselors”; the reforms proposed by the National School Counselor Training initiative, which shifts counselors away from one-on-one or small group counseling to participating in more central ways in academic reforms; the efforts to provide more career-oriented counseling when schools adopt alternative “pathways” or career academies; and the comprehensive developmental counseling

system devised by Valencia Community College, easily adapted to the high school and perhaps middle schools.ⁱⁱⁱ So additional funding *and* some alternative visions of how

guidance and counseling might work would be valuable additions to the other methods of closing the various achievement gaps.

Goal 8: Reforming California School Finance

The first seven goals represent instructional and non-instructional ways of closing the achievement gap. Some of them obviously cost additional money. Some (like reforming approaches to instruction, or reforming guidance and counseling) require some additional funding along with other resources like a clear vision, leadership, and stability. Still others, like the trust and cooperation that are prerequisites for many kinds of reform including the efforts to confront racial/ethnic issues, don't require additional funding in the ordinary sense, but must be constructed by teachers and school leaders with the support of districts. So funding is not the only solution to closing the achievement gap, but it is a part of the solution, necessary if not sufficient.

What is necessary, then, is a school finance system that can support the first seven goals. The school finance system in California has evolved in complex and unforeseeable ways over the past three decades or so, and there is now widespread consensus that the system is badly in need of reform.^{jjj} Two kinds of reforms, each of them difficult and painful, seem especially necessary. One is simply to increase the revenues in the system, since by any measure they are inadequate—by comparisons with other states, by comparison with what expenditures per student in California have been historically, or by comparison with various ways of determining what “adequate” funding might be. Especially in low-performing schools, teachers, leaders, and other staff members (like the counselors mentioned in Goal 7) are so overwhelmed with their existing responsibilities, so

pressed for time and energy, that they cannot meaningfully engage in the kinds of reforms envisioned in Goals 1 through 7. Reforming schools to reducing the achievement gap requires time and energy on the part of a wide range of school personnel, and a resource-starved system like California's does not have enough of this “slack” or energy to make much progress.

The second kind of reform is an alternative form of distributing revenues. Fortunately a great deal of research and deliberation about reforming the system has already taken place, not only in the recent review *Getting Down to Facts* but also in the Joint Committee to Develop a Master Plan for Education that reported in 2002.^{kkk} Among the principles that these two sources have developed, in addition to the need for adequate funding, are the following:

- Replacing the current complex system of categorical grants by eliminating most categorical programs, and placing their revenues in general funding. This would, among other goals, reduce the complexity of the system and its tendency to promote piecemeal rather than coordinated spending. Given Goals 1 – 7, perhaps the only categorical program that should survive is funding for support services, since these are often reduced under fiscal pressures.
- Allocating funding to districts according to need. “Need” in the context of efforts to reduce the achievement gap usually refers to

student characteristics (not district characteristics) that are correlated with low achievement. The Master Plan Working Group envisioned distributing funding on the basis of a weighted student formula where there would be higher weights for special education students, ELs (see Goal 6), and lower-income students, recognizing “the correlation of family income level with student achievement.” In addition, there might be other adjustments for cost of education differences, particularly since large numbers of high-need students live in urban areas with unusually high costs.

- Establishing a category of grants recognized as initiatives, or pilot projects, particularly to test new programs before they are funded statewide. However, the Working Group also recommended that such efforts be carefully devised and then evaluated for their effectiveness, to avoid the situation where the state develops expensive categorical programs that prove ineffective. Some of these initiatives might explore the practices suggested by Goals 1-7 above.
- Devising options to provide districts with the ability to raise their own taxes, partly as a way of restoring some control over educational programs to the district level. While amending Proposition 13 is always an option despite its political controversy, the Working Group recommended in particular easing the ability of districts to levy parcel taxes, enabling districts to levy a sales tax that would be equalized by the state, and encouraging county-wide taxes.

Replacing the current complex and inefficient method of financing school facilities with a stable and reliable annual per-pupil allocation for districts to meet their capital and major maintenance needs. In terms of reducing the achievement gap, this

would in particular benefit districts that are growing due to influxes of immigrants and the need for new schools.

There are, of course, different ways of accomplishing these objectives, and the earlier recommendations may need to be revisited in light of developments since 2002. However, these general recommendations address some of the persistent problems in the California school finance system, and a great deal of thought and deliberation went into them. Without such reforms in financing, or approaches similar to these, the other policies necessary for reducing the various achievement gaps are likely to prove impossible.

A third element of a revised school finance system should recognize how much waste there has been in some of the state’s large categorical programs—particularly since waste is one of the two important reasons why the relationship between funding and schooling outcomes is so weak.

- The state has spent a great deal on class size reduction with little to show for it, because the quality of teachers was not kept high, because teachers received no professional development to enable them to teach differently in small classrooms, and because physical facilities were sometimes inadequate. As in the other programs reviewed here, a few schools were able to take advantage of these funds, but the average effect was virtually zero.ⁱⁱⁱ
- A second expensive effort was the Intermediate Intervention/Underperforming Schools Program (II/USP), providing up to \$400 per pupil to 430 schools in the bottom half of the distribution, to be spent according to a plan developed with the help of an “external evaluator.” In

practice, however, almost everything about this program went wrong.^{mmm}

- Many schools were told by their districts to “volunteer,” so their participation was coerced; many schools were deeply unhappy with their consultants; some consultants produced cookie-cutter plans inconsistent with teachers’ wishes and school conditions; many of the plans involved little more than tinkering with existing practices; the connections between plans and actual activities were loose to non-existent in many schools; districts often found ways of failing to provide the additional funding they were supposed to provide; and the three-year period of the grant proved too short. Some schools already in the process of reform were able to use these funds to further their efforts, but otherwise this expensive effort—about \$1.5 billion/year for three years—generated no visible impact.
- Its successor, the High Priority Schools Grant Program, provided \$400 per student per year for three (and possibly four) years, to be matched with an additional \$200/student from the district, but the first-year evaluation found many of the same problems as II/USP: helpful district policies in only 3 of 9 districts studied, with 4 of the districts “a challenge,” with some teachers reporting that districts had impeded their reform efforts; district fiscal or managerial crises; substantial breakdowns in the implementation process; dissatisfaction with the quality of external consultants, with only 2 of 16 schools reporting any positive experiences; principal turnover; shortages of credentialed teachers; and trivial increases in test scores on only 7 of 12 tests administered [104].

The waste in these categorical state programs appears to be systemic. Again and again districts prove to be impediments, external consultants are unhelpful, schools are unable to formulate coherent plans and follow them (perhaps because of their need for reorganization as outlined in Goal 10). Until the state understands the reasons for these patterns of waste, there is no point in engaging in new initiatives or pilot programs.

Finally, and perhaps most importantly, schools and districts cannot spend their funds wisely on *effective* school resources if they do not have planning mechanisms to create coherent instructional plans and then allow these plans—rather than reactions to crises, or whims, or fads of the moment (to spend on computers, for example, or class size reduction), or desperate efforts to increase test scores quickly—to determine spending and resource patterns. There are several ways to accomplish this. Some districts have allocated funds to schools in a practice known as school-based budgeting; with adequate support, schools can then learn how to allocate resources more effectively. Some apparently exemplary districts have developed more collegial and cooperative relationships with their schools, with more deliberation about the resources schools need—rather than having districts dictate curricula and allocate materials that then end up being wasted as schools don’t use them. Some districts have created “tiers,” allocating more attention and resources to schools that have been especially ineffective.

Similarly, some states have experimented with different mechanisms of helping both schools and districts spend their resources wisely, by providing consultants to low-performing schools and districts, adopting continuous-improvement practices in low-performing schools, trying to enhance the

capacity of low-performing *districts*, and adopting a “tiering” system to identify both schools and districts in need of special attention.ⁿⁿⁿ These somewhat novel state efforts all require the capacity for technical assistance in the state department of education, which California currently lacks, and the effectiveness of these state

initiatives is not yet clear since they are so new. But if California is willing to learn from experiments in other states, there are many practices that could help both districts and schools learn to allocate resources more effectively.

Goal 9: Reforming Assessment

Just as Goals 1-7 require a new system of state *funding*, they also require a new system of *assessment*. Stage 1 in California’s assessment system was established in the Public School Accountability Act of 1999. This substantial piece of legislation was created in a month of closed-door meetings, without much consultation with the state’s educators who would have to carry out the Act, and without consultation with experts in testing, measurement, and assessment. It has, in concert with accountability measures in No Child Left Behind, accomplished one of its primary goals: to force schools to pay attention to low-performing students, and to low-performing students in specific categories including low-income students (school-lunch eligible), African American and Latino students, ELs, and special education students. It provides powerful incentives for schools to narrow some of the various achievement gaps—at least those measured by California Standards Tests—and schools with underperforming students are grabbing frantically at any interventions they think might help [51].

At the same time, the state’s assessment system has had a number of unintended and negative consequences:^{ooo}

- In schools with large numbers of low-performing students, the curriculum has been narrowed to only those subjects tested—math and reading—undermining the rest of the curriculum.
- The pressures of accountability have led

quickly, almost desperately, without much thought about the alternative or about long-run consequences.

- The content of the tests—focused on the most basic skills—has led to instruction focusing on relatively basic competencies, rather than greater breadth within each subject area.
- The way the tests are used to judge schools—using school averages that commingle the effects of schools on students *and* changes in the composition of students over which schools have no control—make it difficult to know whether the system can really identify low-performing *schools*.
- The state tests have been useless for anything but holding schools accountable since the results come back to teachers too late—typically the fall after they are administered in the spring—for them to use in improving instruction.

Overall, whether the California State Tests have helped schools respond in appropriate ways to information about which students are performing at sub-optimal levels, or whether they have constrained and undermined schools’ efforts, is open to debate. It’s therefore time to shift to Stage 2 in the development of an assessment system, one that would not undermine in so many ways the closing of various

many schools to adopt interventions. The development of a more sophisticated assessment system is itself a complex process. It should be conducted in consultation with the educators who have to carry out these assessments and live with their consequences, as well as with the state's experts in assessment, evaluation, and measurement, since the development of assessment instruments is a necessarily technical process that requires certain kinds of expertise. However, a number of principles to guide the development of a Stage 2 assessment system are readily developed from the problems that have been caused by the first system:

- A new assessment system should use multiple measures—a basic precept in all forms of assessment. This in turn involves at least three dimensions of what “multiple measures” mean. One is that multiple subjects should be included, rather than focusing on just two (reading and math); this would help prevent the emphasis on these subjects to the exclusion of others. Second, the tests themselves should test a greater breadth of topics and competencies within each discipline, rather than focusing on relatively basic skills at one grade level. This might prevent schools from focusing on test-prep efforts or teaching to the basic skills of the existing test. Furthermore, the broader range of skills would lead to better diagnoses of students' performance levels, and therefore what competencies need to be strengthened. Third, a focus on multiple outcomes would include several forms of student outcomes—progress as well as measures of learning for example—so that the *multiple* forms of achievement gaps could be recognized (see Goal 2).
- A new assessment system should make greater use of individual student data, rather than school averages, in order to disentangle the effects of what schools

achievement gaps.

do for the students who stay with them from the uncontrollable effects of the composition of schools. This means, for example, examining cohorts of students who stay in a school for 2, 3, or 4 years and seeing how they improve over these periods, rather than assuming incorrectly that the average scores for a school over time reflect the experiences of individual students within the school.

- The state should consider shifting to value-added measures of progress—in which states use *changes* in measures of learning rather than *levels* of learning to hold schools accountable—as a number of other states have done, though realizing that value-added models are still poorly-understood.^{PPP} A shift to value-added models and measurements would also be consistent with focusing on performance over time, a part of Goal 3. Of course, value-added models imply that annual tests be constructed so that comparisons over time are feasible.
- A new assessment system should develop assessments and reporting systems that are useful not only for state accountability, but also for instructional purposes and the goals of improvement. This means at the least that information is returned to teachers in a timely manner, and that assessments contain enough detail for teachers to diagnose where specific students require additional work. It also means that state assessment should be considered not an external requirement that interrupts the work of each school for many days a year, but rather a part of the ongoing process of instruction, assessment, and correction.
- A stage 2 assessment system should be able to recognize not only the average

students, but also the variation around these means. Sometimes, for example, a modest but adequate mean score is created by having some high-scoring students counter-balance a large number of low-scoring students, and a focus on means only may hide this unequal pattern.

- The special needs of immigrant students still learning English should be incorporated into Stage 2 assessments, rather than pretending these students are just like native-born students. (This is consistent with Goal 6, addressing the special needs of immigrant and EL students.)
- This does not mean abandoning the goal of steady progress for immigrant students as well as native students, but it does recognize that progress (or value added) may need to be measured with different assessments, and with

test scores for various groups of different levels of progress in the short- and the long-run, consistent with the evidence on the pace at which individuals can master new languages.

Developing a Stage 2 assessment and accountability system therefore involves a number of substantial changes to the existing system, most of them relatively complex and all of them involving difficult technical as well as conceptual issues. However, without such changes—as without changes in the state’s funding system—it may prove impossible to narrow the multiple achievement gaps in California because of the counter-productive incentives of the current system, particularly the incentives to stampede districts into making unwise curriculum decisions and to adopt remedial, scripted, and semi-scripted curricula that violate all the precepts of effective instruction and motivating teaching.^{qqq}

Goal 10: Reforming the Governance and Organization of Schools, Districts, and the State

Just as reforms to close the achievement gap need changes in funding and assessment, they may also require changes in governance and organization at various levels of the schooling system in California. It is certainly difficult to understand how such changes might be carried out, and how state policies might help foster changes in organization. But in thinking about the wide array of policies necessary to reduce achievement gaps, it is necessary at least to contemplate the kinds of organizational changes that have worked for schools and districts.

Some evidence about reforming schools suggests that they need to be reorganized to make *any* beneficial decisions at all. Many schools held up as exemplars have changed in roughly the same ways. Rather than the

principal makes most decisions and teachers are relatively isolated in their classrooms, the alternative organization stresses that leadership is *distributed* among teachers and those with the formal roles of administrators. Then teachers play active leadership roles as members or heads of committees making crucial decisions about curriculum, budget, or other policies; parents and students also have important roles in the ongoing procedures.

Another similar vision stresses the nature of relationships within schools. Schools that are most successful in responding to *external* accountability—standards imposed by state and federal governments—are those which have developed *internal* accountability, or

conventional organization, where the teachers to one another, of adults in the school toward students and parents. Still others have called this kind of school a learning community, stressing that collective decision-making requires a community of practice. This approach is also consistent with the importance of “buy-in” by teachers in any reform, of trust in schools, and of the need to establish better personal relations, in place of the often hostile relationships that exist in urban schools particularly.^{trr} It also reflects the fact that most effective resources in schools are not simple resources, but instead are compound, complex, or abstract, all of which are collective resources that need to be constructed by a school community (see Goal 1).

Many stories of individual schools that have successfully reformed describe collaborative decision-making processes.^{sss} A large number of reform efforts require decisions to be made by school-site councils or equivalent processes that reflect distributed decision-making, including NCLB school plans (and Title I plans before that), the school planning processes developed when districts move to school-site budgeting, and many planning mechanisms for state programs, including the California programs for low-performing schools (II/USP and HPSGP). So the approach of widely distributed and collective decision-making management is supposed to exist in many policies, though whether it is in practice often replaced by conventional top-down decision-making is a different issue.

Finally, the evaluations of several major state initiatives suggest that some schools were able to take advantage of them, even while the effects on the average were disappointing. In class size reduction, II/USP, and HPSGP—each of which spent at least \$1.5 billion per year—the schools that were able to take advantage of them were already engaged in reform efforts, and were

teachers and leaders to one another, of presumably already structured to make decisions.

Similarly, there is some evidence that high-performing *districts* also follow the organization of distributed leadership and learning communities. One analysis examined three high-performing districts in the state—Elk Grove, Oak Grove, and Rowland—and found the importance of districts having a coherent strategy for maintaining focus and for building capacity (see Goal 1), especially through professional development to enhance the instructional capabilities of teachers. The focus of these districts was on instructional improvement, not political issues; they showed how district officials as well as principals can be instructional leaders. These districts also developed a balance between centralized policies and decentralized or school control—the district version of distributed leadership—and developed processes that allowed for shared learning. One of the districts’ responsibilities was to create intervention programs so that interventions would be consistent among schools; these were generally focused on developing specific teaching strategies to move more students toward proficiency, rather than adopting drill-oriented curricula off the shelf (see Goal 4).

Some of the same themes emerge in profiles of Long Beach and San Diego, again widely considered two of the more successful districts in the state.^{ttt} Long Beach has had the advantage of stability in superintendents. Under the last several superintendents, schools received more authority, developing a balance between a top-down and a bottom-up approach; the district has engaged in wider discussion of issues—distributed leadership again. The district also followed a practice of rotating principals and administrators every five

years or so, in order for these individuals to develop a *district*-wide perspective, a parallel in a way to creating teacher-leaders at the school level who can then become school leaders. The district developed a series of interventions (see Goal 4 above)—a K-3 reading initiative, an eighth grade initiative, and a high school program for 9th graders testing below grade level—using a process of piloting changes and consulting with stakeholders before enacting these reforms. The district also brought together all members of the community and its organizations, developing the kind of “civic capacity” in which all these organizations support the public schools.^{uuu}

San Diego also focused on the quality of instruction through personnel policies, professional development, the development of Instructional Leaders in all schools, and a process of shared expertise. The district developed its own balanced literacy approach, avoiding the swings between phonics and whole language of state policy; indeed, the development of a strong conception of change made the district able to bend state requirements to their own goals, rather than being thrown off course. The district leaders were clear that restructuring schools—especially high schools—might help, but that restructuring would not be a substitute for improving instruction (see Goal 2 above). Interestingly enough, the schools that were most bureaucratically organized with fewest opportunities for collaboration had the most difficulty using the new resources from the district — suggesting that reform is more likely when both schools *and* districts have moved to less bureaucratic, more collegial, and more distributed forms of working. Where the district forgot the limitations of conventional top-down policies, these did not seem to work particularly well: top-down high school reforms were resisted by many schools, and the district found itself looking for more collaborative approaches.

Still other analyses, of districts outside California, have confirmed many of these findings. Districts able to respond to state policies depend on their capacity to learn new policy ideas, which in turn depended on a commitment to learning continuously about instruction, on relations of trust and collaboration within a district (sometimes described explicitly as a learning community at the district level), and on district willingness to engage in problem-solving rather than controlling power. Similarly, a study of district responses to state accountability found that “enterprising districts” worked more actively with schools, got to know individual schools well enough to understand their strengths and weaknesses, and again served as problem-solvers; “slacking” districts used the same approaches for all schools and usually acted passively, waiting for schools to ask for help rather than clarifying central goals. Many studies have noted the focus of successful districts on instruction—the district equivalent of principals as instructional leaders—and on developing roles for the district office of guiding, and supporting instructional improvements at the school level.^{vvv}

Overall, these are many similarities between these apparently successful *districts*—in their focus on improved instruction, their use of “balanced” teaching approaches, the ways they have developed interventions, the balance between district and the school policy-making, the efforts to operate in more collegial ways—and the *schools* operating in more “distributed” ways focused on instruction. To be sure, there’s no “proof” that reorganizing schools and districts will lead to improved decision-making and better use of resources (including additional funding). But there’s substantial evidence that schools and districts organized in ways consistent with

distributed leadership, collective decision-making, and internal accountability are better able to make decisions and to respond to external pressures. Conversely, schools and districts operating in traditional ways have the most difficulty with reform, indicating that reorganization may again be necessary but not sufficient.

One implication is that the policies necessary to reduce achievement gaps—particularly decisions about resources (Goal 1), improving interventions (Goal 4), addressing racial and ethnic issues (Goal 5) and the special needs of immigrant students (Goal 6)—depend on reorganization and changes in governance. This does *not* mean that strong leadership is unimportant. On the contrary, strong principals are crucial in the approaches of distributed leadership and internal accountability;^{www} the model districts that have shifted to new organization forms similarly have had strong superintendents with clear visions about district-school relations. But it does mean that strong leadership implies not autocratic and top-down decision-making, but rather the ability to articulate a vision of school-wide participation and to persuade other members of the school community to embrace this vision.

It's difficult to see how state policy could further these ways of reorganizing schools and districts. Currently, however, the state acts in certain ways that impede new approaches. It tends to promulgate policy with little participation from districts and schools; it has multiple and often uncoordinated sources of power, leading to uncoordinated policy; it rarely completes its education budget on time, leading to great uncertainty for districts and schools trying to plan rationally; it operates largely through mandates and constrained funding (like categorical programs), rather than providing technical assistance and support to districts and schools trying to close the achievement

gap. One goal of state policy might therefore be to modify those policies that prevent districts and schools from focusing on instruction, operating in more collegial and “distributed” ways, and developing new forms of leadership among administrators and teachers alike.

Finally, the finding that *schools* and *districts* may need to be reorganized in parallel ways in order to reduce many achievement gaps suggests that the *state* might also benefit from reorganization. A system in which schools, districts, *and* state policy focus relentlessly on the quality of instruction (rather than performance on narrowly-developed tests, for example), on improving teacher quality in specific ways, on developing both school and district and state leadership that operates in collegial and distributed ways, and on understanding the effectiveness of a wide variety of resources should be better at reducing achievement gaps than the current system. A structure where districts support school-level reforms and the state supports districts, including their reorganization, would create a kind of symmetry among school, district, and state actions, rather than the conflicts that now occur so consistently. The evidence to support this supposition would require an analysis of other states, to see which of them seem to have been most successful in narrowing achievement gaps and what elements contribute to their success—just as the evidence about successful *schools* and effective *districts* come from examples of strong performance. Knowing more about what makes state policy effective would help the state of California see more clearly what forms of reorganization might contribute to narrowing achievement gaps.

The organization and reorganization of schools, districts, and the state itself is a complex subject that merits considerably more discussion before any steps should

be taken. Reorganization for its own sake is often a waste of time and institutional resources, time and resources that might be better spent on instructional improvement. But in wrestling with the complex issue of

reducing achievement gaps, California should consider the existing evidence about the need for school and district reorganization before other policies can be effective.

The Overall Goal: Resurrecting the Promise of Public Education

The ten goals I have presented in this paper—seven addressing substantive changes that would reduce achievement gaps, and three facilitating these changes—are all complex and inter-related. Each merits a great deal more attention; indeed some, like the mechanisms that cause initial differences among students to increase over time (Goal 3)—are barely understood, and require considerably more research and deliberation. The translation of some of these into state policies is quite difficult—like the need to address certain racial, ethnic, and immigrant issues (Goals 5 and 6) and to reform the organization and governance of schools, districts, and the state itself (Goal 10). So these ten goals provide a long-term agenda for the state and for a P-16 council to pursue. Some of them—like adopting Pre-K

programs in Goal 3, reforming the finance system in Goal 8, and improving interventions in Goal 4—have been more widely discussed than others (like addressing racial and ethnic issues in Goal 5), and might therefore be easier to accomplish in the short run than others that may take considerably more time. But each of these is important in the long-run efforts to narrow various achievement gaps.

This large agenda may seem overwhelming. But it has the potential for both enhancing the effectiveness of California's education system and, by reducing various achievement gaps, improving its equity. These are goals truly worth the state's efforts.

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Notes

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^b See, for example, the references to Bureau of the Census reports and the U.S. Immigration Commission in Lazerson [1], pp. 262-263. See also the discussion of “retardation”—being old for one’s grade level—and “laggards,” on pp. 140-142.

^c See, for example, the book-length analysis of the black-white test score gap in Jencks and Phillips [2].

^d It is unreasonable to think that these policies can *eliminate* achievement gaps since policies outside education also contribute to school gaps, including health policy, housing policy, and urban development policy (or its absence). The contribution of non-educational policies that are complementary to education policies is a different subject; for three examples see Grubb and Lazerson [3], Ch. 8, 9; Rothstein [4]; and Grubb [5], Ch. 12.

^e See, for example, the National Governor’s Association “Closing the Achievement Gap,” which mentioned only four options: early childhood education, improving teacher quality, early intervention for college, and after-school programs. Similarly, Rumberger and Arrelano [6] mention three: reducing the gap that students come to school with, through pre-schools or family income programs; out-of-school programs including summer and after-school programs; and improving student behavior through parent education or smaller classes.

^f See the John Merrow PBS special “First to Worst,” describing the decline of the California education system from its prominence in the 1950s and 1960s.

^g Note the evidence in Lee and Wong [7] that accountability systems do not enhance school resources, and do not enhance equity. Note also Hamilton et al. [8], concluding also that accountability cannot work unless teacher and administrator capacity for improvement is developed.

^h The conceptualization of resources presented here is taken from Grubb, Huerta, and Goe [9], with a fuller treatment in Grubb [5]. There are of course other ways to conceptualize resources, but most of them are less complete than the one presented here.

ⁱ Balanced approaches draw both on behaviorist and on constructivist approaches to teaching, rather than following only one or the other.

^j This conception of school resources is developed more carefully in Grubb, Huerta, and Goe [9], with other support in the school finance literature analyzing the limits of considering funding only. On the limits of increasing funding as a way of enhancing compound, complex, and abstract resources, see Grubb [12].

^k There are at least four ways of describing effective teachers: according to credentials and degrees held; according to their behavior in the classroom, from direct observation; according to what they, as in Shulman’s [13] influential formulation of content knowledge, pedagogical knowledge, and pedagogical content knowledge; and in terms of their effects on student outcomes, as in value-added measures. The problem is that none of these four are necessarily related to one another, and there (for example) great debate over whether teacher credentials lead to more effective approaches to teaching in the classroom. For evidence that teacher credentials are not closely connected with teaching practices, see Goldhaber and Brewer [14]. See also the review of teacher characteristics that matter in Wayne and Young [15].

^l On the importance of “balanced” instruction, see the summaries of the enormous literature on instruction by the National Research Council including Snow, Burns, and Griffin [16]; NRC [17]; Donovan and Bransford [18]. See also the evidence based on NELS88 data in Grubb [11], and the evidence specifically about the teaching of low-income students in Knapp and Associates [19].

^m This formulation comes from Shulman [13]. See also the recent policy brief on Teaching Quality by Access Quality Education, www.schoolfunding.info/policy/teachingquality.php3.

ⁿ On “new” approaches to professional development, see Little [20].

^o The support for principals generally comes from the effective schools literature, and has been incorporated in the “five factor” model of effective schools. See especially Edmunds [21] and Clark, Lotto, and Astuto [22].

^p See especially Lemons [23] and the discussion in Goal 10.

^q Many of these results come from Grubb [10], which uses the NELS88 data to measure many more kinds of school resources than has been possible in past efforts. In virtually all cases the resources that prove to be important in these NELS88 results have been supported by other more detailed analyses.

^r On reducing turnover see Ingersoll [24]; for evidence that increasing salaries improves outcomes, presumably because higher salaries allow districts to hire better teachers, see Grubb [10].

^s On the effectiveness of teacher's time use see Grubb [10]; on various definitions of time and their effectiveness see Cotton [25]; on year-round tracks, see Cooper et al., [26], Table 7.

^t See Bryk and Schneider [27] on trust, as well as Payne [28,29]; see Newmann et al. [30] on curricular coherence; see Lampert [31], Ch. 3 on consistency among elements of the classroom; and see William et al. [32] on the value of consistency, coherences, and a principal's focus on learning and teacher responsibility.

^u See Rumberger and Larson [33] on the effects of individual mobility, as well as Grubb [10]. Other dimensions of mobility, like mobility of teachers, principals, and superintendents, are widely apparent in looking at schools that try to attempt multi-year reforms, but which are then interrupted by changes in school administration and priorities; see Grubb, Huerta, and Goe [9] on sources of waste.

^v See also NRC [17], Ch. 6, and Stone [34].

^w On the effects of school size see Grubb [10].

^x On magnets and charter schools see Gamoran [35].

^y See the evidence in Grubb [10], including statistical results from NELS88, as well as evidence from evaluation of school reforms.

^z The statistical results in Grubb [10] support these kind of differentiated effects of school resources; see also Rumberger and Palardy [36] (2005). Evidence on reforms that have improved engagement and progress but not test scores includes Kemple, Herlihy, and Snipes [37] on the Talent Development high school; Kemples and Snipes [38] on career academies; Gándara et al. [39] on Puente. On First Things First, see Quint et al. [40].

^{aa} On the inadequacy of guidance and counseling, both in general and as related to college, see NRC [17], Ch. 6; Schneider and Stevenson [41].

^{bb} For documentation on the differences at school entrance see Farkas [42] and the special issue of *The Future of Children*, Spring 2005, Vol. 15(1).

^{cc} See, for example, Rumberger and Arrelano [6], who show that kindergartners who attended center-based preschool had higher language skills and math achievement, but that this did not eliminate the effects of language status and socio-economic status (Table A-5).

^{dd} For example, Fryer and Leavitt [43] show that modest black-white differences at the beginning of kindergarten, largely explained by some simple socio-economic status variables, increase over the period until the spring of third grade. Phillips, Crouse, and Ralph [44] estimate that initial black-white differences are roughly doubled by the end of 12th grade. Scores on the Peabody Individual Achievement Test for the middle 50% of students widen steadily over time, Hargis [45]. My own analysis of NELS88 data for 8th to 10th to 12th grades shows divergence in test scores over this period, associated with race/ethnicity and measures of family background.

^{ee} See Alexander et al.'s [46] analysis of Baltimore data, Heyns' [47] research on Atlanta, and O'Brien's [48] research on a Texas district. In the analysis of kindergarten and first grade by Downey, von Hippel, and Broh [49], schooling tends to reduce inequality (except for Black-white differences), but not by enough to offset differences created over the summer.

^{ff} Some of the evidence of difficult transitions is anecdotal, for example as teachers complain about the transition from third to fourth grade. For quantitative evidence of "bursts" of inequality from either to tenth grade, see Grubb [9]. Phillips et al. [44] (Table 7.7) find a particularly high increase in the relative gap of reading and math scores between white and Black students in 7th and 8th grades, and the variation in Peabody scores reported by Hargis [45] seems to increase markedly in grades 3 and 7.

^{gg} See Cooper et al. [26], Table 7.

^{hh} See, for example, *Early Childhood Education & the Elementary School Principal: Standards for Quality Programs for Young Children* [50].

ⁱⁱ This section is based on reports of students in the Principal Leadership Institute and on a study of 12 schools in the Bay Area, reported in Grubb, Kinlaw, Young and Posey [51].

^{jj} See again [13,14,15].

^{kk} Most research on Out-of-School Time (OST) programs, including before- and after-school programs, has been largely negative; see Kane's review [52], Bodilly and Beckett [53], and a slightly more positive meta-analysis by Lauer et al. [54], concluding that the most effective programs are tutoring programs for reading. On tutoring, a rough consensus is that effective practices include a coordinator knowledgeable about reading and writing instruction; structure in tutoring sessions; training for volunteers; and coordination between classroom instruction and volunteers. See Elbaum and Moody [55], and Wasik and Slavin [56]. See also Cole's [57] model of an after-school program based on a university-school partnership.

^{ll} For a similar argument that schools need to face racial and ethnic issues squarely, see "Schools can't be color-blind" [58]. See also Oakes, Rogers, and Lipton [59], Valenzuela [60], and Anyon [61]. The enormous literatures on

culturally-relevant pedagogy (e.g., Gay [62]) and on multicultural education in its many forms (Banks and Banks [63]) are also arguments for facing racial and ethnic issues up front.

^{mm} Grubb [10], Ch. 4; Clotfelter, Ladd, and Vigdor [64].

ⁿⁿ See, for example, Ferguson [65] and more generally Weinstein [66].

^{oo} See Ayers [67] and the various essays therein.

^{pp} Grubb [10], Ch. 4, reviews this evidence. See also the reviews by Zirkel [68,69,70]. In addition, much of the literature on critical race theory is based on autobiographical and other incidents of racial/ethnic mistreatment. See also Valenzuela [60] and Anyon [61].

^{qq} See Deschenes, Cuban, and Tyack [71]; Delpit [72]; hooks [73]; Ladson-Billings [74]; Payne [28] and Payne and Kaba [29].

^{rr} On discipline policies see Ayers [67].

^{ss} [34,75,76,77,78,79].

^{tt} See Wheeler [80] on contrastive analysis and code-switching, and Gutiérrez, Baquedano-López, and Tejada [81] on repertoires of language practices.

^{uu} There appear to be many presenters and workshops intending to help schools discuss racial issues; see for example Singleton and Linton [82]. For the awkward conversations that often take place see Pollak [83].

^{vv} For an introduction see Ladson-Billings [84], Gay [62], and Banks and Banks [63].

^{ww} There are currently discussions in the state about developing a system of inspections. As these have been practices in the United Kingdom and other countries, these methods can be extraordinarily helpful in clarifying and reforming classroom practices, but they can also be highly destructive if carried out in punitive ways associated with accountability systems; see Grubb [85].

^{xx} Rumberger and Arellano [6] present some of the appropriate numbers. On the magnitude of the EL gap see Gándara, Rumberger, Maxwell-Jolly, and Callahan [86].

^{yy} On the inequities in resources, see Rumberger and Gándara [88]. On segregation see Rumberger, Gándara, and Merino [89].

^{zz} These conclusions come from Genesee et al. [90], Ch. 6. These are quite consistent with findings in August and Shanahan [91]; García [92], especially Ch. 3; Cummins [93]; Thomas and Collier [94]; and Minami and Ovando [95]. Contrary to this research, the evaluation of Prop 227 (Parrish et al. [96]) found no clear evidence to support one EL instructional approach over another, but that was largely because of data limitations.

^{aaa} See Cummins [93], Ch. 5. The evaluation of Prop 227 found that fewer than 40% of EL students could be designated as English proficient after 10 years; see Parrish et al. [96].

^{bbb} On the various components of Puente see the special issue of *Educational Policy* on Puente, September 2002.

^{ccc} See especially García [92], p. 164, and the citations on p. 41 about the negative treatment of bilingualism in most American schools.

^{ddd} On the problems with California's current assessments for English learners, see Rumberger and Gándara [88].

^{eee} See Dryfoos [97]. Comer schools (Comer [98]) also rely on the community to provide a variety of services.

^{fff} Some schools have employed school social workers to bridge the different cultures, paying them out of Title I funds.

^{ggg} See Blum, McNeely, and Rinehart [99]. The argument about the school environment is made at much greater length in NRC [17], Ch. 6.

^{hhh} See especially Schneider and Stevenson [41], and more generally NRC [17], Ch. 6.

ⁱⁱⁱ On these reforms models in general see NRC [17], Ch. 6. On Valencia's LifeMap program see www.valenciacc.edu/lifemap, with its five developmental stages of incorporating various support services.

^{jjj} See especially the reports produced by *Getting Down to Facts*, a recent assessment of many dimensions of California's education system, available at <http://irepp.stanford.edu/projects/cafinance.htm>.

^{kkk} See especially the Finance and Facilities Working Group, K-12 Education, *Final Report*, March 2000.

^{lll} For the evaluation of class size reduction see Stecher and Bohrnstedt [100].

^{mmm} The state's formal evaluation is O'Day and Bitter [101]. See also Goe's [102] comparison of three II/USP schools with 2 low-performing schools not receiving this grant, and her analysis [103] of the lack of any effects on test scores of II/USP. In addition, McKnight and Sechest [104] describe the low quality of many evaluation plans.

ⁿⁿⁿ This is based in Grubb [10], Ch. 10. On exemplary districts in California see Springboard Schools [106]; on practices in various states see especially Calkins et al. [107] (Supplement).

^{ooo} [108,109,110,111,112,113] and Grubb, Kinlaw, Posey, and Young [51], based on examining 12 schools in the Bay Area.

^{ppp} Estimating value-added models involves technical issues that have not been fully understood; see Grubb [12] for some of the problems. In addition, in the value-added models that have been widely cited (like the Tennessee value-

added system), it is not clear what kinds of statistical analysis takes place because the results are proprietary. Before value-added models can be properly used to hold schools accountable, therefore, additional clarification of technical issues is necessary.

^{99q} Since reviewers of this paper wanted it larded with additional citations, see NRC [17] on the precepts for motivation and instruction; see the references in footnote 11 for extensive reviews covering thousands of studies on the effectiveness of instruction.

^{99r} On distributed leadership see Spillane [114]; on internal accountability see Carnoy et al. [115] and Abelman and Elmore [116]; on trust see again Bryk and Schneider [27]; on the hostile relationships within many urban schools see Payne [28] and Payne and Kaba [29]. See also the summary of “organic management” in Rowan [117] and Miller and Rowan [118].

^{99s} See, for example, the example of “Railside School,” where mathematics teachers worked collaboratively to shape their own teaching methods and design their own curriculum (Boaler and Staples [119]).

^{99t} On district issues, see Springboard Schools [106]; Austin et al. [120]; and Darling-Hammond et al. [121].

^{99u} On the importance of civic capacity, or the cooperation of all civic groups within a district on the success of schools, see Stone et al. [122].

^{99v} See especially Spillane and Thompson [123]; Snipes and Doolittle [124], McLaughlin and Talbert [125], and Murphy and Hallinger [126].

^{99w} See especially Lemons et al. [23]. Note this means that distributed approaches should be included in principal preparation programs and induction programs.

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