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# Education Inadequacy, Inequality, and Failed State Policy: 

## A Synthesis of Expert Reports Prepared for Williams v. State of California

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This paper synthesizes the findings of a set of expert reports analyzing the plaintiffs' claims in Williams v. State of California, and it presents the implications of those reports for changes in state policy and practice. It examines California students' access to three basic requirements for educational quality and opportunity: qualified teachers; adequate textbooks and other relevant instructional materials; and clean, safe, and educationally appropriate facilities. It reviews the role of these resources and conditions in providing or limiting access to students' opportunities for achievement, and, more specifically, it places the availability of these basic requirements in the context of California's current standards-based education policies. This paper considers both the overall availability of these essential conditions to California students and patterns in their distribution among schools serving different student groups. Finally, it assesses the past performance of state education policies and officials in providing California's students with the educational essentials they require, and suggests policy alternatives that would bring considerable improvement.

The following findings stand out:

- Qualified teachers, relevant instructional materials that students may use in school and at home, and clean, safe, and educationally appropriate facilities are fundamentally important to students' education. They enable students to learn the knowledge and skills that the state has specified as important. They promote students' chances to compete for good jobs and economic security. They provide students with the tools to engage in civic life as adults. The consequences of not having access to such teachers, materials, and facilities are particularly harsh in California's current high-stakes, standards-based education system.
- Many California students do not have the teachers, materials, and facilities that are fundamental to their learning and that are enjoyed by the majority of California students. The burdens of these serious shortfalls are borne most heavily in high-poverty schools, disproportionately attended by children of color and students still learning English. Such students are often housed in overcrowded, deteriorating facilities. Their schools frequently lack critical instructional resources. Often these are also schools with the fewest qualified teachers and the schools in which student achievement and college-going rates remain very low. The insufficient supply and poor quality of these educational basics create significant obstacles for students as they attempt to meet the content standards the State has set, pass State tests that are required for grade-to-grade promotion and high school graduation, and qualify for competitive opportunities in college and the workforce. In some schools, these

[^0]poor conditions breed social alienation and pose real threats to students' health and wellbeing.

- Actions (and inaction) by the State have either contributed to or failed to prevent students' lack of access to qualified teachers, appropriate instructional materials, and adequate school facilities. These actions include a) the failure to specify and/or enforce standards for adequate and equitable resources and conditions that could prevent inadequacies and inequities; b) the failure to build the capacity of districts and schools to provide these resources and conditions; c) the failure to collect and/or analyze data in ways that would permit the State to know the extent of needs and problems regarding basic educational necessities; and d) insufficient interventions and assistance to address inadequacies and disparities when they occur.
- The inadequacies and disparities in access to teachers, instructional materials, and facilities are symptomatic of deeper, systemic flaws in California's education system. These flaws include a) a fragmented and incoherent approach to state policymaking; b) a system of school finance constructed in the absence of an overall plan for providing equitable and adequate resources and conditions, let alone ensuring education of the highest quality to all students; and c) a reluctance to invest in ways that ensure an equitable distribution of adequate resources and conditions; d) the delegation of responsibility for providing adequate and equitable education to local districts in the absence of State will or capacity to prevent the occurrence of serious inadequacies and disparities or to detect and correct them, should they arise. These flaws grow out of California's peculiar education policy history since the 1960s, and they have been exacerbated by the State's recent decision to rely on test-based accountability to drive educational improvement.

These findings make clear that the State must alter its policies and practices if it is to ensure that all students have access to the basics of educational quality and opportunity. Specific policies must be created that correct specific inadequacies and inequalities in the distribution of qualified teachers, textbooks and materials, and facilities. However, given the State's policy history, we caution that when recommendations are translated into specific policies, they can easily become temporary, if well-meant "spot-fixes." To be effective, however, these specific remedies must be framed in ways that recognize the deeper structural impediments in the State's current approach to governance and funding that underlie the current inadequacies and inequities and could give rise to them again. To rectify the more systemic problems, systemic reforms are required. Those reforms should modify the State's governance of the educational system in the following ways:

- Set State standards that specify the resources and conditions that are essential for teaching and learning, in addition to content and performance standards;
- Base the school funding system on what providing essential resources and conditions actually costs, with adjustments for cost differences in schools serving different communities and students;
- Expand the State accountability system to accurately and fairly measure and report learning resources and conditions, as well as achievement test scores;
- Establish unambiguous lines of State, regional, and district responsibility for ensuring that all students have these learning resources and conditions, and develop mechanisms that hold the appropriate officials at each of these levels accountable;
- Ensure that the accountability system is reciprocal-i.e., that it includes a two-way flow of accountability information and provides legitimate roles for local communities, parents, and students in holding the system accountable.

Only with these systemic changes will the State be able to prevent, or detect and correct, the specific problems that are the focus of this litigation.

This synthetic paper relies primarily on the set of expert reports prepared for Williams $v$. State of California. ${ }^{2}$ These expert reports marshal persuasive empirical evidence from the educational research literature about the importance of teachers, textbooks and instructional materials, and facilities to education. They provide background evidence about the particular importance of these resources and conditions in California's standards-based educational system. Using new as well as previous analyses of California data, the reports also present compelling evidence about the current status of students' access to resources and conditions, including analyses of the connections between current problems and State policy. This synthesis supplements the material in the expert reports with information from documents produced by the California Department of Education (CDE) and other State agencies, information generated by California schools and districts, and reports of independent organizations.

In many ways, this paper goes to great lengths to demonstrate what is patently obvious to great numbers of California school children and their parents as well as uncontested by nearly all observers of California's education system. For children to be educated, they require basic educational tools-teachers, books, and safe, healthy, and uncrowded schools. Teachers, books, and adequate school buildings are the staples of American teaching and learning. They are not usually thought of as educational resources or conditions whose availability varies significantly among schools, or whose centrality to education requires examination, documentation, and defense. The state has failed to provide these basic educational tools to many, many school children. Most often these are children who are poor, non-English speaking, African American, and Latino. It is unacceptable that the educational system would deprive any California child of these basics. It is reprehensible that those children most deprived educationally are also those who society neglects most in other ways.

[^1]
## I. Teachers, textbooks, and facilities are key requirements for educational quality and opportunity.

We begin by quoting some powerful words from former New York Commissioner of Education Thomas Sobol. Sobol's years of work with educators and researchers in New York and around the nation give him a perspective that is broad, incisive, and authoritative. Sobol makes clear that qualified teachers, appropriate instructional materials, and adequate school facilities - three resources that are the focus of Williams-are required, if not sufficient in themselves, for educational opportunity.
[T]he best teaching and learning environments are those that foster cultures of learning and collaborative endeavor among the staff and students. It is of course very difficult to develop these kinds of sustained or continuing cultures when there is a great deal of turnover among the faculty. Teachers are not merely fungible, impersonal conduits of information between some exterior source and students' minds. Instead, teachers are real, live human beings who establish relationships with students and vice versa. Learning depends in large part on the quality of these relationships, so when a teacher leaves a classroom mid-cycle, it takes a long time to rebuild the classroom culture that promotes learning (whether the culture results from a sense of trust and openness with one another, or from a sense of fear or affection or respect, or some other sense particular to a teacher and class relationship). High teacher turnover and high numbers of untrained teachers on campuses thus severely limit student learning opportunities. ${ }^{3}$
[W]hen students receive limited or out of date instructional materials, or no instructional materials at all, the students learn a different lesson: that society doesn't care enough about whether they learn to provide them books. Kids respond to this lesson in different ways, but very often I have seen them feel alienated and/or discouraged and/or hostile and/or apathetic. ${ }^{4}$
[A]sking children to attend school in insulting environments where the plaster is crumbling, the roof is leaking, and classes are being held in unlikely places because of overcrowded conditions has an ongoing, repetitive undercutting effect, sending a message of diminished value to the children. Children are learning all the time; they learn not only the lessons their teachers intend to teach them but also the lessons their schools send them about their value and relative place in the world. Children who see rats in their classrooms and schools, for example, learn, wholly apart from their teachers' lessons, that their schools are places where no one stops rats from running across the floor and where people in authority must not care very much about student learning and about the students themselves because the people in authority fail to prevent the presence of the rats. The

[^2]constancy of these inhumane environments $\square$ the presence of rats or their feces in classrooms again and again, the dailiness of crumbling buildings $\square$ perpetuates a cumulative, ongoing, unending depressive effect of the total environment for the students. By contrast, sending children to school in adequate facilities sends the opposite message: You count; do well. ${ }^{5}$

As detailed below, scholarly research confirms Sobol's professional knowledge of the critical importance of effective teachers, relevant instructional materials that students may use in school and at home, and clean, safe, and educationally appropriate facilities. Students who do not receive these inputs suffer reduced educational outcomes, diminished chances to compete for good jobs and economic security, and limited opportunities to participate in civic life. The consequences of not having access to effective teachers, relevant instructional materials that students may use in school and at home, and clean, safe, and educationally appropriate facilities are particularly harsh in California's high-stakes, test-driven education system. The importance of these resources are acknowledged and confirmed in California's education policies and in the words of State officials responsible for providing an education to all California students. Below, we review each of these claims.

## A. High quality teachers, materials, and facilities contribute to student learning.

1. Teachers. As Professor Linda Darling-Hammond details, a wealth of scholarly studies demonstrate the relationship between teacher quality and student achievement. DarlingHammond cites several California studies finding that differences in teacher quality are significantly related to student achievement in mathematics and reading. ${ }^{6}$ She also reports national studies that find differences in teachers' qualifications-including teachers' general ability, content background, preparation for teaching, and certification status (which encompasses aspects of all of these other indicators)-have a significant effect on student achievement. For example, she cites a recent Public Policy Institute of California study of student achievement across more than 7,000 California schools finding that teacher qualification variables were the strongest predictors of student achievement in a regression analysis, after controlling for the substantial effects of socioeconomic status. That report noted:

Among the school resource measures, the level of teacher experience and a related measure - the percentage of teachers without a full credential-are the variables most strongly related to student achievement. Teachers' level of education, measured by the percentage of teachers with a master's degree or higher, in some cases is positively and significantly related to test scores but not nearly as uniformly as the measures of teacher

[^3]experience. Similarly, a higher percentage of teachers with only a bachelor's degree within a given grade is negatively related to student achievement. ${ }^{7}$

In addition to the salience of teacher training viewed broadly, in terms of credentials and degrees, Darling-Hammond provides evidence that subject-specific teacher training affects student achievement. Students of teachers who are not fully certified in mathematics perform less well than students whose teachers are certified in math. ${ }^{8}$ Research shows that teacher certification and/or teacher experience and preparation correlate significantly with student achievement even after factoring out the effects of student poverty. ${ }^{9}$

Professor Kenji Hakuta augments Darling-Hammond's review of this research by citing a recent publication of the National Research Council, supporting the contention that teachers must have a knowledge base about language learning in order to effectively teach children who do not speak standard English. ${ }^{10}$ Hakuta also cites additional studies that bolster this conclusion. For example, he notes a recent study in Los Angeles City Unified School District (LAUSD) examining the impact of State and district authorization to teach English learners. That study found that students in classrooms with large numbers of English learners achieved less well when their teachers lacked appropriate certification. ${ }^{11}$ Similarly, a study in the Houston schools found that students; achievement suffered when they were placed in classrooms with teachers who were unlikely to have specialized training in working with English learners. ${ }^{12}$
2. Textbooks and Instructional Materials. Professor Jeannie Oakes' report finds that instructional materials are similarly critical to student learning. Not only is the textbook the central tool in almost all forms of schooling, it is accepted internationally as a necessary tool for learning. ${ }^{13}$ " $[\mathrm{T}]$ he World Bank considers textbooks a critical part of education, as necessary as the classroom itself, as indispensable as the classroom teacher." ${ }^{14}$ International organizations such as the Organization of Economic Cooperation and Development and the United Nations
${ }^{7}$ Darling-Hammond, p. 16, citing Betts, Rueben, \& Dannenberg, 2000, p. xxii.
${ }^{8}$ Darling-Hammond, p. 20, relying on Goldhaber, D.D. \& Brewer, D.J., Does Teacher Certification Matter? High School Certification Status and Student Achievement, Educational Evaluation and Policy Analysis, 22: 129-145. ${ }^{9}$ Darling-Hammond, p. 16, citing Fetler, 1997.
${ }^{10}$ Kenji Hakuta, Report prepared for Williams v. State of California (2002), p. 4, citing National Research Council (1997), Improving Schooling for Language-Minority Children, August, D. \& Hakuta, K. (eds.), Washington, D.C.: National Academy Press.
${ }^{11}$ Hakuta, p. 6-7, citing Hayes, K. \& Salazar, J. (2001), Evaluation of the Structured English Immersion Program: Final Report: Year 1, Los Angeles: Program Evaluation Branch, Los Angeles Unified School District.
${ }^{12}$ Hakuta, p. 7, citing Thomas, W. \& Collier, V. (2002), A National Study of School Effectiveness For Language Minority Students'Long-Term Academic Achievement (Final Report), Santa Cruz, CA: The Center for Research on Education, Diversity \& Excellence, available at http//www.crede.ucsc.edu/research/llaa/1.1pdfs/1.1complete.pdf.
${ }^{13}$ Jeannie Oakes, Access to Textbooks, Instructional Materials, Equipment, and Technology: Inadequacy and Inequality in California's Public Schools, Report prepared for Williams v. State of California (2002a), p. 5-6, citing Woodward \& Elliott, 1990; EPIE, 1977. It is worth noting that Oakes' report relies heavily on studies conducted by international organizations, because most of the empirical research on the relative importance of textbooks and instructional materials on student learning has been conducted in developing countries. In part, this can be explained by assumptions commonly made about educational systems in highly developed nations. Most U.S. residents, including policymakers and researchers, have simply taken for granted that textbooks and curriculum materials are available to students.
${ }^{14}$ Oakes(a), p. 5, quoting de Guzman, 2000.

Educational, Scientific, and Cultural Organization stipulate that textbooks are an important indicator of educational quality and use a standard of one textbook for each pupil in every subject as the standard for an adequate supply. ${ }^{15}$

Oakes cites numerous international studies that have documented a strong relationship between instructional materials and student achievement. ${ }^{16}$ Other research focused exclusively on the U.S. confirms the importance of textbooks in this country. For example, Wang, Haertel, and Walberg (1993) found that good curricular materials had a significant effect on student learning. ${ }^{17}$ Access to textbooks and other curriculum materials, equipment, and technology to support teaching and learning is particularly important for students from low-income communities and families, since they are less likely to have access to other books and learning materials outside of school.

Oakes also finds that textbooks and curriculum materials may be so consistently related to student learning in part because having a textbook to take home makes it possible for students to complete meaningful homework. If students have textbooks and curriculum materials to use at home, they can spend out-of-school time on additional reading, research, practice activities and exercises presented in textbooks, and can use these materials to prepare for class and for tests. Without texts and materials to take home, teachers have a difficult time assigning out-ofschool learning experiences that require students to have access to the content included in the text, and students, particularly those with few books and learning resources at home, have difficulty completing such assignments.

Hakuta makes clear that appropriate textbooks and instructional materials play a significant role meeting the educational needs of English learners. Teachers need specialized materials as they employ English Language Development strategies and use specialized techniques known as Specially Designed Academic Instruction in English (SDAIE) to make academic content accessible to English learners. Specialized materials are also required for nonEnglish speaking parents to support their children's learning at home. ${ }^{18}$

In California, trained teachers and instructional materials are particularly important because they are the primary means for students to gain the knowledge and skills specified in the State Content Standards that are at the heart of California's K-12 education system. These basic educational resources are even more important in light of California's alignment of the high school exit exam with those standards. Meeting the State standards and passing the "high stakes" tests based on them require that students learn the knowledge that well-prepared teachers and high quality instructional materials provide.
3. Facilities. Professor Glen Earthman's report demonstrates that the condition of school buildings, including but not limited to temperature, acoustics, and overcrowding, influences students' educational experiences and outcomes. The weight of evidence that

[^4]Earthman reviews shows that a school building's condition has a measurable influence on student achievement. "Researchers have repeatedly found a difference of between 5-17 percentile points difference between achievement of students in poor buildings and those students in above-standard buildings, when the socioeconomic status of students is controlled."19

Earthman explains that the condition of a school building influences student learning directly, as well as indirectly, through the work and effectiveness of a teacher. He cites research findings that poor school facilities diminish teacher effectiveness and performance, which, in turn, have a negative impact on student performance. ${ }^{20}$ For example, one study found that " $[t]$ eachers in buildings in poor condition stated that the design and appearance of the facility had a negative impact upon the learning climate. Conversely, teachers in buildings in good condition reported the building had a positive influence upon the learning climate.,21

Although there are fewer studies of the impact of overcrowding on student learning, Earthman concludes that the available research finds that students in overcrowded schools and classrooms achieve less well than students in uncrowded settings. For example, studies comparing crowded schools to schools that are not filled with more students than they are designed to accommodate find differences in test scores as well as increased rates of teacher and student absenteeism. ${ }^{22}$

Unfortunately, the most common stopgap "solutions" to overcrowding create equally serious problems. Oakes documents that busing students to distant schools as a way to relieve overcrowding, as is the case in many Los Angeles neighborhoods, raises four significant areas of concern: 1) impediments to parental involvement; 2) lack of access to after-school activities; 3) disincentive to enroll children in kindergarten; and 4) obstacles to achievement. ${ }^{23}$ These take a significant toll on the quality of education.

Similarly, Dr. Ross Mitchell and Oakes provide evidence of the adverse impact of "Concept 6" multi-track year round calendars on student achievement. ${ }^{24}$ The Concept 6 calendar permits schools to enroll 50 percent more students than its building capacity allows by scheduling three "tracks" of student that rotate throughout the school year, with two tracks in session at any given time and a third on vacation. The net result of the rotation is that track A and C provide two four-month blocks of instruction and two two-month vacations, while track B provides one four month and two two-month blocks of instruction, and two two-month

[^5]vacations. ${ }^{25}$ To achieve this maximum increase in capacity, the Concept 6 calendar reduces the days of instruction by 17 days. Over the course of a 12-year public education, the loss of 17 instructional days a year results in the loss of 204 instructional days - significantly more than an entire school year.

Students who attend Concept 6 schools suffer several clear educational disadvantages as compared to students at schools on traditional calendars: (1) overcrowded and large schools; (2) truncated and lost instructional time; (3) limited access to courses and specialized programs; (4) ill-timed breaks and correspondingly limited access to extracurricular activities and enrichment programs; and (5) poorer academic performance. ${ }^{26}$ In light of its disadvantages, it is hardly surprising that Delaine Eastin, State Superintendent of Public Instruction, should declare: "I would love to get rid of Concept $6 .{ }^{, 27}$

## B. The lack of teachers, instructional materials, and adequate facilities has negative social, psychological, and health consequences, as well as impeding learning.

Depriving students of trained teachers, instructional materials, or appropriate facilities harms students' educational opportunities in at least three ways. First, as discussed above, the deprivation prevents basic transmission of information: students are less likely to learn if they lack teachers who know their subject matter, books to transmit content, adequate spaces in which to learn, and sufficient instructional time. Second, the deprivation also sends psychologically damaging and educationally debilitating messages to kids "that society doesn't care enough about whether they learn. ${ }^{, 28}$ Finally, inadequacies in school facilities place students' health at risk.

Professor Michelle Fine's report provides compelling evidence of the second effect: "the psychological consequences of exposure to poor and crowded facilities, high numbers of underprepared teachers and teacher turnover, and absence of instructional materials. ${ }^{" 29}$ Fine's analysis is based on 101 interviews she and her graduate students conducted with elementary, middle, high school, and college students who attend (or have attended) California public schools which meet the criteria for the plaintiff class, 86 surveys collected from the same youth, and 11 telephone interviews with graduates of these high schools. ${ }^{30}$

According to Fine's study, schools "are intimate places where youths construct identities, build a sense of self, read how society views them, develop the capacity to sustain relations, and forge the skills to initiate change. These are the contexts where youth grow or they shrink., ${ }^{31}$ Yet, she found that many California students who attend school without some or all of the key

[^6]requirements for learning "believe that schools want them not to succeed, so that the students will leave and classes will become smaller, with no adult responsibility for the loss of student bodies. These interviews reveal a raw sense of social disposability"; " $[\mathrm{t}]$ he power of the quotes lies in the students' belief that the government, Californians at large, the public education system, and some of their teachers so fundamentally undervalue them that they wish their disappearance., ${ }^{32}$ Fine concludes:

In educational contexts such as those represented in the plaintiff class, permeated by low expectations, high rates of teacher turnover, environmental stress, and a sense of buildings that are out of control, youth develop, over time, what is called academic learned helplessness: a site-specific belief that trying doesn't matter and that they are unable to effect change in their schools. Some complain that lack of access to books or instructional materials hinders their abilities to learn and master academic materials. Others cite the frequent loss of educators and lack of continuity that interrupts academic progress. The often-remarked-upon substitute who doesn't know his/her content area comes to be a symbol that the system is neglecting the education of poor and working-class youth and youth of color. Relations with faculty, and the structural environment, become disrupted and stressful. These elements bode ill for academic performance. ${ }^{33}$

The California schools described by focus group participants systematically fail to offer students these opportunities to learn and master basic cognitive and social skills. To the contrary, the conditions in these schools threaten students' social values of integrity, discipline, and civic-mindedness and place in jeopardy a love of learning and enthusiasm for life-long learning. The conditions in these schools convert yearning to anger, pride to shame, and civic engagement to alienation. ${ }^{34}$

Fine also finds that where substandard school conditions reflect racial and socioeconomic disparities, the stigmatizing impact on students of color also diminishes student performance. ${ }^{35}$ As one education consultant whom San Francisco Unified School District hired to review the conditions of its facilities put it, "a pattern of disparate facility conditions associated with the racial and ethnic identity of SFUSD schools. . . . is likely to convey the message of racial inferiority that is implicit in a policy of segregation., ${ }^{36}$

Finally, Professor of Pediatrics Megan Sandel documents the negative effects of substandard school facilities on students' short term and long term health. ${ }^{37}$ She cites evidence suggesting that conditions within school facilities may cause children to become sick with both acute temporary illnesses, as well as chronic illnesses. The effects of some of these conditions, such as molds or allergens, may manifest themselves within days to weeks, while others, such as

[^7]those from toxins, may manifest themselves years later. Conditions within schools may have both direct and indirect effects on child health, since many facility conditions in schools may manifest themselves through multiple indoor hazards. Certain conditions can cause a health hazard to develop as well as encourage the development of a second or third hazard, therefore increasing the ill effects. Examples include moist or humid conditions. High humidity can directly result in mold growth. Indirectly, it can also encourage infestations, or cause lead paint to deteriorate and cause lead exposure, conditions that affect children's health as well. Finally, school building conditions can exacerbate many diseases students have, which can result in not only severe illness but also missed school days. Examples include children with asthma exposed to conditions they are sensitive or allergic to, such as cockroaches. Exposure to allergens has been proven to make asthma worse in sensitive individuals. ${ }^{38}$ Lastly, it should be noted that teachers spend, over the course of a career, many times the number of hours that children spend in these unhealthful conditions.

Facilities expert Robert Corley documents that California's longstanding neglect of its facilities has resulted in measurable health effects on students. He cites published reports that have identified the presence of significant levels of specific health and safety conditions, in particular, high lead levels and poor indoor air quality, in recent years in schools throughout the State. ${ }^{39}$

These negative psychological and health effects also affect learning. They contribute to student absences, which in turn deprive students of access to educational opportunities and of precious time in which to learn. ${ }^{40}$

## C. California policies and education officials have made clear that the state recognizes the importance of these basic educational requirements.

California's policies, as well as the pronouncements of public officials and publicly sponsored commissions and task forces, recognize and affirm the importance of certified teachers, high quality textbooks and instructional materials, and clean, safe, and educationally appropriate facilities.

The State's teacher credentialing policies, for example, make obvious that California officials agree that teachers need an academic college degree and studies in education in order to develop the general intellectual skills, deep knowledge of the subjects they teach, and a grasp of teaching methods that make knowledge accessible to students and make achievement possible. Moreover, the State affirms that teachers who work with California's culturally diverse student population, including the more than 1.5 million who are classified as English Language Learners (ELLs), require specialized training. As a result, the State has established the Cross-cultural, Academic, and Language Development (CLAD) and Bilingual Cross-cultural, Academic, and

[^8]Language Development (BCLAD) certificates for teachers who teach culturally and linguistically diverse students. Both serve as add-ons to a teacher's basic credentials. ${ }^{41}$

California officials have also acknowledged the centrality of textbooks to education. As Oakes notes, in 1994, the legislature affirmed that '. . . education is a fundamental interest which is secured by the State constitutional guarantee of equal protection under the law, and . . . to the extent that every pupil does not have access to textbooks or instructional material in each subject, a pupil's right to educational opportunity is impaired." (uncodified Section 1 to Education Code section 60177). The elaborate and sometimes contentious textbook adoption process also makes clear that State officials see textbooks as critical in conveying content to students. As recently as January 2002, California Secretary of Education Kerry Mazzoni wrote, "placing standardsaligned materials in every classroom is a continuing priority for Governor Davis." ${ }^{42}$ Indeed, First Lady Laura Bush has characterized textbooks as key components to "giving . . . children the tools and skills they need to learn and succeed. ${ }^{, 43}$

As for the importance of appropriate facilities, one needs to go no further than State Superintendent of Public Instruction Delaine Eastin, who, in 1998, noted in her presentation to the Little Hoover Commission, "School facilities poorly maintained and just plain inadequate can depress the human spirit. Cleanliness and enough room are not frills; they enhance productivity." ${ }^{44}$

## II. Widespread inadequacies and significant disparities exist in California students' access to qualified teachers, appropriate instructional materials, and adequate facilities.

The experts' reports review studies of conditions in California schools, and they provide new empirical evidence about those conditions. They demonstrate that, although most California students have access to qualified teachers, appropriate texts and materials, and adequate facilitates, the relatively smaller percentage of students who do not have such access still translates into distressingly large numbers of students who lack some or all of these basics at their schools. These reports also attest to patterns of inequality in the provision of qualified teachers, instructional materials, and adequate facilities. The supply and quality of teachers, materials, and facilities are significantly worse at schools that enroll disproportionately large numbers of low income African American and Latino students. Notably, while English learners comprise one-fourth of the total public school population in California-nearly 1.5 million students - most of these students are concentrated in a relatively small number of schools. The finding that African American, Latino, and other low-income students are deprived of basic resources and conditions is particularly troubling, since these are the students who are least likely to have access outside of school to high quality resources and conditions that will support their learning what California's education system expects of them.

[^9]An Example: Three Urban Schools. Consider, for example, the cumulative impact of such conditions on the students who attend Urban Elementary School \#4 (UE\#4), Urban Middle School \#4, and Urban High School \#1. ${ }^{45}$

Urban Elementary School \#4. All of the 800 children attending Urban Elementary School \#4 qualify for free or reduced lunch. Sixty-two percent are English learners, 65 are Latino, and 33 percent are African-American. The facility consists of one main building and dozens of portables, separated by narrow alley-like walkways. Both students and strangers, some being chased by police, hide in these alleys during the school day. Although, the school's main entrance is kept locked, unwelcome visitors and stray dogs often enter via an open maintenance area next to the school's cafeteria. Fences surround the campus' exterior, but they are low and can easily be climbed.

Disrepair is everywhere. Graffiti covers many of the windows of the portable classrooms, as well as the exterior walls of the school buildings. The very few bathrooms for students or faculty frequently lack toilet paper, soap, and/or paper towels. The water fountains do not always work. The classrooms often have cockroaches. Although a large playing field surrounds two sides of the school, but the school provides no play equipment. During recess, students must entertain themselves or use materials provided by individual teachers. One teacher observed, "They usually run around and fight."

Most UE\#4 teachers are inexperienced, only 10 percent hold full credentials; several are recent arrivals from Spain. Teacher absences are frequent and the turnover rates are very high. In 2000-2001, for example, 12 of the school's 38 teachers left. UE\#4's high teacher absenteeism and tardiness rates are particularly troublesome because the school has difficulty finding enough substitutes. Often, the administrators split absent teachers' students up among other teachers. Last year, for example, one teacher had extra students for 56 out of 180 instructional days. When these students arrive, typically with no materials, teachers must modify their instructional plans. When substitutes can be found, their quality is "hit and miss," with teachers often finding their rooms damaged and their students having done no work upon their return.

UE\#4 provides students few textbooks and instructional materials, and students who are English Language Learners or struggling readers are particularly hard hit. Although teachers have class sets of relatively new reading books and math workbooks (but, no math textbooks) for use in class, the school prohibits teachers from sending these materials home with students. The school does not provide teachers with science, social studies, or English Language Development textbooks, or with any dictionaries, thesauruses, reference books, or writing paper. To provide students picture books in both English and Spanish, math manipulative, art supplies, and photocopies, teachers must spend their own money, with some spending as much as $\$ 1000$ per

[^10]year. UE\#4's one copier was broken until Christmas, so teachers had to make copies at their own expense. In part because of the lack of appropriate learning materials, some teachers do not regularly teach social studies or science. One lamented, "If I want to teach them, I have to provide all the resources, and I'm strapped financially."

Urban Middle School \#4. The 2025 young Latino and African American adolescents (32 percent still learning English; 77 percent poor) who attend Urban Middle School \#4 (UM\#4) fare no better. These eleven- to fourteen-year-olds spend three years crowded into a trash-littered space designed to hold 400 fewer students; they are taught by inexperienced and untrained teachers who lack the books, equipment, and materials they need to teach.

Only 43 percent of UM\#4's teachers are certified, and many teach outside their subject areas. One teacher assigned to teach a "sheltered" class for English learners said that she thought the class "was for foster care students from homeless shelters. I had never heard of sheltered." Long-term substitutes fill many positions for which teachers can not be found. The school's day-to-day substitutes - many of whom lack English fluency, subject matter expertise, or the ability to manage young adolescents-often let the students play or watch a movie instead of providing lessons.

UM\#4 students do all of their reading at school since there are not enough books for them to take home. English learners have nothing to read in their home languages. Students study science in classrooms without running water, lab tables, or equipment. They have no calculators to use in math class, even though the standards require middle school students to use calculators in many mathematical calculations. Math manipulatives, such as counting blocks, that could help students master math concepts are in short supply. Students in one math class spent a considerable amount of instructional time making their own graph paper. In some English classes, students can't look up misspelled words, definitions, or conduct any classroom research, because there are no dictionaries, thesauruses, or other reference materials. In some classes, students study literature only through short stories and poems, since teachers have no sets of novels. In social studies, many students make do without globes or visual media, and they use atlases that are falling apart. One classroom does have a map, but only because an uncertified teacher's university supervisor "felt sorry" and gave her one. Because students rarely visit the school's one computer lab and their classroom typically only have one computer, students have little chance to learn technology.

Many UM\#4 teachers would like to photocopy materials for their students, often an option at schools in affluent neighborhoods. However, with at least 175 students per teacher, the school's limits on teachers of 150 photocopies per day and 500 sheets of copy paper per month, it's not often possible. Besides, one of the school's two photocopying machines for teachers to use was broken for nearly all of the 2001-2002 school year. Many teachers spent their own money to photocopy materials at copy centers, in addition to purchasing the books, manipulatives, and consumable science supplies they need to teach standards-based lessons.

Because of the overcrowding, many teachers float and are working in spaces not intended for classroom use, such as an upstairs gymnasium. One teacher reported, "I have more kids than space. I have no room for anything other than sitting." A science teacher who wants her students to do lots of hands-on experiments says her classroom is too cramped. The heaters in
some classrooms get so hot that students are burned if they touch them, but overcrowding has meant that teachers must place students at desks next to these heaters. All 2025 students eat lunch at once in an outside space with seating for only about 500 students. Students say they often feel unsafe during the chaotic lunch period, and that there is rarely time to get through the lunch line.

The school's water fountains are dirty, and many don't work at all. The school has no playground equipment, save several basketball hoops without nets. The bathrooms are covered with graffiti, and some teachers won't allow students to use the bathroom because "they get jumped" by students who cut classes, roam the school, and cause problems, including breaking second story windows. The bathrooms opening onto the schoolyard are considered unsafe, because no one monitors them.

The gates surrounding the school have large gaps connected by chains, and patches cover large holes in the fences. Workmen drive their trucks onto campus and walk around without identification, and no one questions unidentified visitors as they enter and leave the campus. The building is unlocked only from 7:00 am to 4:30 pm during the week and never on weekends. Unlike schools in affluent neighborhoods where administrators boast of having large numbers of teachers who are so committed that they arrive early and work beyond the "school day," both teachers and students at this school discouraged from coming early or staying late.

Urban High School \#1. If the students from UE\#4 and UM\#4 are unlucky enough to finish their public schooling at Urban High School \#1 (UH\#1), they will experience more years of woefully inadequate education. In some ways UH\#1's African American, Latino, and Asian students are more advantaged than those at UE\#4 and UM\#4, since only half of them are lowincome and only 17 percent are English learners. However, they experience the same debilitating shortages of teachers and materials, and poor physical conditions as their younger peers.

UHS\#1's bare hallways show signs of wear and tear, including many missing ceiling tiles and worn paint. The bathrooms have not been updated in many years and are quite run down. As the administrator observed, "Not much has been done to upgrade the school since it was built in the '50's. It's overly institutional and not welcoming." Teachers concurred. According to one, "The environment makes a big difference. We don't have posters on the walls; we have old, industrial furniture. Plants would make a big difference. I had the idea that I could get posters, plants, even a fish tank but it's all too expensive. I've already spent $\$ 400$ so far this year and as a full-time sub, I only make $\$ 19,000$ a year."

In fact, thirty percent of teachers at UH\#1 lack credentials, and more than half lack are inexperienced. The school's administrator complained, "We're always scrambling to find teachers," because many teachers who sign on to teach at UH\#1 find more desirable teaching positions in other schools just before school starts. In fact, the school doesn't offer many of the physiology, physics and chemistry classes more affluent schools offer, partly because "A lot of our science teachers leave and choose to move to better schools that have better facilities." In fact, the science teacher the researchers interviewed complained of outdated facilities and inadequate resources. His antiquated lab, built decades ago, has not been modernized. Because
the sinks do not drain, students are very limited in the experiments they can perform. According to the teacher:

Hands on learning is a good way to learn and they don't get to learn all the problem-solving and critical thinking skills that come when students are engaged in the scientific process of doing excitements. You feel like you're deprived and the students are deprived of the opportunity to learn. I don't feel good about it.

UH\#1's school administrator agreed, lamenting that, "there's only so much you can do with old resources." He added that science labs in more affluent middle schools are better equipped than labs in his high school. Even the most mundane resources are in short supply. Both the science teacher and his students must walk to the restroom for paper towels needed to clean plastic sheets for the overhead projector.

The school's instructional materials problems aren't limited to science. Of the three English teachers interviewed, only one had a classroom library. Most of the books in that collection were found or purchased out-of-pocket by the teacher. One substitute teacher who had been permanently assigned to a class noted that not enough novels are available for every student to take home. His classroom has no library because no money is available. However, two of the three English teachers were very pleased with the resources the principal provided. As one teacher said, "This school provides a lot of stuff and it's because we have an excellent principal." One teacher noted that the new principal is very capable had has gone far to acquire additional classroom resources. "I have class sets of novels. But that's not the case in most high schools or classrooms," the teacher said. The wide disparities among classrooms can be explained, in part, by the ability of individual teachers to acquire resources independently. According to one English teacher:

When I came here a few years ago, I barely had a desk. The legs are still broken. I had no TV, no computers, and no overhead projector. We had four tables and no desks for twenty students. The lock was broken. I had to get all the materials myself. So, I went to businesses that were closing and got donations.

Now, her classroom is the best equipped in the entire school. Teachers like this one are better able to equip their classrooms than teachers who lack the initiative or knowledge of how to root out the resources they need. All of the teachers interviewed said they spent up to $\$ 1,000$ annual of their own money to equip their classrooms. According to one teacher, "I spend so much that I don't even count anymore."

Ironically, at UH\#1 the State's content standards are posted in classrooms to help students be cognizant of the concrete expectations to which they are being held. However, the ability of the school to help meet those standards is severely constrained by the lack of teachers and other basic resources.

Notably, Urban Middle School \#4, Urban Elementary School \#4, and Urban High School \#1 are not isolated cases. Many California schools have similar problems; many are far worse. Not all of these troubled schools are in urban centers. The terrible conditions documented in the
urban and rural schools represented in Friedlaender and Frenkel's study is consistent with the evidence amassed in this case, much of which is summarized in the following pages.

As disturbing as these terrible conditions themselves is the ample evidence that few California officials are surprised by accounts such as these. The expert reports and other State documents make clear that abundant information about these problematic conditions has been available to California officials in widely distributed reports of independent and State-supported task forces and commissions, as well as in scholarly research. Many of these problems have been commented on publicly by State officials. Consequently, there is considerable evidence that the inadequacies and inequalities in California schools are neither new, nor unknown to the State.

## A. Millions of California students attend schools without trained teachers, appropriate instructional materials, or adequate school facilities. These students are disproportionately low-income students and students of color.

1. Teachers. The huge and growing shortage of qualified teachers in California schools has been widely noted by researchers and State commissions. Darling-Hammond's report documents that, in 2000-2001, 24 percent of the schools in California employed more than 20 percent of teachers who lacked clear credentials. ${ }^{46}$ In addition to 37,000 teachers working on emergency permits who had not met the State's standards for content knowledge or teaching skills, more than 3,000 teachers were working on waivers without having passed even the State's basic skills examination, the prerequisite for an emergency permit.

Darling-Hammond's report draws its evidence from several statewide studies, of which the following are just a few: An analysis conducted at the request of Senator Dede Alpert in 1997 found that the California Teacher Credentialing Commission issued 23,687 emergency permits and 3,810 credential waivers to teachers in that year alone. These teachers constituted 11 percent of the total number of teachers employed in California. ${ }^{47}$ The 1998 report of the California Research Bureau, California State Library reported chronic shortages of fully credentialed teachers, especially in the fields of bilingual education, special education, mathematics, and physical sciences. ${ }^{48}$ SRI International's three annual analyses-1999, 2000, and 2001-for the Center for Teaching and California's Future have shown steady increases in the number of less-than-fully-certified teachers. In 1999, SRI found that, "More than 1 in every 10 classrooms in the State are staffed by teachers who have not met the State's minimum requirements. ${ }^{49}$ The 2001 report showed that more than 42,000 teachers working in California's schools lacked full preparation or credentials, ${ }^{50}$ more than in 25 other states combined.

[^11]Darling-Hammond and Hakuta also provide evidence that low-income students and students of color are taught by a disproportionate share of these less-than-qualified teachers. ${ }^{51}$ These experts cite studies by SRI, the Public Policy Institute (PPIC), Policy Analysis for California Education (PACE), the RAND Corporation, and the American Institutes of Research, among others, in addition to providing their own new analyses. For example, a PPIC study of more than 7,000 California schools found teacher qualifications to be distributed unequally among students of different racial groups, family income, and location. ${ }^{52}$ SRI's 1999 analyses provided evidence that "[S]chools with more than 90 percent minority students have, on average 19 percent underqualified teachers on staff. . . . Schools with the fewest minority students have, on average, only 3 percent underqualified teachers. ${ }^{, 53}$ The 2001 report noted an intensification of this pattern: "Of particular concern has been the maldistribution of these underprepared teachers. Students in low achieving schools are five times more likely than their peers in highachieving schools to have a teacher who has not yet earned a credential.,54 In 2000, a PACE report summarized the problem: "California continues to be plagued by an escalating teacher shortage that has placed thousands of emergency-permit teachers in the schools serving our poorest, neediest students" ${ }^{55}$

As Hakuta notes, California's 1.5 million English language learners (ELs) enrolled in K12 schools are particularly impacted by the unavailability of qualified teachers, even when compared to other low-income non-EL students from homes with comparable income levels. As the concentration of ELs in a California school increases, so too does the percentage of teachers without full credentials. Schools with 40 percent or more ELs have 6 times the percentage of teachers who are not fully credentialed than do schools that have fewer than 7.5 percent ELL students. ${ }^{56}$
2. Textbooks and Instructional Materials. The State does not collect information about the supply and shortages of textbooks and other curricular materials. However, Oakes reports findings from a recent Louis Harris survey of a random sample of California teachers representing the diversity of California's schools that indicate that the State's students experience serious shortages. Harris found that 11.7 percent of California teachers lack sufficient textbooks to use in class and 32 percent (who can be estimated to teach almost two million children) face shortages that make it impossible for their students to use textbooks at home. ${ }^{57}$ Significant percentages also report that the texts and materials they do have are in poor condition and

[^12]provide inadequate coverage of the State's content standards. ${ }^{58}$ Oakes also cites a San Francisco Unified School District survey that reports similar findings about the severity of the instructional material shortage. In that survey, 40 percent of San Francisco Unified teachers disagreed with the statement, "I have enough books for all of my students." ${ }^{59}$ Similarly, a 1998 survey of LAUSD revealed that 87 percent of the district's high schools, 67 percent of middle schools, and 51 percent of elementary schools reported an inadequate supply of currently adopted textbooks. In the Los Angeles study, adequate was defined as having one book for each student in each subject for which a textbook is used. ${ }^{60}$

California schools with inadequate textbooks, curriculum materials, equipment, and technology are also more likely to be schools serving less advantaged students. Both the Harris survey and data collected in conjunction with RAND's study of class size reduction reveal that schools with high populations of students of color or students who are eligible for free or reduced price meals offer students significantly less access to textbooks and instructional materials than do schools with lower populations of these students. For example, the RAND data shows that 83 percent of teachers working at schools serving small percentages of low-income students indicated that they always had access to textbooks, whereas only 57 percent of teachers who worked at schools serving a large population of low-income students indicated that they always had access to textbooks. ${ }^{61}$

The types of schools where the shortages are most severe are also the schools where instructional materials are probably most important, since these schools enroll students who can be expected to have less access to either public or private resources outside of school to supplement those they have available at school. These are also schools with disproportionately large numbers of inexperienced and under-prepared teachers-the very teachers who are most likely to be dependent on high quality curriculum materials to provide students access to curriculum content. ${ }^{62}$

Hakuta demonstrates that very large percentages of teachers who teach English learners are without books and materials that make content knowledge accessible to students who are still learning English. In one example, he uses data from the Harris survey to show that 22 percent of teachers in schools with more than 25 percent English learners reported that that textbooks and instructional materials at their schools were only fair or poor compared to only 14 percent of teachers in schools with lower percentages of English learners. He also shows that teachers with high percentages of English learners (more than 30 percent) in their classrooms are less likely than teachers with low percentages ( 30 percent or less) of English learners to have access to textbooks and instructional materials, in general, and materials needed by English learners in particular. Sixty-eight percent reported not enough or no reading materials in the home language of their children and 29 percent reported that they did not have any or enough reading materials at students reading levels in English. Teachers with high percentages of English learners were

[^13]also almost twice as likely as teachers with low percentages of English learners to report that the availability of computers and other technology was only fair or poor. ${ }^{63}$

These findings echo those of a study conducted by California's Postsecondary Education Commission in 1998. That study concluded,

Substantial differences with respect to the availability of consumable supplies and instructional materials permeate our elementary and secondary school system as well as disparities in facilities and access to computer technology. . . [M]any of the disparities . . . are consistently and pervasively related to the socio-economic and racial-ethnic composition of the student bodies in schools as well as the geographical location of schools. ${ }^{, 64}$
3. Facilities. Although the State lacks data that reveal the extent of California schools with facilities problems, expert Robert Corley addresses the prevalence of unusually poor facilities conditions in California public schools. Corley has inspected many of these schools firsthand, and he cites ample other evidence that the problem is broader than his personal experience. For example, Corley cites the federal General Accounting Office (GAO) study in 1996 estimating that 42 percent of California's schools had at least one building that was in "inadequate" condition. Only the District of Columbia, Ohio, and Michigan ranked worse. ${ }^{65}$ More recently, State Superintendent of Public Instruction Delaine Eastin has said, "We can't have high-quality schools if we have crummy, run-down facilities housing a third of our students as we have today." ${ }^{66}$ Corley notes that Superintendent Eastin's assessment is similar to that given in a 2001 report by the State Legislative Analyst (LAO): "Despite significant sums raised for school construction in recent years, about one in three California students attend an overcrowded school, or one in need of significant modernization." ${ }^{67}$ Additionally, of the teachers responding to the Louis Harris survey, approximately 10 percent reported conditions of their school facilities as "poor" and another 22 percent rated them as "only fair." As Corley observes, taken together, these percentages match the one-third figure of schools with facilities problems cited by the LAO. Corley also puts a human face on these problems by estimating, very conservatively, that if only 10 percent of the State's schools are in unusually poor condition, this would affect at least 400,000 California students. ${ }^{68}$

Oakes' report investigating issues related to textbooks and instructional materials also provides some details about the extent of facilities maintenance problems. She reports that 32 percent of the teachers surveyed by Harris in 2002 reported teaching in classrooms where the temperature was too hot or cold; 27 percent said that cockroaches, rats, or mice were a problem;

[^14]17 percent were in schools where bathrooms were dirty or closed; and 32 percent were in schools that hold classes in a space not intended to be a classroom. ${ }^{69}$

Overcrowding is also a serious problem for many California students. For example, the 1999 report of the Little Hoover Commission on Los Angeles Unified School District found that "Some 15,000 schoolchildren [in LAUSD] ride buses each day because there is no room at their home school. ${ }^{, 70}$ There are also about 240 schools in the State that operate on a Concept 6 or Concept 6 Modified calendar, in an effort to accommodate serious overcrowding.

As with shortages of qualified teachers and adequate textbooks and materials, schools with unusually poor conditions are most often found in communities where students are less likely to be fluent in English, more likely to receive free or reduced price lunches, and to be socioeconomically disadvantaged. ${ }^{71}$ Even within the same school districts, Corley observes that campuses with facilities problems are more likely to serve minority students, students who are less affluent, or limited English speakers. He also notes that the data in the Harris poll to this effect are consistent with his personal assessment. ${ }^{72}$ Only 4 percent of teachers in schools Harris identified as "low risk" on socioeconomic and language factors rated their school facilities as poor, compared to 18 percent of the teachers in schools where the risk factors were high. ${ }^{73}$

Additionally, Hakuta notes, the Harris data also show that whereas one-third-of all teachers ( $32 \%$ ) reported their school's physical plant as either "only fair or poor" a significantly higher percentage ( $43 \%$ ) of teachers in high concentration EL schools (more than $25 \%$ of the students are EL) reported inadequate facilities. Hakuta also cites the Early Childhood Longitudinal Study (ECLS) data to show differences in principals' and researchers' observations of the conditions of facilities (overcrowding, buildings and bathrooms in unsatisfactory conditions, etc.) in elementary schools with high percentages of English learners versus conditions in schools with lower percentages of these students. In every case, schools with higher concentrations of EL students are perceived to have worse facilities. ${ }^{74}$

The State's own data regarding race and ethnicity of students attending schools on various calendars also demonstrate that racial or ethnic group membership is strongly correlated with calendar type, and that Latino students' and English learners' enrollment in Concept 6 multitrack schools is well out of proportion with these students' representation in the State as a whole. Mitchell reports that while Latino students' median school enrollment level in Concept 6

[^15]schools is 84 percent, their median enrollment level in schools statewide is 34 percent. ${ }^{75}$ Hakuta provides the following table showing the overrepresentation of English learners in Concept 6 schools. ${ }^{76}$

Distribution Characteristics of California Schools, 2001 Percent English Language Learner Enrollment by School Calendar

|  |  | Calendar |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Measure | Statistic | Traditional/ <br> Single-Track | Multi-Track <br> Not Concept 6 | Multi-Track <br> Concept 6 |
| Percent English Learners | Mean | 21.06 | 36.48 | 50.97 |
|  | Median | 15 | 35 | 53 |
|  | Number of Schools | 5913 | 735 | 221 |

Source: California Department of Education, Policy and Evaluation Division (http://cdedata.com.hosting.pacbell.net/api2001base/dbapi01b.zip) and School Facilities Planning Division (http://www.cde.ca.gov/facilities/yearround/direct00.htm)

Hakuta concludes from these data that the very students who need the most exposure to schooling, to English language models, and to opportunities to "catch up" to their English speaking peers are more likely to be assigned to school calendars that provide them with fewer school days than other students and less exposure to English in a school setting. ${ }^{77}$
B. The shortages and inadequacies in teachers, instructional materials, and facilities affect large numbers of the state's children. However, the various problems tend to converge in schools serving low-income, students of color. This convergence means that the state's shortages further hinder the educational chances of these already disadvantaged students.

Based on the percentages of teachers reporting various problems in their classrooms and schools, we can estimate the number of children in schools who are affected. There are slightly more than 6 million children attending public elementary and secondary schools in California. This large number is an important context for interpreting statistics reported on schooling opportunities. Although some percentages may appear "small," and the discrepancies just a few "points" of difference, these percentages affect very large numbers of children. For example, with 12 percent of teachers reporting that they don't have enough textbooks to use in class, we can estimate that they are teaching 12 percent of California's students. That is, approximately 700,000 of California's 6 million students are in classrooms where teachers do not have enough books for all of them to use. The chart below shows the percentages of teachers reporting particular conditions and an estimate of the number of schoolchildren subject to these conditions.

[^16]
# Estimates of Numbers of Students Affected by Various Inadequacies ${ }^{78}$ 

| Problem | \% | Students |
| :--- | :---: | ---: |
| Schools with 20\% or more undercredentialed teachers | 19.0 | 1.1 million |
| Not enough textbooks to use in class (in classes using books) | 11.7 | 700,000 |
| Not enough textbooks to send home for homework (in classes <br> using books) | 32.1 | 1.9 million |
| Classroom uncomfortably hot or cold | 32.3 | 2 million |
| Evidence of cockroaches, rats or mice in past year | 27.6 | 1.7 million |
| Student bathrooms not working or closed | 16.6 | 1 million |

Put simply, these numbers portray a crisis of enormous proportions. For example, 42 states across the country have total public school enrollments that are smaller than the number of California public school students who lack enough books for homework.

Importantly, California schools are far worse for children from low-income families and children still learning English. To examine the disparity, Harris constructed an "at risk" scale by combining the schools percentages of poor children and children with limited English proficiency. Harris then compared the conditions reported by teachers in schools most "at risk" (those that ranked in the highest $20 \%$ on his scale) with those reported by teachers in schools that fell in lowest 51 percent on his "at risk" scale (i.e., the less "at risk" half of the State's schools). Extrapolating from these teachers' responses, students attending schools in Harris' most "at risk" category are 12 times less likely than students in "most" schools to be taught by a fully credentialed teacher. The chart below shows that the disparities between these two groups across the range of problems are striking. Problems are 2-12 times more prevalent in schools attended by "at risk" students, as reflected in the following chart.

[^17]
## Disparities Between Schools Enrolling High Risk Student Populations \& "Most" Schools

Disparities: 20\% Highest Risk and 51\% Lowest Risk


Also using data from the Harris survey, Darling-Hammond and Oakes show that teachers who have an inadequate supply of books and materials were more likely than other teachers to report that their schools experienced a number of other hardships. ${ }^{79}$ These problems converged in schools with staffing problems (including shortages of qualified teachers and poor working conditions), with facilities maintenance concerns (including problems with heating, noise, infestations, and dirty and locked restrooms), and problems resulting from overcrowding. Teachers at schools with serious staffing problems reported problems with textbooks, subject matter materials and equipment, and technology more often than teachers at schools with less serious staffing problems. ${ }^{80}$ Similarly, teachers at schools with serious facilities maintenance problems reported problems with textbooks, subject matter materials and equipment, and technology more often than teachers at schools with less serious facilities problems. ${ }^{81}$ Likewise, Mitchell's report documents that "access to fully credentialed public school teachers, and the presence of emergency credential teachers, is strongly associated with the type of calendar under which schools operate. Multi-track year-round schools, especially Concept 6 schools, are much

[^18]more likely to have teachers who are not fully credentialed to teach in their current teaching assignment. ${ }^{\prime 82}$ As Hakuta's report attests, these are schools disproportionately attended by the State's English learners.

Other recent studies have reached the same conclusions. For example, a 2002 PPIC study reported, "By and large, if students at a given school have relatively little of one resource, they are likely to have relatively little of other resources as well.,"83

It's hard to imagine, under such conditions, that students at UE\#4, UM\#4, and UH\#1 can develop as engaged learners and contributing citizens, let alone raise their school's test scores above their current rock-bottom ranking in the State. Like students at the schools described earlier, other California students in the plaintiff class are likely to attend schools with more than one problematic condition, and experience these conditions over several years. Not surprisingly, this accumulation of deprivations compounds the negative effect on student performance. For example, Darling-Hammond cites research showing that "[s]tudents who are assigned to several highly effective teachers in a row have significantly higher gains in achievement than those who are assigned to several ineffective teachers in sequence., ${ }^{84}$

Similarly, Fine explains that "the longer students stay in schools with structural problems, high levels of uncertified teachers, high teacher turnover, and inadequate instructional materials, the wider the academic gaps between White children and children of color or wealthy children and poor children, grow to be, and the more alienated they become., ${ }^{85}$ Regarding alienation, Fine found, "over time, the more youth mature and the longer they are in these schools, the less they believe in themselves as potentially efficacious actors in their schools and in our democracy. ${ }^{, 86}$ Fine and her graduate students documented that younger students tended to be relatively optimistic and positive toward schooling, notwithstanding their exposure to deprivation of basic educational conditions. However, as students mature and go to high school, they evidenced increasingly negative attitudes toward their schools and their life and civic engagement opportunities. ${ }^{87}$

Like students, teachers are also disheartened by such conditions. In 1999, a study for the Center for Teaching and California's Future found, "[M]any hard-to-staff schools have terrible working conditions where no well-qualified professional would want to work. Overcrowding, lack of adequate facilities and space, and weak or nonexistent professional support create extremely difficult and undesirable workplaces. Because they are in high demand, qualified

[^19]teachers go elsewhere.."88 Their departure, however understandable, simply intensifies the negative conditions for the young people they leave behind.

## C. The inadequacies and inequalities are neither new, nor newly discovered. State reports and public pronouncements over the past two decades make clear that state officials either were aware or should have been aware of these problems.

1. Teachers. Shortages of qualified teachers have been the subject of much analysis and discussion in the State over the past two decades. For example, in 1985, the California Commission on the Teaching Profession reported that "emergency credentials, allowing individuals to teach without the required courses in teacher education . . account for over 15 percent of all credentials awarded in California. Projections indicate that one out of three new teachers hired will be hired on an emergency credential." Additionally, it predicted that the "demand by 1990 could total up to 85,000 teachers, while only 50,000 will be available, leaving a likely shortage of 35,000 teachers. These figures may underestimate the problem. If California acts upon the recommendations of the Commission and, for example, adopts a pupil-teacher ratio of 20-1 and eliminates emergency credentials and teacher misassignment, then demand could reach 144,000 new teachers, and the shortage would rise by a like amount, to as many as 94,000 teachers." ${ }^{89}$

Two years later, in 1987, the Legislative Analysts Office warned that, "Several studies have indicated that, in the next five to ten years, the State of California will experience a significant shortage of qualified teachers. ${ }^{90}$ In 1991, this warning was repeated in a report from California's Department of Education (CDE): "By the early 1990s, the State's schools will need about 85,000 new full-time teachers for all subjects beyond the approximately 201,000 teachers currently in the classroom. Only 32,361 , however, were being trained during the academic year 1989-1990."91

The State has also been aware of the inequities in students' access to qualified teachers for at least a decade. In 1993, the Little Hoover Commission warned "There is a severe shortage of teachers with the expertise in language acquisition, the training in cultural diversity and the skills to enhance the classroom learning environment that are vital for meeting student needs in today's schools." It also reported that the CDE was well aware of the problem, having provided the Commission with data about "a statewide shortage of 20,000 bilingual teachers, ranging from 60 percent for Spanish-speakers to 95 percent for groups such as Cambodian and Lao.,"92

In 1998, the California Research Bureau reported that, "Urban and rural districts experience more staffing difficulties than do their suburban counterparts. This is reflected in the

[^20]number of emergency permits and waivers allotted to different counties."93 And, as noted earlier in this paper, beginning in 1999, SRI conducted annual analyses showing the increasing disparities in teachers' qualifications between schools serving advantaged and disadvantaged students. In its first report, SRI noted, "Not surprisingly, the schools with the highest concentrations of underqualified teachers share other characteristics besides low achievement. These schools have more poor students, more minority students, and more students from homes where English is not the primary language," ${ }^{94}$ and "Students in poor, inner-city schools are much more likely than their more advantaged suburban counterparts to have underqualified teachers." ${ }^{95}$ Subsequent reports have shown these disparities to be increasing. ${ }^{96}$

Not only have the current shortages and disparities, as well as their dire consequences, been known to the State, most of the analyses of the problems have been conducted with the State's own data, collected annually as part of the California Basic Educational Data System (CBEDS). (In fact, as we note later in this paper, CBEDS has been collecting data since the early 1980s that could have been used to detect California students' vastly unequal access to qualified teachers and to inform policy solutions.) Recently, some reports of these problems have been prepared and distributed by the State itself. For example, the CDE's Professional Development Task Force reported in 2001:

Recent research paints a stark picture of inequities in the current system. In more than 20 percent of the state's schools, more than 20 percent of the teachers are under-qualified, and the schools are disproportionately in high-poverty communities with a large proportion of students of color and English language learners. These schools lack the human and material resources needed to create a productive learning environment. The unequal distribution of qualified teachers is a major source of the growing achievement gap in California. ${ }^{97}$

And:

Students in high-minority schools are almost seven times as likely to have underqualified teachers as do those in low-minority schools. ${ }^{98}$
2. Textbooks and Instructional Materials. Far fewer State studies and reports have documented California's shortages and disparities in textbooks and curriculum materials than

[^21]they have the problems with teacher shortages. However, the State's problems ensuring an adequate supply of texts has been the subject of much public discussion for several years.

A 1996 study conducted by the Association of American Publishers (AAP) in conjunction with the National Education Association found that California's public school students were among the most in need in the nation of new textbooks. In that study, 54 percent of California teachers reported that they did not have enough books to send home with their students. Twenty-four percent of California teachers reported that their students did not even have books to use in class. In fact, 40 percent of the teachers surveyed said they waste valuable instructional time reading aloud or writing on the chalkboard because there are not enough books to go around. Importantly, the survey also reported the disparities between urban and rural schools in this regard. ${ }^{99}$

The widely publicized textbook crisis in Los Angeles Unified School District in the late 1990s brought much public attention to that district's textbook shortages. A study, No Bang for our Books: Solving the Book Crisis in Los Angeles Schools, widely publicized in the Los Angeles Times, documented the local dimensions of the "crisis." ${ }^{100}$ As noted earlier, that survey revealed that 87 percent of the district's high schools, two-thirds of middle schools had an inadequate supply, and that 51 percent of elementary schools reported an inadequate supply of currently adopted textbooks. ${ }^{101}$

As noted earlier, the California Postsecondary Education Commission pointed in 1998 to statewide patterns of inequality in access to instructional materials that disadvantage low-income students and students of color. ${ }^{102}$ Similarly, in 2001, the CDE and the California Technology Assistance Project study reported that schools with a large population of students eligible for free and reduced lunch provided less access to technology than did other schools. ${ }^{103}$ The study also found that the State's poorest students are disproportionately denied access to the resources of the Internet. Commenting on these findings, State Superintendent of Public Instruction, Delaine Eastin said,
. . . I am disheartened that it is our poorest students who have the least access to these tools that could contribute to their academic success. The ability to use technology is a new basic job skill in the information age economy and all children must have the appropriate access. This digital divide is just not right. ${ }^{104}$

English learners are very hard hit by these shortages. Hakuta provides considerable data from the evaluation reports about schools involved in the state's Intermediate

[^22]Intervention/Underperforming Schools Program illuminating the inadequacies of materials for English learners. ${ }^{105}$
3. Facilities. Similar to California's continuing and growing teacher shortage, the State's serious facilities problems have been forecast and documented by State commissions and reports over the past two decades. Perhaps most notably, the State's Commission on California State Government Organization and Economy (later renamed the Little Hoover Commission) has consistently reported the deteriorating condition of California schools since the passage of Proposition 13. For example, in 1981 the Commission reported that in the Los Angeles Unified School District "maintenance backlogs have increased to over $\$ 900$ million." ${ }^{106}$ And in 1982 the warning was extended to conditions statewide.

The deferred maintenance of school facilities has reached catastrophic proportions. The Superintendent of Public Instruction, working with school districts, should immediately design and implement a multi-year program to correct this neglect. ${ }^{107}$

A decade letter, the Commissioned issued No Room for Johnny: A New Approach to the School Facilities Crisis, in which it reported the following:
[T]he State did participate in a 1989 federal study that was designed to assess school facility needs nationally. In the study, California estimated that:

- . . . the condition of 55 percent [of its school buildings] were inadequate
- Of the 3,919 inadequate facilities, all needed major repairs, 90 percent were obsolete, 80 percent had environmental or asbestos problems, 60 percent were overcrowded and 10 percent actually were unsound structures. ${ }^{108}$

As noted earlier, a 1996 federal GAO study reported that 42 percent of California schools had "[a]t least one inadequate building." 109 And the GAO findings were echoed in the California Legislative Analyst's report on the State's 1997-1998 budget:

Inadequate ongoing maintenance has long been a problem for $\mathrm{K}-12$ school districts resulting in huge backlogs of deferred maintenance. In 1979, the SDE estimated that the deferred backlog among K-12 school districts was approximately $\$ 900$ million or $\$ 1.7$ billion in today's dollars. By 1995-96 the backlog totaled $\$ 2.6$ billion, which even after adjusting for inflation, is a 53 percent increase over 1979. ${ }^{110}$

[^23]In 1999, the Little Hoover Commission issued a report that examined the conditions in LAUSD schools. "[I]n some classrooms, there are twice as many children as there are desks. Some 15,000 school children ride buses each day because there is no room at their home school." ${ }^{111}$ The Commission concluded, "Another generation of children in Los Angeles have been doomed to overcrowded, uninspiring, and unhealthy schools."112 Finally, in 2000, Governor Gray Davis acknowledged, "Hundreds of thousands of our children are trying to learn in overcrowded, out-of-date, unsafe schoolrooms $\square$ or in temporary trailers staked on what were once playgrounds. Our critical class-size-reduction programs simply won't work if schools have no space. ${ }^{113}$

The fact that the worst facilities problems exist in low-income communities of color has been highly publicized in the State. Corley cites a series of articles that appeared in the Los Angeles Times and the San Francisco Chronicle throughout the 1990s that provide graphic details about the serious problems in schools serving disadvantaged students in Los Angeles, Compton, Oakland, and other low-income communities across the State. ${ }^{114}$ Additionally, in 1993, Los Angeles County reported Compton's serious problems to the State legislature. ${ }^{115}$

That State Superintendent Eastin was aware of these problems is also revealed by statements she made in 1996, after visiting Los Angeles "classrooms where the floor tiles are all detached and a room with a gaping ceiling hole caused by a roof leak, which the school has stopped repairing because it reopens in every rainstorm. A school restroom emits a stench, despite scrubbing and steam-cleaning, because bacteria have seeped into the walls." Eastin lamented, "For too long, LAUSD students have sat in classrooms where roofs leak, the paint is peeling and air-conditioning is all but nonexistent" and that "If we allow these conditions to continue, we are not doing right by Los Angeles' children." ${ }^{, 116}$ In 1997, the CDE and State Superintendent Delaine Eastin issued a Progress Report on the Compton Unified School District, acknowledging, "The district's facilities had been neglected, underfinanced, and inappropriately maintained for years. This neglect created health and safety problems for students and faculty. Most facilities were and still are in need of major repairs and modernization. ${ }^{1117}$

Inequities associated with overcrowding and year-round schedules have also been known for more than a decade. For example, as Mitchell notes, a 1987 study from the California Department of Education documented the lower achievement of students who are placed on year-round calendars. ${ }^{118}$ The Quinlan study also documented the lower achievement of students who are placed on these calendars. That the State acknowledges the severity of year-round-

[^24]multi-track schedules is well documented. Mitchell notes that State policy designates the multitrack year-round calendar as an indicator of academic performance risk. In order to make schools comparable, even after accounting for non-education policy related circumstances that include parental education level, family income level, the ethnic composition of the school, and student mobility, an additional correction must be made for the fact that a school is utilizing a multi-track year-round calendar. That is to say, in California, multi-track year-round schools are places with lower academic achievement when compared with traditional/single-track schools and the State expects them to be lower, even when all else is equal. ${ }^{119}$

## III. State actions have failed to correct and have exacerbated the disparities in students' access to qualified teachers, instructional materials, and clean and safe facilities.

The inadequacies and inequalities documented by the Williams experts are considerable and consequential for California students' education. So, too, are the flaws in the State's educational policies that many experts have identified as the proximate causes. Despite the numerous reports and decades of warnings about teacher and textbook shortages, unusually poor conditions in the State's public schools, and mismanagement in some districts, California officials have established only a patchwork system of policies to address these concerns. Those policies have failed to ensure that every child attends a school with qualified teachers, sufficient materials, and safe, functional, and adequate school facilities. These flaws include a) the lack of standards requiring that all students have essential resources and conditions; b) the failure to give schools the capacity to provide all students an education; c) the failure to collect and/or use data about the conditions of education in schools and across the State; d) insufficient State actions/interventions to address the many inadequacies and disparities that have resulted; e) reliance on a test-based accountability system that assumes that the low student achievement results exclusively from insufficient teacher and student motivation rather from a lack of resources and capacity.

## A. The state has set no standards that require that all students have the resources and conditions that are essential for an adequate education.

Although the State has specified the characteristics of qualified teachers, appropriate materials, and adequate facilities, it has established few and conflicting standards requiring that districts and schools must meet to ensure that students have access to these resources and conditions.

1. Teachers. The State defines a "qualified teacher" through its teacher credentialing system. As noted earlier, the State's credentialing policies recognize the importance of teachers' general intellectual abilities, subject matter knowledge, pedagogical expertise, and training to work with culturally and linguistically diverse students. However, the State does not require that all students be taught by teachers who have these characteristics. A number of State policies allow students to be taught by teachers who have not yet satisfied the State's own measures of competency.
[^25]As Darling-Hammond reports, as recently as May 2002, actions by the California Board of Education and the CDE have set policies that undermine students' access to qualified teachers. In its response to recent federal legislation calling for all students under the Elementary and Secondary Education Act (ESEA) to be served by fully certified teachers, California proposed to include as highly qualified teachers, teachers without full State certification, but who have passed only the State basic skills test and met only a portion of its standard subject matter requirements ( 18 credits, which is equivalent to only a fraction of the coursework required in many of the State-approved subject matter programs as prerequisites to entering a teacher education program). This proposed California definition of "highly qualified teachers" ignores all of the State's extensive requirements for knowledge about teaching. ${ }^{120}$

Significantly, the State's widespread authorization to hire under-prepared teachers both encourages individuals to enter the teaching profession before they can be effective and decreases the likelihood that they will continue to acquire the preparation they need or continue teaching. ${ }^{121}$
2. Textbooks and Instructional Materials. California's textbook adoption policies set standards that textbooks and instructional materials must meet if schools and districts purchase them with State funds. By law, all State-adopted K-8 instructional materials must be aligned with the State's content standards, and whatever materials are provided by districts and schools must be accurate, objective, current, and suited to the needs and comprehension of pupils at their respective grade levels. Despite these policies governing what texts schools can buy, California has not mandated that students be provided with any textbooks or curriculum materials. ${ }^{122}$
3. Facilities. Although the State specifies standards regulating the construction of new school buildings, it fails to set or enforce minimum standards once schools have been built. No standards exist related to the temperature, noise, playground area, and a whole host of other important conditions of existing facilities. Additionally, the State has no binding standards as to the number of "portables" that may be placed on a campus so that some threshold school capacity is not exceeded. Moreover, as Corley's report points out, even with knowledge of deficiencies existing in some of the State's schools, and even after a more-than-ten-year-old legislative mandate that the State develop school facility standards, the State has not adopted sufficient standards for facility operations. ${ }^{123}$ As Corley attests, and evidence in Earthman and Sandel illuminates, the State's failure to develop standards and enforce what standards do exist has led to school facility conditions that are detrimental to education.

## B. State policies do not give local districts the capacity to provide basic educational resources and conditions.

[^26]1. Teachers. In the 1990s, growing enrollments, increasing retirements, high attrition rates (especially for beginning teachers), and the State's class size reduction initiative increased the demand for teachers. Nevertheless, Darling-Hammond argues that underlying the apparent teacher shortage is the State's failure to build the capacity of the teaching workforce. ${ }^{124}$ The State has not provided competitive teacher salaries or high quality working conditions for teachers statewide necessary to attract and keep qualified individuals in teaching. Additionally, since 1970, the State has restricted entry into teaching unnecessarily by making teacher education available only at the graduate level. With the exception of California, most teacher education in the United States occurs within four- to five-year undergraduate programs. Compounding this problem has been the State's under-funding of its teacher education system, which has limited the capacity of the State's college and universities to provide high quality preparation. Additionally, until very recently California had no licensing reciprocity with other states. Thus, despite nationwide surpluses of elementary teachers during the 1990s, California hired tens of thousands of untrained teachers. Additionally, the State has provided inadequate incentives to recruit teachers into high-need fields like mathematics, science, computer technology, special education, and bilingual education/ English language development where there are genuine under-supplies of candidates.

Most egregious, the State has been blind to the stark inequalities in students' access to qualified teachers that disadvantage the State's low-income children, immigrants, and children of color. Consequently, it has not provided the inducements (additional compensation, support, and training) that would attract and retain highly qualified teachers in schools where students are most at risk. To the contrary, the State has permitted stark differences in salaries and working conditions that tend to discourage teachers from working in schools serving the State's most disadvantaged students.
2. Textbooks and Instructional Materials. The State has not based its textbook funding levels on an analysis of what providing sufficient books and materials to all students actually costs. As a result, the State has allocated less funding than districts and schools actually require to purchase materials in sufficient quantities for all students to have them in every core subject for use in class and at home. For example, as the study of the Los Angeles Unified School District's textbook shortage in 1998 observed:

Existing textbook allocation rates, statewide, were set during the 1983-84 fiscal year and have risen only modestly in the years since. At the same time, the costs of books and instructional materials have risen exponentially and local school districts have come under even greater fiscal pressures. This combination of factors has had a significant effect not only on the LAUSD, but also on other school districts in California. ${ }^{125}$

The State has been well aware of the insufficient textbook funding levels. In his veto message in 1998 to SB 1412, for example, Governor Pete Wilson made clear that he considered California's categorical textbook funds to be incentives, rather than funding for a mandate. He

[^27]noted that, if the State did mandate textbooks the costs would be significantly higher than the funding levels now provided: "SB 1412 also mandates compliance with the Pupil Textbook and Instructional Materials Incentive Program, which is currently optional, and the mandate costs will be significant. ${ }^{126}$

The amount of State funding for texts and instructional materials is also subject to the vagaries of budget surpluses and deficits. For example, although the 1999 Schiff-Bustamante legislation provided additional funding to help remedy a highly publicized shortage of textbooks, the level of funding it provided for three years has not become a permanent allocation. Although the legislature unanimously approved a bill in 2001 that would extend the program beyond 2002, Governor Davis vetoed the measure due to a budget shortfall.

In addition to providing insufficient funding, the State has not assisted districts and schools to manage textbooks and materials effectively. Rather, it has left districts to decide for themselves how best to spend textbook funds and to distribute textbooks among schools, subject areas, and students. Further, as Hakuta points out, the State has failed to provide guidance about what types of materials are appropriate to use with EL students in structured English immersion classes, causing teachers working with English learners a great deal of confusion. ${ }^{127}$ In sum, California's policies fail to build the capacity schools and districts need-either in terms of the total dollars or the systems required for purchasing, inventorying, distributing, and monitoring instructional materials.
3. Facilities. Myers and Corley explain that the State's facilities funding mechanisms fail to ensure that dollars go to the districts and schools where they are most needed. ${ }^{128}$ The State supports new construction and modernization with a pool of resources raised through State revenue bonds. California allocates these funds on a first come, first served basis. Districts that hire someone to "chase" State funding by negotiating the complex application process quickly are most likely to obtain State funding. In contrast, funds for deferred maintenance are allocated on an equal basis (e.g., using the same formula for matching local funds) to all those districts that apply. If there isn't enough funds to meet all needs, the cuts the ratio of state to local funds. Neither allocation process ensures that the schools in the worst condition will be provided for or that the amount of funding will meet the needs. Additionally, because the State provides some funding for deferred maintenance projects, but provides no funds for ongoing maintenance, it creates a disincentive for locals to keep their buildings in good conditions. That is, districts may wait to address maintenance problems until they are serious enough to warrant at least some State funding. ${ }^{129}$

However, most of the responsibility for raising funds for school facilities rests with school districts, most often through the mechanism of local bond sales authorized by voters. As

[^28]PACE has noted, making facilities funding primarily a local responsibility has created severe inequities.

The effect of devolving the responsibility for funding new school construction and facilities improvements to the local level in conjunction with a constant reduction in local discretionary funds, contrasted with a school finance system controlled at the state level, has resulted in a two-fold uneven playing field. First, school districts that are successful in garnering the two-thirds vote necessary for passing a school bond measure will receive state matching funds for construction and likely meet local needs. However, school districts who are unable to pass a school bond measure or are unable to afford the indebtedness associated with repayment of a school bond measure, will not be able to receive matching capital improvement funds from the state, and are less likely to meet local needs. Second-and most concerning in light of the Serrano decision which advanced the concept of fiscal neutrality-low property wealth districts will need to levy a higher tax rate in order to repay a bond of equal magnitude issued by a high property wealth district. ${ }^{130}$

Compounding these inadequacies in facilities funding, the State provides little technical assistance to districts attempting to repair deteriorated facilities. Although the CDE is charged with reviewing school district plans for new construction, it has minimal if any involvement with the ongoing maintenance and operations of facilities. It has neither the power nor capacity to assist with deferred maintenance, even if it becomes aware that a district has facilities that pose health and safety risks or have become educationally inappropriate.

## C. The state fails to collect systematic data in some areas and fails to use it in others. Both failures prevent the state from recognizing needs and intervening when problems arise in the provision of basic educational necessities.

1. Teachers. Although the State collects considerable data about teachers, there are some important gaps. Most egregious, however, is that data about teachers are not collected in ways that permit analyses of some of the most pressing issues regarding the supply, quality, and distribution of the teaching force. As the Center for the Future of Teaching and Learning has explained:
[P]olicymakers need more reliable information in the areas of teacher attrition (teachers leaving the workforce before retirement), teacher workforce participation (job-taking), teacher movement between schools and districts, the "reserve pool" of teachers, trends in different credential routes, and the effect of state-sponsored programs for teachers. ${ }^{131}$
[^29]Furthermore:
The underlying weakness stems from the fact that different state agencies $\square$ the California Department of Education, the California Commission on Teacher Credentialing, and the California State Teachers' Retirement System $\square$ maintain databases for their own purposes, but the databases cannot be used in combination to address specific policy questions. ${ }^{132}$

As the Little Hoover Commission noted, the negative consequences from this lack of information have been significant:

In the past, not having accurate data on teachers has led to false conclusions about which teacher initiative should be a priority. For example, poor workforce information resulted in the State first trying to fix the teacher shortage by just increasing the supply of teachers. Policy-makers only later realized it needed to adjust its efforts to attract skilled instructors to schools with the greatest academic challenges, and often the least prepared teachers. ${ }^{133}$

Finally, Hakuta also notes that the Comité Compliance Unit of the CDE-the unit charged with monitoring whether districts have appropriate programs for English learners, pursuant to State and federal statutes-does not collect data at the classroom level on the qualifications of teachers of English learners. ${ }^{134}$ Neither does it send reports about problems with students' access to qualified teachers to the State Board of Education or any other watchdog agency of the education system.
2. Textbooks and Materials. Compounding the instructional materials problems noted earlier-the lack of mandates and the lack of adequate funding for textbooks and materials-the State has extraordinarily weak requirements regarding the monitoring and reporting of students’ access to textbooks in core subjects, and those requirements are poorly enforced. As Oakes details, the result is that the State has no data that allows it to determine whether California students have the textbooks and materials they need.

For example, for a school district to receive instructional materials funding, its governing board must hold a public hearing at which it reports the supply and quality of textbooks and other materials. However, compliance with the requirement for a public hearing has been uneven: some districts have not held public hearings at all; others have conducted the hearing in the most superficial manner. In any event, the State does not collect or use any of the information produced for these hearings.

California schools are also required to inform their communities about the quality and currency of textbooks and other instructional materials on a School Accountability Report Card (SARC). However, the data reported are neither collected nor used by the State. As a

[^30]consequence, many schools provide a response that does not really address the issue. For example, schools in the Los Angeles Unified School District provide no real information about the availability or quality of textbooks and other instructional materials. Every school's SARC includes the following text, regardless of supply or quality:

The Los Angeles Unified School District has set a priority on ensuring that a sufficient number of textbooks to support the school's instructional program is available. The instructional materials are chosen primarily from the textbooks adopted by the California Department of Education. ${ }^{135}$

Additionally, the State fails to use opportunities available through its on-site monitoring of school compliance with State and federal program requirements to collect data about the supply and quality of textbooks and other instructional materials and equipment. Oakes describes, for example, how the State's Coordinated Compliance Review (CCR) process fails to monitor students' access to textbooks and other instructional materials because it stays narrowly focused on categorical programs. Thus, the instruments used (for both the self-study and the validation review) neglect these features of schooling, and there are considerable disincentives for a school to use the CCR self-study process to report shortages and other problems. ${ }^{136}$ Hakuta notes that, as with teachers' qualifications, the Comité compliance review teams monitoring programs for English learners neither collect nor report data on the availability of materials for students in English immersion classrooms. ${ }^{137}$

The State appears to have little interest in correcting these information gaps. Two recent efforts to strengthen regular data collection and reporting on textbooks and instructional materials-SB 1412 in 1998 and SB 81 in 2000-were both vetoed. Moreover, William Padia, Director of the CDE's Policy and Evaluation Division, reported in a deposition (taken in conjunction with this case) that he has never performed an inquiry regarding students' access to textbooks. Further, he has never heard of any inquiry or any study related to textbooks being conducted by the CDE. ${ }^{138}$
3. Facilities. Robert Corley argues that the lack of a statewide systematic inventory of schools and school facilities and the State's failure to conduct on-site inspections of existing facilities (i.e., once new construction is completed) have prevented adequate analysis and development of responses to overcrowded schools or substandard conditions. ${ }^{139}$ In its 2000 report To Build a Better School, the Little Hoover Commission reported that lack of such data limits the State's ability to target funding to schools with unusually poor conditions:

The State has invested billions of dollars in K-12 school facilities, yet it does not have an inventory detailing when schools were built, their attributes, or their condition. Without such an inventory, the State is unable to accurately forecast

[^31]the demand for new facilities or the costs of maintaining and renovating existing facilities. ${ }^{140}$

And :
[the State] is not monitoring, managing or evaluating these programs in ways that will allow policy-makers or the public to know if hundreds of millions of dollars are being well spent. ${ }^{141}$

## D. The state has either failed to intervene when problems related to students' access to teachers, instructional materials, and facilities have arisen, or it has intervened in ways that have failed to correct them, and, in some cases, have actually exacerbated inadequacies and disparities.

1. Teachers. As Darling-Hammond demonstrates, the State has responded to the increased demand for teachers and to reported shortages as if teacher shortages are inevitable, rather than as if there are solvable problems within the educational system that currently discourage individuals from entering and remaining in teaching. Consequently, rather than upgrading the State's teacher workforce, California has responded to shortages primarily by reducing standards. This has led to a reliance on pathways such as emergency hiring, on-the-job training, and other short-term alternative routes to certification, that have extremely high attrition rates, as well as a negative impact on students' learning. ${ }^{142}$

Additionally, the State has failed to curb personnel practices that undermine the hiring and retention of qualified teachers, especially in many urban school systems. Finally, the State has contributed to the high rates of teacher attrition by failing to provide adequate supports for beginning and veteran teachers. Even with recent expansions of the Beginning Teacher Support and Assessment (BTSA) and Peer Assistance and Review (PAR) programs, the share of beginning teachers working regularly with a mentor is still relatively small. ${ }^{143}$

Darling-Hammond's overall assessment of the insufficiency of State actions is corroborated by the 2001 report of the Little Hoover Commission:
[T]he State's efforts to improve student achievement by improving the teacher workforce are frustrated by the fragmented way these initiatives are managed. The State lacks a mechanism for guiding teacher initiatives to produce desired educational outcomes. ${ }^{144}$

Even more troubling, the State's blindness to distributional patterns that disadvantage children in schools serving low-income neighborhoods, immigrants, and communities of color has prevented the State from anticipating or correcting inequalities in students' access to

[^32]qualified teachers. Hakuta shows, for example, that, although statewide there are sufficient numbers of EL teachers (those with at least some authorization to teach English learners), many of these teachers are not teaching in schools with large percentages of English learners. ${ }^{145}$ This problem has been exacerbated by the State's class size reduction reform that precipitated a migration of credentialed teachers away from schools in low-income communities to those in more affluent areas with better working conditions. For example, the percentage of less-than-fully-credentialed teachers teaching in schools with the large English learner enrollments (40 percent or more of all students at the school) increased from 3.7 percent to 23.9 percent after the implementation of class-size reduction. ${ }^{146}$ Consequently, schools with the most English learners benefited the least from class-size reduction, at least in terms of their ability to provide students with fully credentialed teachers.

The State neither anticipated this problem nor intervened to solve it. Instead, the State has allowed any teacher to teach in EL classrooms, as long as the teacher is either participating in training or agrees to do so. Called "teachers in training," these teachers are authorized to teach ELD and SDAIE as long as they sign an agreement to complete SB 1969 or CLAD training within 2 years, or BCLAD within three. ${ }^{147}$
2. Textbooks and Instructional Materials. The State has not developed mechanisms for implementing, monitoring, and enforcing students' access to textbooks and instructional materials. ${ }^{148}$ As noted above, the State's regulations only require that schools and districts spend State money on approved textbooks and materials. Specific oversight of textbook policies does not aim to ensure provision of sufficient numbers of instructional materials to all public school students. ${ }^{149}$ The State also fails to take advantage of its opportunities to use other State polices, already in place, to induce or require that districts and schools ensure students' access to textbooks and materials. As Oakes demonstrates, three types of State policies provide opportunities for the State to identify problems with instructional materials, remedy those problems, and monitor the effectiveness of those remedies: 1) oversight and reporting mechanisms meant to ensure that districts and schools follow State reform priorities and comply with federal program requirements 2 ) accountability policies; and 3 ) policies for intervening and giving support to low performing schools. However, none of these polices pays serious attention to textbooks and materials.

Additionally, even when the State intervenes specifically to investigate perceived problems, its actions may fall far short of effectively diagnosing or remedying those problems. For example, consider the flaws in a study conducted in 2002 by the California State Auditor, Bureau of State Audits, in response to the Legislature's concern that the Los Angeles Unified School District's policies and practices were creating disparities between high- and lowperforming schools in the quantity and quality of textbooks available to students. Although the audit found both shortages in the supply and quality of textbooks in the district and disparities among schools in textbook availability that disadvantage students in predominantly Hispanic

[^33]schools, the report actually minimizes these disparities. Going beyond its charge from the Legislature to determine whether district policies and practices resulted in textbook disparities, the Auditor concluded that that textbooks shortages are inconsequential, in the face of other factors such as SES, English proficiency, parents' level of education. By distracting the reader (the public, legislators, and other government officials), the Audit creates the impression that the textbook disparities it found are not a serious problem.
3. Facilities. Virtually all State involvement in school facilities oversight occurs prior to occupancy or during infrequent major repair or modernization projects. State officials have stated their understanding that ongoing oversight of school conditions is a local rather than a State responsibility. Corley argues persuasively that this limited State role has contributed to the unusually poor conditions on many school campuses that impede students' access to a full and complete education. Moreover, the lack of oversight at the State level has left students and parents without formal recourse when their local school districts, as agents of the State for providing educational services, fail to perform by maintaining schools in clean and functional condition. Notably, the CDE, Division of the State Architect, and other State agencies do not even have procedures for responding to complaints about physical conditions in schools. Some complaints are handled on an ad hoc basis, but the State often refers complaints back to the local district because of the State's position that it is not responsible for maintaining adequate school facilities.

A more general problem is that some of the potentially powerful interventions the State has available to it have little authority to actually effect changes. The Fiscal Crisis and Management Assistance Team (FCMAT), created in 1991 to provide assistance to districts believed to be experiencing or approaching financial difficulties, provides one example. Reviews of available FCMAT reports reveal that the teams do make extensive and thorough assessments that sometimes include consideration of the availability and quality of basic resources and conditions. In addition, when problems are detected, FCMAT makes helpful recommendations for improvement. However, FCMAT reviews are limited in their authority to require change. Not surprisingly, given their voluntary character, there is no consistent follow-up. Moreover, the emphasis is placed on remedying fiscal matters, and other problem areas seem to be of less interest.

## E. The state has chosen to rely on a test-based accountability system that assumes that low student achievement results exclusively from insufficient teacher and student motivation, rather from a lack of resources and capacity.

In April of 1999, California legislators and the Governor approved the State's version of a high-stakes, incentives-based accountability system-the Public Schools Accountability Act (PSAA). The passing of this law set into motion a system in which schools are publicly ranked based on an academic performance index (API) which forms the basis for rewarding schools that do well and sanctioning schools that do poorly. The indicators in the API are scores on an achievement test administered pursuant to the STAR program, as established in 1997 by Senate Bill 376.

1. Limits of the API. As Professor Michael Russell makes clear, the PSAA has serious limitations as a form of State and local oversight. ${ }^{150}$ The API reveals nothing about the problems schools are facing-the cause behind a school's API score. Because it relies entirely on test scores, it provides no information about the conditions under which the scores were achieved, including the circumstances in which students are expected to learn, or the disparities in resources available to students. It ignores whether students' have access to the basic tools of education. For example, the API does not account for teachers' qualifications or experience; for students' access to textbooks, other instructional materials for both class and home use, and technology; or for the adequacy of the schools' facilities. ${ }^{151}$

Instead, the API treats problems in schools' performance as the result of failures in motivation exclusively, and proceeds as if those problems can be remedied with a promise of rewards for improvement and the threat of sanctions for continuing problems. The State has set an initial goal for all schools to obtain 800 on the API, and each school is expected to increase its API score each year by 5 percent of the difference between its current score and the statewide target. Through the Governor's Performance Award Program, schools that exceed their API growth target are eligible for monetary awards. Until 2002, the program included cash awards to individual teachers and administrators (up to $\$ 25,000$ each), as well as to schools. Funding for the individual awards was cut in response to the recent budget shortfall, and it is uncertain whether this aspect of the program will be restored. The school awards remain in place.

## 2. Problems with the Intermediate Intervention/Underperforming Schools Program

 (II/USP) and the High Priority Schools Program (HPSP). Schools that earn lower than expected API scores are entitled, but not required, to apply for assistance through the Immediate Intervention/Underperforming Schools Program (II/USP) and the High Priority Schools Grant Program (HPSGP). These programs require schools to develop an action plan with the assistance of outside evaluators, and are given additional resources to make improvements over a period of three years. If schools do not improve at the targeted rate, the State may take additional steps that include reassigning the principal or closing the school. The very lowest scoring schools are eligible to apply for further assistance through the High Priority Schools Grant (AB 961). However, as Professor Heinrich Mintrop demonstrates, these two programs suffer from several major failings: participation is voluntary, there are no mechanisms to ensure that the most troubled schools get assistance, and the funds available are insufficient to support all of the schools that do apply. ${ }^{152}$ In fact, the II/USP incentive system may actually discourage school districts from nominating their most troubled schools for the program. If participating schools do not improve, the sanctions they face are even more severe. From a district's perspective, it might be far better politically to enroll only schools that have a fairly good chance of improving.[^34]
## IV. Systemic flaws in the state's governance of the educational system underlie inadequacies and disparities in California's schools and the failure of state policies and actions to prevent or correct these inadequacies and disparities.

This paper began with three assumptions about California's education policies: 1) the State of California expects to meet the educational needs of all its students; 2) the State intends to improve the quality of education in its public schools; and 3) the goal of offering higher quality and more equitable access to knowledge is a driving force behind California's current standards-based education reform. These assumptions are articulated throughout the State's policy goals and in California officials' public pronouncements. The material in the experts' reports, summarized above, provides compelling evidence that these goals are not being met.

Further, State officials have failed to enact policies that either counteract or repair fundamental, systemic flaws in California's State education system that underlie the inadequacies and inequities summarized in the previous sections of this paper. These flaws include

- a fragmented and incoherent approach to education policymaking;
- a system of school finance that has been constructed without an overall plan and without systematic data for understanding the costs of providing basic education resources and conditions to all students;
- the failure to enact policies that ensure equitable distribution of resources and conditions, including serious under-investment in the State's neediest schools; ${ }^{153}$
- the delegation of responsibility for providing education to local districts, in the absence of State will or capacity to prevent the occurrence of serious disparities or to detect and correct them, should they arise.

These flaws grow out of California's peculiar education policy history since the 1960s, and they have been exacerbated by the State's recent decision to rely on test-based accountability to drive educational improvement.

Because of these flaws, the State's actions have often exacerbated the problems that they were intended to solve-namely, the inequitable distribution of resources and conditions in California schools. To unravel how these systemic problems have resulted in policies that defy officials' expressed goals, we must look at shifts in educational governance and funding that have occurred since the 1960s. These shifts have left the State increasingly unresponsive to current crises in the provision of teachers, instructional materials, and facilities.

[^35]Unfortunately, the State's chosen paradigm for responding to these crises has been testbased accountability. Test-based accountability is grounded in the wrong-headed assumption that the problem of low and unequal achievement is attributable primarily to the lack of motivation exhibited by students, teachers, school districts, and parents. The State's theory is that testing, through competition, rewards, and punishments, and public exposure of success and failure, will spark levels of motivation high enough to overcome all manner of obstacles. Indeed, many State officials claim that there are now (or will be very shortly) enough resources and investment in the system to deliver an education to all students, once testing has leveraged sufficient motivation across the State. This perspective and policy environment has led or allowed State officials to ignore serious problems with resources, conditions, and capacity.
A. Federal policy actions, state voter initiatives, and court decisions in the 1960s, 1970s, and 1980s triggered fundamental changes in California's education system to which state officials did not respond adequately. These include the transfer of the financing and control of schooling from local communities to the state, a precipitous decline in education resources, and a debilitating incoherence among the state's education policies.

Authority for California's K-12 schooling was largely local until the 1960s. For more than a century policymakers had delegated the State's Constitutional responsibility for education-including most of the financing and governing of school programs and activities-to local boards of education. Most influential Californians were happy with this arrangement, and by the mid-twentieth century, California's schools were the envy of the nation. The State boasted one of the nation's highest per pupil spending rates, a surplus of qualified teachers, modern and well-kept facilities in most communities, and rising rates of high school graduation and college going.

However, the nation's growing commitment to ending discrimination and inequality made visible California's deepest educational failure. Decades of de jure and de facto segregation in housing, employment, and schooling meant that California's glowing educational "averages" masked stark disparities in the resources, conditions, opportunities, and outcomes between schools in whiter and wealthier communities and those in communities of color and of poverty. The heightened attention to these issues nationwide and in California triggered a host of new federal compensatory education programs and the Serrano v. Priest funding equalization litigation. The State's responses to these actions and to the statewide "taxpayer's revolt" initiative-Proposition 13-shifted much of the responsibility for educational funding, governance, and accountability to the State. Unfortunately, any hope for coherent and comprehensive policies was lost as the State responded with a patchwork of policies and categorically funded programs, rather than with an overall governance and financing plan that could have provided adequate resources and equitable education opportunities. As a result, the State has assumed more and more control over the policies and resources affecting education, and it has created large gaps and discontinuities that limit its capacity to protect and educate fully and fairly all the State's school children.

1. In the 1960 s and 1970 s , increased federal funding meant to combat the problems of discrimination and poverty brought new programmatic and spending mandates that disrupted the consensual relationship between the state and local school systems.

As the federal activism around civil rights and the War on Poverty increased, state education departments assumed the responsibility of administering a collection of federal categorically funded programs, as was reflected in new organizational structures. In California, State Superintendent Wilson Riles re-organized the CDE to focus on populations with special needs and the categorical programs aimed at serving them (e.g., Title I, Migrant Education, Special Education), rather than on its traditional technical assistance role, such as teacher preparation, curriculum development, and textbook provision.

The relationships between State education officials and local school systems changed as well. The rather unobtrusive technical assistance that the State had provided previously, predominantly to rural school systems, was replaced by a far more assertive role as overseer of programmatic and funding mandates. Most notably, the State's new role as the shaper of local responses to federal policy and as the "compliance office" with control over important resources was accomplished most often by adding new layers of bureaucratic control.

## 2. The state's response to the Serrano v. Priest decision and Proposition 13 in the 1970s coupled declining resources with increased state control and policies that further undermined equity.

In 1971, the plaintiffs in Serrano v. Priest charged that California's educational finance system violated the Constitutional guarantee of equal protection because of the large variations in revenue that high- and low-wealth communities could generate through local property taxes when they taxed themselves at a given rate. Ruling for the plaintiffs, the court directed the State legislature to equalize funding among districts. In 1977, the legislature developed a complex equalization formula that included revenue limits and allowed poor districts to increase their funding at a greater rate than wealthy districts, thereby diminishing spending differentials over time.

Although the Serrano v. Priest solution brought greater fiscal equity to California's educational system, its impact was quickly attenuated by Proposition 13. The 1978 "taxpayer's revolt" decreased local tax revenues overall by 60 percent, by limiting the property tax rate to 1 percent of the assessed value and holding annual increases to 2 percent. It also required any new tax increases to be approved by a two-thirds majority of voters. The combination of the Serrano and Proposition 13 requirements virtually eliminated the capacity of local school districts to generate educational funds through local taxation.

As Grubb and Goe detail, the State did not respond to the dramatic drop in local propertytax dollars with a new approach to school finance (property taxes being only one mechanism that states can use to fund education). ${ }^{154}$ Rather, overall spending declined as the State assumed a

[^36]higher percentage of funding. Moreover, as the State paid more of the bill, it began exercising more control over how school funds were spent, and State policies increasingly shaped local practices. At the same time, the State, with a nod toward "local control," deflected responsibility for educational shortcomings with the broad claim that local educators and elected officials were in the best position to solve local problems.

Significantly, the funding mechanisms the State used to compensate for the loss of local tax revenue worked against the equalizing effect of the Serrano decision. Most new State funds came in the form of categorical grants that carried fewer equalizing provisions than did revenue limit funds. Thus, despite the requirements of Serrano, the responses the State made to the constraints imposed by Proposition 13 were negative, both in terms of equity and in terms of the overall quality of public education.
3. In the 1980s, the state's response to the dire warnings of $\boldsymbol{A}$ Nation at Risk further expanded state control over local schools without ensuring adequate resources or insisting on equity.

In 1983, A Nation at Risk (the report of the National Commission on Educational Excellence established by President Reagan) warned that fundamental school reform was essential to prevent the low quality of U.S. schools from undermining the nation's economic competitiveness. At the same time, a highly publicized California Business Roundtable report showed a serious erosion of quality in California's once-admired school system. Together, these reports increased the pressure in California for more rigorous curriculum content, increased instructional time, improved classroom instruction, and higher expectations for student achievement.

With education reform emerging as a major State priority, the legislature passed omnibus reform legislation, SB813, the first of a series of legislated mandates and inducements for school improvement. SB813 established programs for mentor teachers, a longer school day and year, higher beginning teachers' salaries, more rigorous graduation requirements, and statewide curriculum standards. The CDE launched a process of developing "frameworks" to guide curriculum and instructional materials in the content areas; professional development programs to make teaching consistent with the frameworks, and a State assessment system designed to track schools' achievement of the frameworks' goals.

The overall impact of the State's reform initiatives was to exert State control more extensively over the day-to-day practices of local schooling.

## 4. The state did not support its greater control and increased pressure for school improvement with changes in its governance and funding relationships with local schools that were required ensure that adequate and equitable resources and school conditions are available for all children.

For more than three decades, the State has failed to incorporate its increased State involvement and pressure for reform into a plan with clear lines of State responsibility or support for implementing and overseeing the new State policies and programs. The Legislature retained
its broad Constitutional authority for education, and along with the Governor set the funding levels for State-supported programs and for the work of the Superintendent of Public Instruction and the CDE. The Governor-appointed State Board of Education maintained responsibility for setting policy for and governing the CDE. The elected Superintendent of Public Instruction implemented State Board Policies, Legislative initiatives, and the growing number of State and federally funded programs-providing technical assistance, and ensuring compliance with State requirements. Finally, specialized agencies retained authority for teacher credentialing, facilities financing, and other domains.

As each of these State entities became more focused on improving the quality of the State's schools, each became more engaged in specifying the details of school organization, curriculum, teaching, instructional materials, testing and assessment, special programs, and more. The result was a proliferation of uncoordinated policies layered onto the existing system, exacerbating the fragmentation and incoherence of the State's education policy system. No clear lines of accountability were established among the various State actors that could ensure that local schools had the resources or capacity to provide quality and equity as they implemented the State's policies.

Because the State had not developed a new approach to school finance, it did not have the mechanisms necessary to assess the level of investment in the State's education system that fundamental school improvement and equal opportunity require, or to adjust State spending to match those costs. As Grubb and Goe note, the State's school finance policies were constructed in response to the Serrano decision, Proposition 13, and the many different categoricals, rather than being driven by an overall plan for providing either adequate resources or equitable education opportunities. ${ }^{155}$ That has meant that the level of State investment in schools has been a function of politically negotiated, arbitrarily set "available" revenues, rather than following from an assessment of what a good education actually costs. Further, with legislators functioning without such knowledge, the voting public had few opportunities to make informed judgments about the State's education spending. Most of the State's reform initiatives in the 1980s required considerable new funding to support new programs, provide incentives, build the State's capacity to oversee implementation and ensure compliance. Yet, these initiatives were mounted in a context of a continuing downward slide in per pupil spending, relative to other states.

Finally, in 1988, voters approved the Constitutional Amendment drafted by the legislature, Proposition 98, guaranteeing a percentage of tax revenue increases for K-12 education. However, while the Proposition 98 guarantees have increased overall spending on schooling (particularly in "boom" times), they have not advanced the goal of equitable funding. Neither have they reconstructed the finance system so that it operates on good cost estimates and a range of funding mechanisms. Lacking good data and a coherent plan for financing the system, the State has failed to coordinate the existing funding strategies in ways that adequately support the schools with the greatest needs. As one example of the problems this failure has created, Grubb and Goe describe how the State's mechanisms for financing the new construction of

[^37]school facilities have remained unconnected to the State's support for ongoing maintenance. ${ }^{156}$ The result of this disjunction has been to undermine the quality of facilities in local districts with inadequate current revenues. In many districts, much-needed maintenance is deferred so that funds can be spent on other, more pressing problems.

## B. Efforts in the 1990s to develop more systemic reform policies that could ensure both quality and opportunity were derailed, both by the state's lack of an adequate state governance and finance system, by the state's increasingly single-minded focus on test scores, and by its adoption of a wrong-headed view of "local flexibility."

By the late 1980s, policies framed in response to $A$ Nation at Risk had proved disappointing, and U.S. students continued to lag significantly behind their peers in other countries on achievement tests. Repeating the theme that the poor quality of the schools would have disastrous consequences, President Bush and the nation's governors convened an Education Summit in 1989. The Summit, led by then governor Bill Clinton, called for specific national goals and aggressive State efforts to meet them. Those State efforts had to 1) focus on high academic standards for all students; 2) provide schools with the tools, skills, and resources they needed to help students meet the standards; and 3) hold schools accountable for the results. The Summit called for increased federal funding to support the states’ efforts, but it also argued for considerable State discretion over how those funds should be spent.

The Summit's reform prescription reflected a growing consensus among education policy analysts about the need for systemic, rather than piecemeal reform. If schools were to be governed from state capitals in ways that would drive significant improvement, analysts argued, they must develop a set of coherent policies that would align the various parts of the educational system toward student achievement. In fact, some states (Rhode Island and Connecticut are examples) followed the systemic reform model with a fair degree of fidelity. States such as these have achieved steady results, particularly in terms of insuring equitable access to the tools of learning. This has not been the case in California.

The version of reform that emerged in California left the most problematic features of the State's system untouched. The pressure for reform was extremely high in California, since new State comparisons showed that California students achieved less than students in other states. Nevertheless, California eschewed the comprehensive version of systemic reform described above in favor of an incomplete version, driven by content standards and test-based accountability. This approach created little pressure on the State to provide schools with more equitably distributed tools, skills, and resources to help students meet the standards. On the contrary, the State's decision was to set standards, administer standardized tests, and to reward or sanction schools based on their scores. Rather than ensuring the resources, conditions, and opportunities for learning at local schools, the State has developed "high stakes" tests, and a ranking system that creates competitiveness among schools, which, in theory, motivates individual teachers and students to seek rewards and avoid sanctions. Importantly, this decision

[^38]was not simply a matter of choosing one rational policy alternative over another. Given the tangible shortages in such educational basics as qualified teachers, appropriate texts and materials, a policy that emphasizes outcomes and ignores inputs cannot possibly be expected to produce the hoped-for results. Not surprisingly, this flawed approach has served to exacerbate rather than ameliorate the State's deteriorating educational infrastructure and its attendant inequalities.

1. Systemic reform initially called for coherence between high standards and the conditions under which students were expected to meet the standards. It positioned the states as providing strong, centralized leadership, and, at the same time, allowed considerable local flexibility in how that vision would be implemented.

Policy analysts Marshall Smith (then Dean of Stanford's School of Education and chief staff member for the National Governors' Association) and his colleague Jennifer O'Day provided the most widely referenced articulation of systemic reform. ${ }^{157}$ It appeared in major documents of the National Governor's Association, the Business Roundtable, and the Council of Chief State School Officers. It was also the basis of major State initiatives sponsored by the National Science Foundation, the foundation of federal bills in the $102^{\text {nd }}$ and $103^{\text {rd }}$ Congress, and the goal of funding initiatives mounted by several major philanthropic foundations.

Smith and O'Day identified the following as essential elements of systemic reform policy:

- Curriculum frameworks or standards that establish a clear vision of what students should know and be able to do and that guide efforts to upgrade content and instruction within schools (Standards).
- Alignment of other parts of the education system-i.e., curriculum, learning opportunities, teacher preparation and professional development, and assessments of student learning-to these standards. (Alignment).
- Restructured governance wherein the State provides the centralized vision and supportive infrastructure, and local districts and schools have the resources and flexibility to design and use strategies appropriate for bringing their students to a high level of performance. (Balanced State Authority and Local Flexibility).

Central to this conception was the alignment of standards for what students must learn with a guarantee of equitable opportunities to students to learn. This guarantee would take the form of rigorous standards for the educational conditions required to teach and learn the content standards. These included:

- Knowledgeable teachers and administrators, instructional materials and resources (such as laboratories) of a quantity and quality to offer all students the opportunity to achieve the content standards. (Resource Standards).

[^39]- A curriculum matched to the standards, pedagogy suited to the needs and cultures of students, a safe and respectful environment that ensures that students can take advantage of the resources provided. (Practice standards).
- Aggregate levels of student performance on assessments matched to the content standards that demonstrate that a satisfactory percentage of students at the school (either overall or by subgroups) achieve a high level of learning (Performance Standards).

Notably, accountability for meeting these standards could not rest with the school alone. Districts had to provide the necessary resources to enable schools to meet the school standards, and the State had to ensure that districts had the necessary resources to provide to schools. Without these resources in place, it would be illegitimate to hold schools and students accountable for meeting the content standards. ${ }^{158}$


#### Abstract

2. In California, systemic education reform policy was stripped of its guarantees of quality and equal opportunity to teach and learn the content standards. ${ }^{159}$ Test-based accountability provided state policymakers with a far less costly alternative. The students who would lose most with this shift were those attending schools in low-income communities of color.


By 1996, the decision to impose less regulation of school inputs, and increasing concerns about costs, had trumped efforts to establish resource and practice standards that would guarantee adequate and equitable school conditions for all students. Instead, the State adopted policies that operationalized "high standards" as grade-level benchmarks in traditional academic content areas, measured by standardized tests. Equity for students was defined as closing the test-score "gap" among racial groups on basic reading and arithmetic skills. In the "systemic reform" model, increased flexibility and local control meant that standards would be set centrally and local actors would have flexibility for adapting local practices to achieve the standards. In California, with "standards" reduced to test scores on a few subject-area tests, flexibility and local control were misinterpreted to mean fewer standards or regulations mandating adequate or equitable resources and school conditions (while actually increasing regulations on such traditionally local decisions in areas such as pedagogy). Accountability was made concrete by attaching "high stakes" rewards and sanctions for students and teachers based on standardized achievement test scores. Rather than being assured that every public school would provide students high quality and equitable opportunities to learn at high levels, parents would act as consumers who chose, based on publicized test scores, whether to "buy" the education provided at their local school.

[^40]Under Governor Pete Wilson's leadership, the Legislature and the State Board of Education launched the process of setting content standards and adopted the SAT9 testing program as a stopgap instrument for measuring students' learning until an acceptable State test could be developed. The State gathered no data and adopted no policies specifying the educational resources and conditions that would be required to provide teachers and students a reasonable chance of meeting the standards. ${ }^{160}$

In fall 1997, "Steering by Results," authored by the California Rewards and Interventions Committee, articulated the administration's interest in focusing California education policy on "high stakes," test-based accountability. As EdSource reported at the time, "[A]ttempts to improve schools with both incentives and sanctions are decades old. But past efforts tended to focus on compliance with laws and institutional policies: schools, for instance, have to offer certain programs and ensure that students receive a specified minimum number of instructional minutes. The current school accountability effort differs in that it is concerned not with inputs, but with outputs." ${ }^{161}$

The State's preference for test-based accountability and the eschewing of State standards for schooling resources and conditions became law in April of 1999, with the adoption of the Public Schools Accountability Act (PSAA). As noted earlier, PSAA established that schools would be publicly ranked based on an academic performance index (API), and that schools would face consequences attached to that performance. According to Senate Bill 1X, the program was intended as an "immediate and comprehensive accountability system to hold each of the State's public schools accountable for the academic progress and achievement of its pupils within the resources available to schools" [emphasis added]. ${ }^{162}$

This test-based approach helps explain why the State has reduced on-sight monitoring and data reporting of the conditions under which teaching and learning occur (e.g., replacing the Program Quality Review with the written Single Plan for Pupil Achievement, extending the Coordinated Compliance Review cycle from three to four years, relaxing the public reporting and hearing requirements related to using State funds for instructional materials, etc.). With its single-minded interest in results, the State became increasingly dismissive, wary even, of the "excuses" for poor performance that reports of inadequate resources and poor conditions might provide. The decision to focus exclusively on test results may also explains why the governor has spurned new measures that emphasize the importance of students' access to teachers, instructional materials, and facilities. For example, the Legislature overwhelmingly approved SB 81 in 1999 a measure requiring the public reporting of students' access to qualified teachers, high quality curriculum, and other learning conditions. In his veto message, Governor Davis declared:

California has made substantial efforts at providing equitable resources to all school districts and has been judged to be in compliance with court orders to that

[^41]effect. Hundreds of millions of dollars have been devoted to equalizing per pupil funding rates among school districts.
[The] appropriate role for the state is to hold districts accountable for their results. ... [t]he Public Schools Accountability Act of 1999 . . . provides for a system of accountability which ranks schools by the results of their efforts, and provides financial rewards and sanctions for their performance. The High School Exit Examination will also help the state hold school districts accountable for the opportunity they provide their students to learn. ${ }^{163}$

Davis implies that schools and districts whose standardized tests test scores improve need not worry about providing the qualified teachers, books and materials, and facilities that nearly all citizens, educators, and policymakers deem central to an adequate education. For example, if a school or district provided few working computers, little science laboratory space or equipment, and not enough novels for all students to read, the school might still escape the State's scrutiny if it met its test score target. Even the failure to meet the target would not cause the State to address these serious resource inadequacies. In fact, a school that was subject to State sanctions could choose to redirect monies away from essential resources to purchase materials or services designed narrowly to increase test scores.

In sum, California's system cannot prevent, detect, and correct the inadequacies and disparities in the State's schools because it has not been designed to do so. The large gaps in the system make it impossible for the State to know where unequal conditions exist, how they affect students' performance, and how these conditions could be remedied. Moreover, as the Legislative Analyst's Office has noted, the State operates "without any clear vision as to how the K-12 system can best foster high quality schools. As a result, the Legislature and Governor must make major decisions about the K-12 system without a long-term strategy." The current testbased approach may have provided State policymakers with a politically attractive alternative to one that would ensure adequate and equal conditions for all students. Perhaps not surprisingly, the communities that stand to lose most in this shift toward test-based accountability-low income communities of color-are precisely the communities that lack the political power to shape State policies.

## 3. California's history and context are particularly inimical to a test-based approach. This approach has collided with and exacerbated problems in the state's uncoordinated and under-resourced system.

The history sketched above helps explain why California's schools and students have suffered so badly during the past two decades, and why the State's current policies will not correct the inadequacies and inequalities that persist. That history, together with the research cited throughout the expert reports, makes clear that the success of "results-based" education reform and accountability depends on conditions that are simply not part of California's context. Given the inadequacies and inequities in the State, a test-based system simply cannot be expected to bring education to California's children.

[^42]First, a test-based system presumes that adequate resources and conditions are present in the system and available to all students. This presumption makes it possible to view unsatisfactory performance as a product of either a lack of motivation or flawed decisions about how to deploy resources effectively. However, there is ample evidence that California's school performance problems stem from a failure to invest sufficiently in building the capacity of its educational system - both in terms of tangible resources and the competence of teachers and administrators. The precipitous decline in California's educational funding over three decades, coupled with compelling evidence of current shortages and poor conditions and widespread inequities, mean that however motivated educators might be, they are unlikely to have sufficient resources or training to translate their good intentions into results. Ironically, the incorporation of rewards into a test-based system further depletes the system of resources. The funds allocated for rewards could have been spent on the far more compelling need to ensure adequate conditions, including well prepared educators, at all schools.

Second, a test-based system presumes that the competition among schools to attain rewards and avoid sanctions (and to entice parents to "choose" to enroll their children) takes place on an even playing field. That is, it presumes an absence of structural inequalities that systematically inhibit the equitable distribution of whatever resources (choices) are available in the system. In fact, the substantial historic inequalities among California's schools evidenced in the pre-Serrano funding disparities and exacerbated by post-Proposition 13 policymaking have left California schools with an extraordinarily uneven playing field. That too is well documented by the experts cited in this paper.

Third, a test-based policy system presumes that test scores can drive the improvement of student achievement. This presumption requires several conditions that do not currently exist in California: a) a State test that accurately measures and tracks students' mastery of the State's content standards; b) feedback from achievement tests that can diagnose learning problems, identify the sources of these problems, and point to solutions; and c) rewards and sanctions tied to test scores that can actually generate adequate and equitable opportunities and quality in schools where they do not now exist.

Russell makes clear that the State's exclusive focus on test scores is ill advised, partly because the API suffers from numerous technical shortcomings. ${ }^{164}$ As noted above, regardless of how technically sound a test may be and how motivated educators and students may be, many schools simply lack the resources and/or capacity to provide the students the tools and opportunities they require to learn. Neither feedback from tests about students' areas of weakness, local outrage in response to public reports that a school did not enable its students to meet the standards, nor State sanctions will solve these deeper problems. Furthermore, we have no evidence that the money currently spent on rewards for the schools that do meet their performance goals is having a positive effect on performance.

Fourth, a test-based system's reliance on parents to ensure delivery of adequate educational inputs-either through participation or "choice" is also misguided. If reporting

[^43]mechanisms such as the API rankings and the School Accountability Report Cards actually gave accurate and useful information (an assumption without foundation in California), such mechanisms ostensibly position those with a vested interest in the affairs of public schools-parents and the local community-to monitor conditions in their schools and take action. Indeed, it is the case that affluent communities generally have little difficulty eliciting community participation in school board elections, site decision-making councils, and other avenues for civic involvement. However, the demands of poor parents can be more easily ignored. Middle class parents also possess the ultimate tool for exercising leverage upon schools: they generally have a wide range of options if they are not satisfied with the schools their children attend. In contrast, poor parents are usually compelled to accept the quality of educational services provided to them, whether they like it or not.

Finally, a test-based policy system presumes a degree of stability in the educational system that enables school-to-school and year-to-year comparisons to reflect the performance of the schools. Changes in the student populations and communities make such comparisons impossible. Dramatic shifts in the composition of California's student population and considerable mobility among the State's most vulnerable school schoolchildren create significant educational challenges that are unequally borne by schools. These make it necessary that the State's attention focus on more than results to understand the needs and accomplishments of its schools.

## C. The result: A chaotic state educational policy system incapable of preventing or correcting inadequacy and inequality.

Today, Californians lack the considerable capacity they once had. Old race- and incomebased inequities remain, and California's standing relative to other states has declined. Funding is part, but only part, of what has changed. Between 1979 and 1994-95, the State's spending per pupil fell about 25 percent relative to the average for the other states, rebounding somewhat between 1995 and 1998. ${ }^{165}$ Although California has a higher cost-of-living than the national average, it spends well below the national average on education both in absolute dollars and as a share of personal income. By 1999-2000, California ranked first in the nation in the number of pupils it served and $48^{\text {th }}$ in $\mathrm{K}-12$ expenditures as a share of personal income. California is $50^{\text {th }}$ in the ratio of students per teacher, despite the influence of class size reductions during the late 1990s. ${ }^{166}$

This precipitous funding decline surely explains part of the State's crisis-level teacher shortage, as well as its insufficient textbooks and instructional materials, deteriorating, overcrowded buildings, and much more. By the late 1990s, California employed a greater number of under-qualified teachers than any other state in the country, and California ranked in the bottom decile among states in class size, staff/pupil ratio, libraries, and most other school resources. Not surprisingly, California earned a grade of "F" for "resource adequacy" on Education Week's annual state report card. Nobody argues seriously that this crumbling

[^44]educational infrastructure and the State's low academic performance are simply coincidental. There is simply too much evidence otherwise.

However, growing inequalities in funding are as large a problem as funding declines. In 1998, the California Postsecondary Education Commission noted that:

The gap in expenditures for education between the high-spending and low-spending school districts in our state in the 1991-92 school year was $\$ 1,392$ - a figure that placed our state at approximately the $30^{\text {th }}$ percentile nationally. Today, that gap has risen to $\$ 4,480 \ldots$ Perhaps the most disturbing part of this statewide picture is that many of the disparities noted above are consistently and pervasively related to the socioeconomic and racial-ethnic composition of the student bodies in school as well as the geographical location of schools. That is, schools in our low socioeconomic communities as well as our neighborhoods with a predominance of Black and Latino families often have dilapidated facilities, few or inadequate science laboratories, teachers in secondary schools providing instruction in classes for which they have no credential, curriculum that is unimaginative and boring, and teachers who change schools yearly and lack the professional development to complement their teaching with new instructional strategies and materials . . . ${ }^{167}$

The consequences are evidenced most vividly in the shortages and inequities in the supply of qualified teachers, adequate instructional materials, and appropriate facilities. Effects of these disparities are also seen in the inability of the State to intervene and provide support to schools and districts, in need or distress according to the State's own performance criteria. Large numbers of schools that qualify for the State's Underperforming Schools Program are simply not reached through State oversight or support.

However, it cannot be emphasized strongly enough that the State's school finance problems are an integral part of a larger problem of State governance and accountability. The State's lack of sound fiscal planning is just one arena of haphazard policymaking spawned by the State's diffuse and often contentious State governance apparatus. Other arenas are equally troubled-with some parts of the system over-regulated and others left untouched. For example, we have elaborate educational standards, but no guarantees that students have the resources and opportunities needed to meet them. Detailed rules dictate which textbooks schools can buy, but nothing requires that schools provide textbooks at all. Complex requirements govern who can become a certified teacher, but loopholes allow thousands of uncertified people to teach each year. The State delegates the responsibility for producing student achievement to local districts, but it often circumvents those same districts as it micro-manages the details of ranking and rewarding schools and, with the forthcoming High School Exit Exam, determines which students should graduate.

Even good ideas have had disastrous consequences. For example, the State's catastrophic teacher shortage has been made worse by a right-minded initiative-class size reduction. As noted earlier, the increased demand for teachers that came with the institution of 20-to-1 pupil-

[^45]teacher ratios in the primary grades, triggered an exodus of qualified teachers from schools in poor communities into more advantaged ones that offer better working conditions. Many schools serving the most vulnerable children have been left with fewer than half of their teachers certified. ${ }^{168}$ Similarly, as Russell notes, California's attempt to establish an educational accountability system over the past decade has been tumultuous. Setting aside the several proposed and implemented versions of the current PSAA, California has put into place five distinct systems within a ten-year period. ${ }^{169}$

The complaints brought by the plaintiffs in the Williams case-millions of California school children in schools with unqualified teachers, materials shortages, and unclean and unsafe facilities-provide evidence about the terrible consequences of the State's systemic failures. These are consequences that the State's current policymaking, compliance, and accountability systems do not prevent, detect, and correct. In many cases, those systems have exacerbated the problems. The accountability system is made up of an "off the shelf" test that does not match the State's content standards. The State's API that ranks schools' performance based solely on this test has considerable technical shortcomings; it also lacks the information parents and policymakers need to fix the problems that keep students from learning-as a result, it cannot help parents detect and correct gross inequalities. As Russell and Mintrop make clear, currently it is impossible for the State to know where unequal conditions exist, how they affect students' performance, and how these conditions could be remedied. ${ }^{170}$ Of course, the analyses here and in the expert reports are not new. In 1996, California's Constitution Revision Commission drew similar conclusions:

California has an educational system that provides no real focal point for responsibility, no flexibility for local districts, and has widely scattered responsibilities, resulting in no single official or entity being accountable for the state's education system either at the state or local level. The system has no organized method for ensuring that California's pupils are well-educated or that education funds are spent in the best way for each local area. ${ }^{171}$

## V. What Remedies are Needed? Specific Policy Changes and Systemic Reforms that Enable the State to Prevent, Detect, and Correct the Underlying Causes of Current Inadequacies and Inequalities.

There are specific remedies the State can employ to prevent, detect and correct the specific inadequacies and disparities in teacher quality, materials, and facilities that are the subject of this case. However, the systemic flaws in the State's governance, funding, and accountability mechanisms that underlie these specific problems must be corrected as well. Without a systemic reform of California's education system, the State's children will remain vulnerable. The State's recent "class-size reduction" reform is just one example of how quick

[^46]and costly fixes have unintended, negative outcomes that exacerbate inequities. Accordingly, this paper concludes with suggestions for both specific and systemic reforms. Although the State has attempted some of the specific strategies identified below, it has not done so at a sufficient scale, in sufficient combination, and with an education system infrastructure that can be counted on to sustain and build upon improvements.

## A. Remedying the Specific Complaints

1. Mandate the provision of qualified teachers; appropriate, standards-based textbooks, instructional materials, equipment, and technology; and well-maintained, safe, healthy, and uncrowded school facilities. The most straightforward policy instrument for ensuring all California public school students' access to the resources and conditions their education requires would be for the State to require districts and schools to provide all students with them.

Teachers. The State should provide every student with a qualified teacher with appropriate skills to teach him or her. At the same time, the State should require the Commission on Teacher Credentialing to set standards that are sufficiently high to guarantee that teachers are qualified to teach California's diverse student population, including English learners. Teachers who lack experience and appropriate credentials must be provided appropriate training before they enter the classroom.

Textbooks, Instructional Materials, Equipment, and Technology. The State should require that all students be provided with textbooks, instructional materials, equipment, and technology required for mastery of the State content standards in core subjects, and that students have textbooks for use both in class and at home. Several states already do this, and they provide models of policies that California could adapt to its context. Florida's "one book per child" statute provides an example. Additionally, the State should require that schools provide materials and instruction for English learners and their parents in English and in the primary language to the extent possible, to strengthen emergent literacy skills. ${ }^{172}$

Facilities. The State should mandate that every child has a safe, adequate facility (clean, functioning bathrooms; adequate classroom space; outdoor space to exercise; heating, cooling, and electrical outlets that work; and access to technology) in which to learn. Both Corley and Myers argue that standards could feasibly be developed that include health and safety requirements, recommendations for ongoing maintenance and operations functions, appropriate guidelines to address the educational appropriateness of the facility and guidelines for allocation of financial resources to ensure ongoing maintenance and operations. Corley notes that California has already drafted quite good non-mandatory school guidelines. Corley also argues that the State's prior experience adopting mandatory standards for non-school facilities such as restaurants, barbershops and beauty salons, nursing homes, State-funded preschools, and others pave the way for school facilities standards. These other standards provide ready benchmarks for minimum standards for schools: school cafeterias should be as clean as a fast food outlet or a nursing home, and standards for State preschools can easily be adapted to a primary grade

[^47]classroom. These standards apply throughout the State and demonstrate that a system need not be oppressive or immense at the State level to cover the entire State. ${ }^{173}$

Additionally, given the negative effects of overcrowded facilities and of the year-round, multi-track schedules that districts use to relieve overcrowding, the State should prohibit the assignment of any child to overcrowded schools or to schools employing Concept 6 year round education plan. Finally, the State should require that all students be assigned to a wellmaintained, uncrowded school facility within reasonable commuting distance from home.
2. Build the capacity of schools and districts statewide to provide and maintain qualified teachers; appropriate, standards-based textbooks, instructional materials, equipment, and technology; and well-maintained, safe, healthy, and uncrowded school facilities.
a. Teachers. Building the capacity of schools and districts to hire and retain qualified teachers for all students requires first that the State take action to increase the supply and quality of the State's teacher workforce. Workforce shortages overall and the lack of teachers prepared to work in linguistically diverse schools and schools in low-income communities are not problems that individual districts and schools have the authority and resources to solve. Consequently, Darling-Hammond and Hakuta both argue that the State must employ a combination of strategies to increase the numbers of individuals who choose to prepare to teach and remain in the profession. ${ }^{174}$

Appropriate statewide strategies include increasing teacher recruitment incentives for undergraduate and graduate students and providing additional support to teacher education institutions to increase the quality of teacher preparation. As a part of this effort, the State must target programs and financial support to shortage fields (such as special education, mathematics, science, computer science, and foreign languages). Equally important, the State must enable districts to offer better salaries, improve teachers' working conditions, and provide teachers with more mentoring support-factors critical to attracting and retaining teachers.

The State must also respond to the stark inequities in California students' access to qualified teachers with a state-wide solution, including a series of incentives for teachers to choose to teach at schools serving poor and minority children. For example, Darling-Hammond recommends that the State of California develop incentives to more equally distribute the qualified teachers who are now in the educational system so that English learners have the same chance as any other student of having a fully certified teacher. ${ }^{175}$

Notably, similar recommendations have been made in the State's own reports and by other analysts, some more than a decade ago. For example, in 1991, a CDE report on remedying the shortage of teachers for students whose first language is not English recommended:

[^48]The CDE and LEAs need to cooperate on improving the quality of the work environment for teachers of LEP students by lowering the teacher-student ratio, by providing preparation time for classroom instruction, and by establishing accommodations in the same quality of buildings and surroundings as that of regular classes. Too often bilingual and ESL resources are offered to LEP students in temporary or makeshift settings. ${ }^{176}$

In 2000, a PPIC recommended:
What can the state and districts do to encourage more of the most highly qualified teachers to work in low SES schools? One obvious solution involves offering salary incentives to highly qualified teachers who choose schools in disadvantaged areas. Such a system would represent a fundamental change in teacher pay policy in California, where rigid formulas typically set teachers' salary throughout a district as a function of teachers' seniority and education. In addition, such a system might require renegotiation of 'first right of transfer' clauses in collective bargaining agreement. ${ }^{177}$

In 2001, the CDE's own Professional Development Task Force noted:
The problem of emergency hiring cannot be cured by waving a magic wand. Ensuring that all California students are taught by well-prepared teachers will require making teaching in hard-to-staff schools more attractive by offering better salaries, improving working conditions, mentoring, and developing a different strategy for managing the teacher labor force." ${ }^{178}$

Further, in 2001 the Little Hoover Commission argued for more aggressive State action:
[T]he State needs to target resources where the shortage of qualified teachers is persistent and severe. These schools come to the State for regulatory relief $\square$ permission to hire unlicensed teachers under emergency permits. As a condition of these permits, the State should make sure those schools and districts are doing what they can to attract qualified instructors, to improve school-site management, to provide adequate teaching resources, and to ensure a safe and healthy learning environment. ${ }^{179}$

Additionally, the State must intensify its efforts to increase the competence of teachers already working with students. When the State obtains information from its current on-site reviews, such as CCR, Comite, etc. that suggest that find experienced teachers lack specific

[^49]content or EL skills, the State should intervene with professional development to help them meet their students' needs.
b. Textbooks, Instructional Materials, Supplies, and Technology. While the first necessary step is establishing a standard that mandates the provision of textbooks and instructional materials to all students, the State must also ensure that districts and schools have the fiscal capacity to meet this standard. Oakes provides evidence that California provides insufficient funding for textbooks and other instructional materials compared to the amount allocated by other states and compared to estimates of an "adequate" level of spending on these materials. Building the capacity of schools will require the State to identify and allocate a specific level of funding that is based on what it actually costs to assure the availability of textbooks, instructional materials, equipment, and technology that students need to achieve outcomes, such as meeting State standards in core academic subjects.

The State must also develop new, appropriate materials for use in Structured English Immersion classrooms, as currently few such materials exist. It must also provide transitional materials and guidance for teachers on how to use mainstream English-only materials for instruction of EL students. The State must provide primary language materials to support student literacy and learning.

Finally, the State must provide technical assistance that enables districts to purchase, inventory, distribute, and otherwise maintain control over its textbooks, instructional materials, equipment, and technology.
c. Facilities. As with textbooks and other instructional materials, capacity requires both adequate funds and a strategy for ensuring the equitable distribution of funds, both for new construction and for ongoing maintenance and operations. As Myers demonstrates, the facilities funding system should not be based totally on providing dollars to only those districts that apply, either on a first come first served basis or on the application process alone. Rather, once an adequate data-gathering system has been established (see below), then the State, working with the local Districts can identify and prioritize those districts and specifically the buildings that are top priorities for funding. ${ }^{180}$ Additionally, to provide districts with the capacity to ensure adequate ongoing maintenance and operations, Myers recommends that 2-4 percent of the replacement value of each facility be included in the general budget. ${ }^{181}$

Myers also recommends that the State establish an organizational structure that allows local school districts the opportunity to become responsible for their facilities. Myers explains that in Maryland, for example, a very well defined organizational structure has been established whereby the local school district provides a maintenance plan to the State, and updates its plan each year. The State uses the plan to establish facility priorities based on the "adjusted" age of facilities and the needs of each school. The process for awarding financial assistance is one in which need is determined by an objective "point" system assuring all school districts that a fair and equitable distribution of funds occurs. ${ }^{182}$

[^50]Myers also suggests that in California, FCMAT could assist local districts with developing strategies for ensuring adequate maintenance and operations, but that would require that FCMAT be accorded more power and authority as well as financial resources. Additionally, Myers recommends that the State have a role in providing assistance to districts in the maintenance of adequate and appropriate school facilities after the schools are built, thereby expanding on the current role of the CDE School Facilities Planning Division which is presently charged with reviewing school district plans for all of the funding streams related to new construction. ${ }^{183}$

## 3. Collect, analyze, and use data to monitor and report regularly the supply and

 equitable distribution of qualified teachers; appropriate, standards-based textbooks, instructional materials, equipment, and technology; and well-maintained, safe, healthy, and uncrowded school facilities. It is difficult to imagine serious opposition to collecting valid and useful information about school conditions. To be sure, data collection and analysis can be costly, cumbersome and time-consuming, even-if in the wrong hands-coercive. That said, the potential for problems is miniscule compared to the power for good this information can exert, and it is difficult to imagine how the State can accomplish its education goals without such data. Further, a rational and streamlined reporting and data collection system is likely to reduce the potential for wasted time and misuse rather than to make the current "non-system" worse.The State could quite easily find out whether students have the resources and conditions they need by refining the monitoring processes it already has in place. If adequately staffed and given a more comprehensive data collection charge, the CCR process, for example, could be a valuable tool for detecting problems regarding students' access to teachers; to textbooks, instructional materials, equipment, and technology that match the State standards; and wellmaintained, safe, healthy, and uncrowded school facilities. Similarly, with State training and oversight, the WASC review teams could provide much of the necessary data in its reports and recommendations to trigger State action to solve problems. ${ }^{184}$ Finally, if the data reported by districts and schools on the State-mandated school report cards (SARC) were subject to State scrutiny for their accuracy and utility, the State could also use these data for monitoring students' access to resources and conditions and identifying problems as they arise.

Importantly, whether it uses these existing strategies or develops new ones, the State must collect data about teachers, textbooks and materials at the classroom level so that school officials, policymakers, and the public know which teachers are assigned to which children (such as English learners), and know the type of materials and curriculum to which these students are exposed.

As detailed below, there are also some relatively simple changes in the State's current data collection and analysis systems that could yield much better information.

[^51]a. Teachers. The State now collects considerable data about teachers-for example, through the CBEDs and the CTC credentialing process. However, the State does not use these two systems to provide the type of data or analyses that policymakers need to anticipate or detect problems. Documenting this problem in 2002, the Center for the Future of Teaching and Learning reported:

Policymakers report that they do not have access to data needed to make reliable projections of the magnitude of the teacher shortage in coming years. They also are in need of data to better understand complex conditions, such as the dynamics of the teacher labor market that result in the maldistribution of underprepared teachers, to be able to design appropriate policy to address pressing problems. They need data to help them identify which parts of the system and which types of schools or districts are in the most need. Last, they need data to provide a baseline against which the impact of existing and new policies and programs can be measured. Without such data, policymakers never can be confident about the overall success of the state's efforts and cannot gauge the progress of individual programs. In addition, important problems, such as the maldistribution of underprepared teachers or an impending drop in the supply of teachers, may remain hidden. ${ }^{185}$

One major constraint on the State's current capacity to analyze and use data in ways that would address these issues is the failure to assign a unique identifier to each teacher (e.g., social security number or credential number) that could be used by all agencies that collect teacher data. That simple addition would enable the various agencies that collect data from and about teachers to link their data sets in ways that would answer a wide range of questions about the supply, retention, and distribution of teachers with various credentials and experience. ${ }^{186}$
b. Textbooks, Instructional Materials, Equipment and Technology. The State could easily remedy its lack of data about the supply and quality of textbooks and other instructional materials and equipment by strengthening and enforcing the current requirements of the Instructional Materials Funding program. Currently, for a district to qualify for State funds for textbooks and materials, its governing board must hold a public hearing, at which it reports the supply and quality of textbooks and other materials in the districts' schools. However, as noted earlier, the State has turned a blind eye to the fact that many districts ignore this requirement and do not hold public hearings at all, and that others conduct the hearing in the most superficial manner. In any event, the State does not now use or even collect any of the information produced for these hearings.
c. Facilities. Comprehensive, accurate, and useful data about facilities requires on-site inspections. Myers asserts that inspections guided by standards can help ensure high-quality, ongoing maintenance and operations for the life of the building. Critical to such remedies is an inventory that identifies every facility in the State of California by its square footage, age,

[^52]renovations and or additions, and educational appropriateness. Once a data-gathering system has been established as described above, then the State, working with the local Districts can identify and prioritize those districts and specifically the buildings that are top priorities for funding. ${ }^{187}$

As Corley notes, this need not be terribly different from procedures the State now uses to inspect facilities related to other important services. Workable school facility inspection and monitoring models already exist, and other states operate statewide school inspection programs based on State standards. ${ }^{188}$ Myers points to Illinois as an example of an inspection process where a partnership is established between the state, the Educational Service Regions and the local districts to inspect each school each year. ${ }^{189}$ Corley notes that Maryland targets an inspection of every school every eight years, on average. Given the current very poor conditions of many of California's schools, inspections should occur at frequent intervals, with reevaluations conducted in schools needing to correct serious problems.

## 4. Develop and use effective strategies of state oversight and intervention whenever problems related to students' access to teachers, instructional materials, and facilities in poor condition.

Good data is essential for the State to detect problems related to students' access. However, correcting those problems requires that the State act on the information it collects with interventions that target the right schools and provide the assistance and support that correcting the problems requires. Consequently, the State must use the information it collects through improved data systems and from on-site monitoring (such as the CCR, WASC, and Comite processes, as well as new facilities inspection systems) to trigger intervention and assistance. However, the State does not have to wait until improved data systems are place to improve its current strategies for correcting shortages and inequalities in qualified teachers, high quality textbooks and materials, and adequate facilities.

An obvious and much needed improvement that could be implemented immediately would be for the State to establish mechanisms whereby parents, students, and community members could report problems with resources and conditions in the State's public schools. Each complaint could trigger a State investigation and, if warranted, a response. The appropriate response to valid complaints would be the provision of adequate resources and the repair or improvement of problematic conditions in a timely manner.

The State can also immediately incorporate standards for adequate teachers, textbooks and other instructional materials, and facilities into its current oversight processes, using the State's current definitions. Some of these standards lend themselves to a straightforward evaluation of compliance. For example, the availability of credentialed teachers, instructional materials that match the State content standards, and safe and healthy facilities can be monitored quite easily. These areas could easily be included into the current CCR compliance regime, WASC, and into the Comite process.

[^53]However, as Mintrop notes, such improvements are only a first step. For compliance reviews to prompt continuous improvement in the core of a school's operations, they require a more holistic review that considers learning conditions, practices, and the needs of specific student populations. ${ }^{190}$ Such a review not only would allow the State to uncover areas of needed improvement in educators' work performance, but also shortcomings in school capacity and provisions that are controlled by districts or the State.

Mintrop also recommends that the State make the IIUSP mandatory for schools in the lowest API deciles, and it should concentrate its limited resources for providing direct assistance on these schools. ${ }^{191}$ However, these schools should be evaluated against a comprehensive set of standards of adequate learning conditions, in addition to meaningful standards of adequate academic performance, as is currently the case. Moreover, to ensure that skillful external evaluators perform useful, comprehensive reviews, the State must select evaluators carefully and train them to apply newly formulated standards in a standardized approach. To ensure that a sufficient number of evaluators are available to conduct these more sophisticated evaluations, the State should set clear goals and develop a time line for the development of a high-quality school improvement infrastructure, including a cadre of fully trained and accredited evaluators. ${ }^{192}$ This last point itself will test and reveal the state's capacity and resolve to pursue a more rational and accountable educational system. For example, the state's actions to enlist such a cadre should result in adequate numbers of independent inspectors intent on detecting and reporting substandard conditions especially those conditions that are not apparent to a more casual observer.

Finally, the State should focus its interventions on low-performing districts as well as on low-performing schools. As Mintrop notes, when schools labor under faulty district policies, State intervention in district affairs is potentially more powerful than interventions in many schools in one district. By the same token, when districts do not have the capacity to attract good teachers, to build and maintain adequate facilities, or to issue coherent policies, they need help from the State in the form of resources and authoritative guidance. ${ }^{193}$ By concentrating State interventions on districts in distress (and leaving local school improvement to district officials), the limited SDE capacity could be spent on high-leverage interventions in low-performing districts.

## B. Systemic remedies to prevent, detect, and correct the inadequacies and disparites

The severe inadequacies and inequities in California's education system are symptomatic of deep systemic problems. The specific remedies suggested above are likely to provide considerable relief for the specific problems that have been identified. Nevertheless, the conditions that are the subject of this litigation require systemic reform that recognizes and corrects for the structural impediments that have led to these problem and, without correction, would be likely to give rise to them again. Consequently, the State should modify its systems for governing and financing public education in California to include all of the following:

[^54]- State standards that specify the resources and conditions that are minimally required for teaching and learning and that the State considers necessary prerequisites to achieving the state's content and performance standards;
- A school funding system based on the actual cost of providing essential resources and conditions, with adjustments for cost differences in schools serving different communities and students;
- An expanded State accountability system that places valid, fair, and useful measures of students' achievement of the State's standards in the context of measures of the learning resources and conditions under which students were expected to learn;
- Unambiguous lines of State, regional, and district responsibility for ensuring that all students have these learning resources and conditions, with mechanisms that hold the appropriate officials at each of these levels accountable;
- An accountability system that is reciprocal-i.e., it includes a two-way flow of accountability information; and provides legitimate roles for local community, parent, students and students in holding the system accountable.

Each of these changes is described in more detail below.

1. State standards that specify the resources and conditions that minimally required for teaching and learning and that the state considers necessary prerequisites to achieving the state's content and performance standards. The State must develop standards that regulate the minimum conditions in schools. Such standards, combined with monitoring and enforcement to ensure compliance with those standards, are essential to ensuring delivery of opportunity to learn to all of California's public school students. As Thomas Sobol accurately recognizes, "[a]bsent such nonnegotiable baselines, some children will be, as they have been, left behind in terms of educational opportunity and promise." ${ }^{194}$ State standards must establish which high quality resources, conditions, and learning opportunities are essential to ensure that all students have a chance to meet the State's content and performance standards. These standards would include, but not be limited to, standards for qualified teachers, proper instructional materials, and adequate, uncrowded facilities. With such standards, schools themselves have the opportunity to evaluate whether their operations are on an adequate level. And, as noted below, external reviews can be far more fruitful when they are grounded in statewide standards.
2. A school funding system based on the actual cost of providing essential resources and conditions, with adjustments for cost differences in schools serving different communities and students. As Grubb and Goe's report concludes, California's overall approach to financing schools needs reconstruction so that it employs funding mechanisms that are based on what it actually costs to provide high quality schooling. To achieve congruity between schools' needs and funding allocations, the State should move toward the "new"

[^55]approach to school finance wherein the focus is on how resources are translated into school and classroom learning opportunities, rather than only on the dollar amount spent. According to the "new" school finance, ensuring the effective use of resources requires a two-stage process. "It s first necessary to ascertain those practices and instructional conditions within schools and classrooms that enhance learning. Then it is necessary to allocate resources to those practices, rather than to ineffective uses." ${ }^{, 195}$

For example, the State could develop and implement a "Quality Education Model" (QEM) to serve as a benchmark for knowing how much should be spent on education if the goal is to support a high quality education for every student. To assure funding that will enable all schools to reach this benchmark, however, the State must ensure that all schools receive the funds necessary to provide its particular students with the services essential to meet their needs. That means that the State must provide differing levels of resources when needed to attain an equitable education for students with differing circumstances.

A funding system redesigned in this way would not necessarily require greater overall levels of spending. However, given the State's failure to respond constructively to the Constitutional caps on property tax imposed by Proposition 13, and, until recently, the high bar that proposals for school bonds had to pass, it is unlikely that current education spending levels are sufficient. However, without a systemic accountability system, described below, it is impossible to pinpoint the extent of the current shortfalls and the specific areas where the new spending may be needed problematic.

## 3. An expanded state accountability system that places valid, fair, and useful measures of students' achievement of the state's standards in the context of measures of the learning resources and conditions under which students were expected to learn. A

 comprehensive and useful accountability system must take into consideration of information about the schools' resources, conditions, and opportunities, in addition to measures of students' achievement and other important outcomes. In Russell's words the accountability system should assess, "the programs and practices [schools] have in place, the appropriateness of these programs and practices given specific context and background indicators, and the effect these programs have on a variety of student outcomes." ${ }^{196}$ Russell provides one list of the indicators that such a system might include:
## Programs and practices:

- Access to quality teachers (e.g., student:teacher ratios, \% of teachers with emergency credentials, $\%$ of teachers with Masters Degree or Beyond, etc.) ${ }^{197}$
- Access to books, textbooks and other learning materials (e.g., ratio of library books to students, ratio of course specific textbooks to students, ratio of students:computers, ratio of students:Internet accessible computers, etc.)

[^56]- Adequacy of school facilities (e.g., overcrowding, access to sanitary facilities-ratio of students:functioning toilets, ratio of "contaminated" classrooms:total classrooms, etc.; availability of functional heating and cooling systems, presence of lead paint, etc.)
- Type of school calendar (e.g., multi-track year-round schools; schools operating under the Concept 6 model)
- Availability of appropriate instructional materials, specially trained teachers for ELL students
- Subject area curricular materials used (e.g., math curriculum/textbooks, science curriculum/textbooks)
- Availability of Advanced Placement Courses (e.g., number of courses offered, number of sections available).
- Professional Development Opportunities (e.g., topics focused on during PD, number of hours offered, number of hours taken, percent of faculty participating).

Student outcomes might include, but should not be limited to:

- Performance on tests closely aligned with the State frameworks
- Attendance rates
- Promotion/retention rates
- Graduation rates
- Drop-out rates
- Course taking patterns (higher vs. lower level mathematics, AP courses, etc.)
- Percent of students completing all courses required for UC eligibility
- Percent of students taking college entrance exams
- College entrance ${ }^{198}$

As Russell and Oakes note, in many respects, this type of system is currently in place in Rhode Island where data is collected about a wide range of variables and schools are required to engage in active reflection, goal setting, and communication with their community. ${ }^{199}$

However, accurate and useful information on the conditions under which students are expected to learn can probably be accomplished best by a professional cadre of external evaluators who gather data from all schools (not just those performing below expected API target levels). Such information can inform the State, the district, the school, and the public about the status of schools and the educational system as a whole, and trigger actions that are powerful enough to improve the State's lowest-performing schools. Such a system is in place in England. Her Majesty's Inspectorate of Schools (HMI) is a model of oversight that is carried out by a cadre of well-educated, highly qualified individuals who evaluate schools for accountability, program quality and effectiveness. Variations of HMI are common in other countries, and could be adapted to the California context.

## 4. Unambiguous lines of state, regional, and district responsibility for ensuring that all students have these learning resources and conditions, with mechanisms that hold the

[^57]appropriate officials at each of these levels accountable. Students and teachers should not be punished for failing to meet the State standards if the State is not held accountable for ensuring that teachers and student have the resources they need to meet them. Consequently, the State's educational accountability system must hold all of the appropriate adults-from the Governor down to the classroom teachers-accountable to children, families, and communities for the things over which they have control (e.g., resources, conditions, and opportunities, as well as outcomes).

However, the current diffusion of responsibility among various State actors and the lack of coordination among them makes the conditions of schooling in the State either everyone's or no one's responsibility. Holding State officials accountable requires a restructured State governance system that establishes clear lines of State authority over various aspects of educational policy and practice. Additionally, the State must also develop mechanisms that hold districts directly accountable for their schools' performance. As Mintrop recommends, when more than a third or more than half of all schools in a given district are not meeting growth targets and when the overall district performance ranges well below the State average, the State should intervene at the district level. ${ }^{200}$

## 5. An accountability system that is reciprocal-i.e., it includes a two-way flow of accountability information; and provides legitimate roles for local community, parent, students and students in holding the system accountable.

As Mintrop notes, accountability in a democratic State flows from top to bottom, but also in reverse. Accountability systems are two-way lines of communication. In addition to State officials communicating performance expectations and overseeing adequate performance and learning conditions, accountability systems must also ensure that information flows upward to permit State officials to craft effective policies that address systemic shortcomings on the local or State levels. Moreover, accountability must also mean that the top (the State) is held accountable by communities and citizens for the adequate and equitable provision of education. ${ }^{201}$

In the English inspectorate system, for example, reports of school inspections address school-level accomplishments and shortcomings, but they also make note of any problems related to the resources and conditions that fall under the responsibility of local and national policy makers. Data collected through school inspections and compiled in authoritative reports can convey the concerns of citizens in ways that command a State response.

The State could also explore the use of a corps of local "inspection volunteers." Parents, grassroots groups, or local experts could monitor and report many aspects of facilities infrastructure, while calling in more highly trained monitors for particular needs. This is not a completely untried idea. As Sobol reports, such local engagement in accountability can be costeffective as well as democratic. He reports that, in New York State, " $[t]$ he primary values of the School Quality Reviews [implemented as part of the State's oversight of schools] were that they involved local people from multiple perspectives and stakes in education (educators, business people, and parents) in assessing school quality, they did not drain State resources by requiring

[^58]State employees to conduct the reviews, and they provided substantive information in addition to data such as test scores on which to base school evaluations." ${ }^{202}$

Acting on their common interest in quality education, organized parents are better positioned to demand good service from schools and to hold them and the State accountable when their expectations are not met. However, local engagement in reciprocal accountability must be supported with mechanisms that organize and keep parents and community members be informed about their rights and responsibilities. This will require technical assistance, translation services, childcare and active support from community-based organizations. Churches and community groups that possess strong ties with poor communities, especially recent immigrants, are often well positioned to provide training and to facilitate contact and communication between parents, local schools, and the State education bureaucracy.

The problems outlined in the collection of expert reports are egregious. They are also fixable. The specific remedies and more comprehensive reforms suggested here are not radical. There is nothing groundbreaking about giving kids books, qualified teachers, and adequate facilities. Framing an accountability system that holds state and local officials responsible for providing these basic educational tools is not only "sensible" and managerially sound, leaders across the state and nation have made calls for accountability the cornerstone of education policy reform and practice. The recommendations in this paper do not aim at creating a cookie cutter to stamp out identical schools; they do not encourage a leveling down of opportunity and quality; and they do not regulate professional decisions about how educators teach children. Sadly, they are not even aimed to meet the worthy and still neglected goal of bringing exemplary, high quality education to all the state's children. Rather, the modest goal of what is proposed here is to bring the worst California schools up to a standard of common decency and to do so expeditiously.

[^59]
## Appendix <br> Experts and Report Topics

Robert Corley, Independent School Facilities Consultant—The Condition of California School Facilities and Policies Related to those Conditions

Professor Emeritus Glen Earthman, Virginia Polytechnic Institute and State University—The Effect of the Condition of School Facilities on Student Academic Achievement.

Professor Linda Darling-Hammond, Stanford University-Access to Quality Teaching: An Analysis of Inequality in California's Public Schools

Professor Michelle Fine, City University of New York, Graduate Center-The Psychological and Academic Effects on Children and Adolescents of Structural Facilities' Problems, Exposure to High Levels of Under-Credentialed Teachers, Substantial Teacher Turnover, and Inadequate Books and Materials

Professor Norton Grubb and Laura Goe, UC Berkeley—The Unending Search for Equity: California Policy, the "New" School Finance, and the Williams Case

Professor Kenji Hakuta, Stanford University—English Language Learner Access to Basic Educational Necessities in California: An Analysis of Inequities

Professor William Koski, Professor, Stanford University—What Educational Resources Do Students Need to Meet California's Educational Content Standards?

Dr. Ross E. Mitchell, Research Scientist, Gallaudet University—Segregation in California's K12 Public Schools: Biases in Implementation, Assignment, and Achievement with the Multi-Track Year-Round Calendar

Professor Heinrich Mintrop, UCLA—State Oversight and the Improvement of Low-Performing Schools in California

Dr. Nancy R. Myers, Educational Facility Planner, The Myers Group-Solutions Available and Utilized by States Other Than California to Address the Long-Term Planning, Maintenance, Supervision, and Operation of School Facilities

Professor Jeannie Oakes(a), UCLA—Access to Textbooks, Instructional Materials, Equipment, and Technology

Professor Jeannie Oakes (b), UCLA—Multi-Track, Year-Round Calendar (Concept 6) and Busing to Address Overcrowding

Professor Michael Russell, Boston College-California's Accountability System and the API

Professor Megan Sandel, Boston University—The Impact of the Physical Condition of School Facilities on Student's Short Term and Long Term Health

Dr. Thomas Sobol, former Commissioner of Education, New York—Identification of Conditions and Resources Minimally Required for Schools and of an Appropriate State Role in Their Provision


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[^1]:    ${ }^{2}$ Much of this paper is drawn directly from those reports, as cited throughout the text. The complete list of the report authors and topics they cover are provided in the Appendix.

[^2]:    ${ }^{3}$ Thomas Sobol, Report prepared for Williams v. State of California (2002), pp. 7-8.
    ${ }^{4}$ Sobol, p. 8.

[^3]:    ${ }^{5}$ Sobol, p. 9.
    ${ }^{6}$ Linda Darling-Hammond, Access to Quality Teaching: An Analysis of Inequality in California's Public Schools, Report prepared for Williams v. State of California (2002), citing Betts, J.R., Rueben, K.S., Danenberg, A. (2000), Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California, San Francisco: Public Policy Institute of California; Fetler, M. (1997, January), Where Have All the Teachers Gone? Education Policy Analysis Archives, 5(2) [online], http://olam/ed.asu.ed/epaa/v5n2.html; Goe, L. (2002), Legislating Equity: The Distribution of Emergency Permit Teachers in California, Berkeley: Graduate School of Education, University of California, Berkeley; Los Angeles County Office of Education (1999, May), Teacher Quality and Early Reading Achievement in Los Angeles County Public Schools, Trends: Policy Issues Facing Los Angeles County Public Schools, 6(2).

[^4]:    ${ }^{15}$ Oakes(a), p. 5.
    ${ }^{16}$ Oakes(a) pp. 7-9, relying on Fuller \& Heyneman, 1989; Fuller \& Clark, 1994; Levin \& Lockheed, 1991; Heyneman et al., 1978; Wang et al., 1993; Schiefelbein et al., 1998.
    ${ }^{17}$ Oakes(a), p. 8 citing Wang, Haertel, and Walberg, 1993.
    ${ }^{18}$ Hakuta, pp. 16-17.

[^5]:    ${ }^{19}$ Earthman, pp. 3-4; see also Michelle Fine, City University of New York, Graduate Center, Report prepared for Williams v. State of California (2002), p. 40, citing Edwards, (1993).
    ${ }^{20}$ Earthman, p. 4.
    ${ }^{21}$ Earthman p. 11, citing Lowe, 1990.
    ${ }^{22}$ Earthman, pp. 12-13, citing Corcoran et al., 1988; Fernandez \& Timpane, 1995; Riveria-Batiz \& Marti, 1995.
    ${ }^{23}$ Jeannie Oakes, Multi-Track, Year-Round Calendar (Concept 6) and Busing to Address Overcrowding, Report prepared for Williams v. State of California (2002), p. 3.
    ${ }^{24}$ There are several types of multi-track school calendars that divide the student body and staff into different tracks, which are then rotated throughout the course of the school year. If a school operates on a four-track calendar, for example, at any one time three of the four tracks are in school while the fourth is on vacation.

[^6]:    ${ }^{25}$ The Concept 6 Modified calendar differs from the Concept 6 calendar in that it operates basically with four twomonth blocks of instruction and four one-month vacations. I will generally refer to the Concept 6 and Concept 6 Modified calendars as Concept 6.
    ${ }^{26}$ Oakes (b), pp. 1-2; Ross Mitchell, Report prepared for Williams v. State of California (2002), pp. 6, 26-27.
    ${ }^{27}$ Oakes (b), p. 3; citing Julie Z. Geise, State Superintendent Makes Stop at Lodi Middle School, Lodi NewsSentinel, Oct. 26, 2001.
    ${ }^{28}$ Sobol, p. 8.
    ${ }^{29}$ Michelle Fine, Report prepared for Williams v. California (2002), p. 3.
    ${ }^{30}$ Fine, pp. 5-6.
    ${ }^{31}$ Fine, p. 13.

[^7]:    ${ }^{32}$ Fine, p. 20.
    ${ }^{33}$ Fine, p. 29.
    ${ }^{34}$ Fine, p. 52.
    ${ }^{35}$ Fine, p. 42.
    ${ }^{36}$ Fine, p. 42, quoting Declaration of Robert S. McCord in San Francisco NAACP, et al. v. San Francisco Unified School District, et al. (2002).
    ${ }^{37}$ Megan Sandel, Report prepared for Williams v. State of California (2002).

[^8]:    ${ }^{38}$ Sandel, pp. 6-14.
    ${ }^{39}$ Robert Corley, Independent School Facilities Consultant, Report prepared for Williams v. State of California (2002), pp. 13-16.
    ${ }^{40}$ Sandel, pp. 4, 7-9, 12-13.

[^9]:    ${ }^{41}$ Hakuta, p. 12.
    ${ }^{42}$ Mazzoni, 2002, cited in Oakes (a), p. 5.
    ${ }^{43}$ Oakes (a) p. 5, quoting USAID, 2002.
    ${ }^{44}$ Eastin Testimony to Little Hoover Commission, March 26, 1998, p. 8.

[^10]:    ${ }^{45}$ Diane Friedlaender and Steve Frenkel, "School Equity Study Documentation," Oakland, CA: Social Policy Research Associates, March 2002. Urban Elementary School \#4, Urban Middle School \#4, and Urban High School \#3 are the pseudonym given to three of the 17 elementary, middle and high schools, located in both rural and urban communities throughout California that were studied by Social Policy Research Associates (SPRA) in 2002. The criterion for inclusion in the SPRA study was the percentage of uncredentialed teachers employed at the school. All but two of the schools studied had at least $30 \%$ uncredentialed teachers. The SPRA team toured the schools, interviewed teachers and administrators, observed in classrooms, and examined the supply and quality of basic and supplementary instructional materials, supports for teachers, and the condition of the schools' facilities.

[^11]:    ${ }^{46}$ Darling-Hammond, p. 36.
    ${ }^{47}$ Chloe Bullard, at the request of Senator Dede Alpert, Qualified Teachers For All California Students, 1997, p. 6.
    ${ }^{48}$ California Research Bureau, California State Library, Qualified Teachers For All California Students: Current Issues in Recruitment, Retention, Preparation, and Professional Development, 1998, p. 6.
    ${ }^{49}$ Patrick M. Shields. et al., The Status of the Teaching Profession: Research Findings and Policy Recommendations, 1999, p. 9.
    ${ }^{50}$ Center for the Future of Teaching and Learning, Teaching and California's Future: The Status of the Teaching Profession, 2001, p. 1.

[^12]:    ${ }_{51}^{51}$ Darling-Hammond, pp. 4, 36, 72; Hakuta, pp. 25-26.
    ${ }_{53}^{52}$ Darling-Hammond, p. 74, citing Betts et al., 2000.
    ${ }^{53}$ Patrick M. Shields, et al., The Status of the Teaching Profession: Research Findings and Policy Recommendations, 1999, p. 34.
    ${ }^{54}$ Center for the Future of Teaching and Learning, Teaching and California's Future: The Status of the Teaching Profession, 2001, p. 1.
    ${ }^{55} \mathrm{PACE}$, Crucial Issues in California Education, 2000, p. 5.
    ${ }^{56}$ Hakuta, pp. 19-20, citing Rumberger, R. \& Gandara, P. (2000, October), The State of Education for English Language Learners in California, paper presented at the University of California All Campus Collaborative, Outreach, Research, and Dissemination (UC ACCORD) Conference, San Jose, CA; Gandara, P. \& Rumberger, R. (forthcoming, 2002), The Inequitable Treatment of English Learners in California's Public Schools.
    ${ }^{57}$ This 2002 study, conducted by Peter Harris Research Group 2002, surveyed a randomly selected sample of elementary and secondary public school teachers in a stratified random sample of California schools. The Harris group sought information regarding the teaching and learning conditions and problems California teachers face. Over one thousand public school teachers responded.

[^13]:    ${ }^{58}$ Oakes (a), pp. 20-32.
    ${ }^{59}$ Oakes (a), p. 24.
    ${ }^{60}$ SAPC, No Bang for our Books: Solving the Book Crisis in Los Angeles Schools, 1998 at 41, 44, 48.
    ${ }^{61}$ Oakes (a), p. 37.
    ${ }^{62}$ Oakes(a), p. 20.

[^14]:    ${ }^{63}$ Hakuta, p. 31, citing Harris survey data, 2002.
    ${ }^{64}$ CPEC, Toward a Greater Understanding of the State's Educational Equity Policies, Programs, and Practices (1998), p. 29.
    ${ }^{65}$ Corley, p. 6.
    ${ }^{66}$ Kerr, Sacramento Bee, Aug. 21, 2001.
    ${ }^{67}$ Corley, citing LAO, 2001.
    ${ }^{68}$ Corley, p. 8. Corley calculates that ten percent equals about 800 schools. Using an estimate of 500 students per campus, ten percent of the schools would represent about 400,000 of California's 6.1 million students. This is a very conservative estimate, given that many schools house far more students, with some campuses housing as many as 6,000 students.

[^15]:    ${ }^{69}$ Oakes(a), pp. 45-46.
    ${ }^{70}$ LHC, Recommendations for Improving the School Facility Program in Los Angeles Unified School District, 1999, p. 4.
    ${ }_{71}$ Earthman, p. 5, citing U.S. Department of Education, NCES, June, 2000.
    ${ }^{72}$ Corley, p. 10.
    ${ }^{73}$ Harris created what he called a "risk index," which was based on an evaluation of the percentage of students whose families were on CalWorks, the percentage who received free or reduced price school lunches, and the percentage of English Language Learners (ELL). He broke down the data so that one could compare the results for schools in the higher risk groups (those schools with the higher concentration of low socioeconomic status and ELL students) with those in the lowest risk group (schools with the lowest concentration of low socioeconomic and ELL students).
    ${ }^{74}$ Hakuta, p. 27.

[^16]:    ${ }^{75}$ Mitchell, pp. 13-14.
    ${ }^{76}$ Hakuta, p. 28.
    ${ }^{77}$ Hakuta, p. 28.

[^17]:    ${ }^{78}$ The information in this chart appears in the final report of the Peter Harris Research Group (2002) teacher survey.

[^18]:    ${ }^{79}$ Darling-Hammond, pp. 39-40.
    ${ }^{80}$ Oakes(a), p. 42-44.
    ${ }^{81}$ Oakes(a), p. 45.

[^19]:    ${ }_{83}^{82}$ Mitchell, p. 26.
    ${ }^{83}$ PPIC, Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California, 2000, p. 55.
    ${ }^{84}$ Darling-Hammond, p. 14, citing Sanders, W.L. \& Rivers, J.C. (1996), Cumulative and Residual Effects of Teachers on Future Student Academic Achievement, Knoxville: University of Tennessee Value-Added Research and Assessment Center.
    ${ }^{85}$ Fine, p. 26.
    ${ }^{86}$ Fine, p. 23.
    ${ }^{87}$ Fine, pp. 14, 25-27.

[^20]:    ${ }^{88}$ Patrick M. Shields, et al., The Status of the Teaching Profession: Research Findings and Policy Recommendations, 1999, p. 49.
    ${ }^{89}$ California Commission On The Teaching Profession, Who Will Teach Our Children?, 1985, p. 14, 37.
    ${ }^{90}$ LAO, The California Teacher Trainee Program: A Review, 1987, p. 1.
    ${ }^{91}$ CDE, Remedying the Shortage of Teachers for Limited-English-Proficient Students, 1991, p. 6.
    ${ }^{92}$ Little Hoover Commission, A Chance to Succeed: Providing English Learners with Supportive Education, July 1993, p. 9, 77.

[^21]:    ${ }^{93}$ California Research Bureau, California State Library, Qualified Teachers For All California Students: Current Issues in Recruitment, Retention, Preparation, and Professional Development (1998), p. 11.
    ${ }^{94}$ Shields, Patrick M. et al., The Status of the Teaching Profession: Research Findings and Policy Recommendations, 1999, p. 33.
    ${ }^{95}$ Shields, Patrick M. et al., The Status of the Teaching Profession: Research Findings and Policy Recommendations, 1999, p. 9.
    ${ }^{96}$ Center for the Future of Teaching and Learning, Teaching and California's Future: The Status of the Teaching Profession, 2001.
    ${ }^{97}$ CDE, Professional Development Task Force, Learning ... Teaching ... Leading: Report of the Professional Development Task Force, 2001, p. 5-6.
    ${ }^{98}$ CDE, Professional Development Task Force, Learning ... Teaching ... Leading: Report of the Professional Development Task Force, 2001, p. 16.

[^22]:    ${ }^{99}$ Oakes (a), p. 23, citing AAP School Division Survey, AAP Instructional Materials Survey Data Reports (1996) pp. 32, 43-47, 50-51.
    ${ }^{100}$ Oakes (a), pp. 23-24, citing Pyle, A., (7-28-1997). Book Shortage Plagues LA Unified, L.A. Times (July 28, 1997). Available at http://www.laep.org/essay/8_1/textbooks1.html.
    ${ }^{101}$ SAPC, No Bang for our Books: Solving the Book Crisis in Los Angeles Schools, 1998 at 41, 44, 48.
    ${ }^{102}$ CPEC, Toward a Greater Understanding of the State's Educational Equity Policies, Programs, and Practices (1998), p. 29.
    ${ }^{103}$ Oakes (a), p. 42, citing CDE \& CTAP, 2001.
    ${ }^{104}$ CDE, State Superintendent of Public Instruction, Delaine Eastin, (9-20-2001).

[^23]:    ${ }^{105}$ Hakuta, p. 34-35.
    ${ }^{106}$ Little Hoover Commission, Los Angeles Unified School District, 1981, p. 1.
    ${ }^{107}$ June 15, 1982 Letter from Commission on California State Government Organization and Economy to Governor, President and members of Senate, and Speaker and members of Assembly accompanying Commission' Report on the Role of the State Department of Education in California's K-12 Public Education System, 1982, p. 3.
    ${ }^{108}$ LHC, No Room for Johnny: A New Approach to the School Facilities Crisis, 1992, p. 23.
    ${ }^{109}$ GAO, School Facilities: America's Schools Report Differing Conditions, 1996, p. 36.
    ${ }^{110}$ LAO, Report on the 1997-1998 Budget, 1997, p. E-83.

[^24]:    ${ }^{111}$ Little Hoover Commission, Report to the Governor \& Members of the Legislature, November 3, 1999, p. 4.
    ${ }^{112}$ Little Hoover Commission, 1999.
    ${ }^{113}$ Letter from Gov. Davis to Fellow Democrat, April 20, 2000.
    ${ }^{114}$ Corley, pp. 73-92.
    ${ }^{115}$ Corley, p. 52, citing the Los Angeles County Office of Education, Report of Priority Corrective Actions for the Compton Unified School District, 1993, p. 17.
    ${ }^{116}$ Corley, p. 45, citing Pyle, Delaine Eastin Pledges Support for Ballot Measure That Would Fund Repairs at the District's Aging Facilities, Los Angeles Times, October 4, 1996.
    ${ }^{117}$ Corley, p. 80, citing State Department of Education/Superintendent of Public Instruction, Progress Report on the Compton Unified School District, February 18, 1997, p. 5.
    ${ }^{118}$ Mitchell, pp. 23-24.

[^25]:    ${ }^{119}$ Mitchell, pp. 6, 17, 27.

[^26]:    ${ }^{120}$ Darling-Hammond, pp. 75-77.
    ${ }^{121}$ Darling-Hammond, p. 73, citing Shields et al., 2001.
    ${ }^{122}$ Oakes (a), pp. 54-55.
    ${ }^{123}$ Corley, p. 33, noting that legislation in 1989 required the Division of the State Architect to develop statewide standards for school facility maintenance and cleanliness. Calif. Health \& Safety Code section 16500.

[^27]:    ${ }_{125}^{124}$ Darling-Hammond, p. 53.
    ${ }^{125}$ SPAC, No Bang for our Books: Solving the Book Crisis in Los Angeles Schools (1998), p. 106.

[^28]:    ${ }^{126}$ Governor Pete Wilson, Veto message, 09/23/1998.
    ${ }^{127}$ Hakuta, pp. 42-43.
    ${ }^{128}$ Corley, p. 46.
    ${ }^{129}$ Dr. Nancy R. Myers, Educational Facility Planner, The Myers Group, Solutions Available and Utilized by States Other than California to Address the Long-Term Planning, Maintenance, Supervision, and Operation of School Facilities, Report prepared for Williams v. State of California (2002), pp. 11-13.

[^29]:    ${ }^{130}$ PACE, Crucial Issues in California Education (2000), p. 49; see also Norton Grubb and Laura Goe, California School Finance Policy, Report prepared for Williams v. State of California, 2002. Note that a subsequent voter initiative lowered the percentage required to $55 \%$.
    ${ }^{131}$ Center for the Future of Teaching and Learning, SRI, Strengthening California's Teacher Information System (2002), p. 2.

[^30]:    ${ }^{132}$ CFTL, Teaching and California's Future: The Status of the Teaching Profession (2001), p. 4.
    ${ }^{133}$ LHC, Teach Our Children Well (2001), p. 65.
    ${ }^{134}$ Hakuta, p. 37.

[^31]:    ${ }^{135} \mathrm{http}: / /$ search.lausd.k12.ca.us.
    ${ }^{136}$ Oakes(a), p. 63-65, 99.
    ${ }^{137}$ Hakuta, p. 41.
    ${ }^{138}$ Padia deposition, 4-18-01.
    ${ }^{139}$ Corley, p. 29.

[^32]:    ${ }^{140}$ Little Hoover Commission, To Build A Better School, 2000, p. vi.
    ${ }^{141}$ Little Hoover Commission, "Teach Our Children Well," September 2001, Executive Summary, p. ii.
    ${ }^{142}$ Darling-Hammond, pp. 51-55.
    ${ }^{143}$ Darling-Hammond, p. 66.
    ${ }^{144}$ Little Hoover Commission (LHC), Teach Our Children Well, 2001, Executive Summary, i-ii.

[^33]:    ${ }^{145}$ Hakuta, p. 22, citing Gandara and Rumberger, 2002.
    ${ }^{146}$ Hakuta, p. 40, citing Stecher \& Bohrnstedt, 2002.
    ${ }^{147}$ Hakuta, p. 25.
    ${ }^{148}$ Oakes (a), p. 53-55.
    ${ }^{149}$ Oakes (a), p. 56-59.

[^34]:    ${ }^{150}$ Michael Russell, Report prepared for Williams v. State of California (2002).
    ${ }^{151}$ Russell, pp. vi-ix.
    ${ }^{152}$ Heinrich Mintrop, State Oversight and the Improvement of Low-Performing Schools in California, Report prepared for Williams v. California (2002), pp. 12-14.

[^35]:    ${ }^{153}$ Because the state has been unwilling to collect or analyze the data necessary to assess the adequacy of all students' access to such educational essentials as qualified teachers; appropriate textbooks, instructional materials, equipment and technology; and facilities in good condition and the costs of providing them to all students, it is impossible to say with certainty that the state has not provided sufficient funding. Accordingly, although a strong hypothesis emerges from the expert reports that providing equitable and adequate schooling to all California students will require greater levels of investment than has been the case, far better information is required to confirm it.

[^36]:    ${ }^{154}$ Prof. Norton Grubb and Laura Goe, U.C. Berkeley, The Unending Search for Equity: California Policy, the "New" School Finance, and the Williams Case, Report prepared for Williams v. State of California (2002), pp. 9-10.

[^37]:    ${ }^{155}$ Grubb \& Goe, pp. 9-12.

[^38]:    ${ }^{156}$ Grubb \& Goe, pp. 13-15.

[^39]:    ${ }^{157}$ Marshall Smith \& Jennifer O’Day, "Systemic School Reform," in S. H. Fuhrman \& B. Malen (Eds.), The Politics of Curriculum and Testing, Politics of Education Association Yearbook, pp. 233-267, London: Taylor \& Francis, 1990.

[^40]:    ${ }^{158}$ Jennifer O'Day \& Marshall S. Smith, "Systemic Reform Educational Opportunity," Designing Coherent Education Policy: Improving the System, edited by Susan H. Fuhrman. San Francisco: Jossey-Bass Publishers, 1993, pp. 250-312. .
    ${ }^{159}$ Reasons for this in are complex and have little to do with delivering a quality education to the desktop of all California students. A national struggle over the meaning of systemic reform and political wrangling in Sacramento over the control of California's education policies undermined the state's ability to frame systemic policies to ensure adequacy and equity for all students. California's flirtation with systemic reform as with all its education policies has been shaped by the state's continued reluctance to invest in education, as well as by its distribution of political power.

[^41]:    ${ }^{160}$ R. F. Elmore \& S. H. Fuhrman, "Ruling Out Rules: The Evolution of Deregulation in State Education Policy" Teachers College Record, 97:2, 279-309, Winter, 1995.
    ${ }^{161}$ EdSource OnLine, "Shifting the Focus to Learning: California's Accountability Debates," 1998. ${ }^{162}$ SB 1X, 1999.

[^42]:    ${ }^{163}$ Veto message to the Legislature, October 10, 1999.

[^43]:    ${ }^{164}$ Russell, pp. xi-xvi, 21-28.

[^44]:    ${ }^{165}$ Darling-Hammond, citing Sonstellie, Brunner, \& Ardon, 2000, p. 90.
    ${ }^{166}$ Darling-Hammond, citing Ed Source, 2001, p. 1.

[^45]:    ${ }^{167}$ California Postsecondary Education Commission, 1998, p. 29.

[^46]:    ${ }^{168}$ C. Jepsen, \& S. Rivkin, Class Size Reduction, Teacher Quality, and Academic Achievement in California Public Elementary Schools, San Francisco: Public Policy Institute of California, 2002.
    ${ }^{169}$ Russell, pp. v, 3-6.
    ${ }^{170}$ Russell, pp. vi-viii; Mintrop, pp. 13-17.
    ${ }^{171}$ California Constitution Revision Commission, Final Report and Recommendations to the Governor and the Legislature (1996), p. 62.

[^47]:    ${ }^{172}$ Oakes (a), pp. 75, 102-103.

[^48]:    ${ }^{173}$ Corley, p. 43; Myers, pp. 3, 7.
    ${ }_{175}^{174}$ Darling-Hammond, pp. 55-71; Hakuta, p. 47-50.
    ${ }^{175}$ Darling-Hammond, pp. 64-65.

[^49]:    ${ }^{176}$ CDE, Remedying the Shortage of Teachers for Limited-English-Proficient Students (1991), p. 10.
    ${ }^{177}$ PPIC, Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California (2000), p. xxv.
    ${ }^{178}$ CDE, Professional Development Task Force, Learning ... Teaching ... Leading: Report of the Professional Development Task Force (2001), p. 21.
    ${ }^{179}$ LHC, Teach Our Children Well (2001), at iii.

[^50]:    ${ }^{180}$ Myers, pp. 11-12.
    ${ }^{181}$ Myers, pp. 8-9, citing the National Research Council (1990).
    ${ }^{182}$ Myers, p. 4.

[^51]:    ${ }^{183}$ Myers, p. 5.
    ${ }^{184}$ Oakes (a), p. 109.

[^52]:    ${ }^{185}$ Center for the Future of Teaching and Learning, SRI, Strengthening California's Teacher Information System 2002, p. 4.
    ${ }^{186}$ Center for the Future of Teaching and Learning, SRI, Strengthening California's Teacher Information System 2002, p. 2.

[^53]:    ${ }^{187}$ Myers, p. 6.
    ${ }^{188}$ Myers, pp. 7-10.
    ${ }^{189}$ Myers, pp. 3-4.

[^54]:    ${ }^{190}$ Mintrop, p. 21.
    ${ }^{191}$ Mintrop, pp. 22-23.
    ${ }^{192}$ Mintrop, p. 22.
    ${ }^{193}$ Mintrop, pp. 23-24.

[^55]:    ${ }^{194}$ Sobol, p. 13.

[^56]:    ${ }^{195}$ Grubb \& Goe, p. 34.
    ${ }^{196}$ Russell, p. xvii.
    ${ }^{197}$ Darling-Hammond recommends that the state's accountability system should include an annual, publicly available, Teacher Qualifications Index that would provide school-level and district information about the number of emergency permits, waivers, intern, pre-intern, clear credentialed, and National Board Certified teachers employed at each school site and within each district.

[^57]:    ${ }^{198}$ Russell, pp. xvii-xix.
    ${ }^{199}$ Russell, p. xxi, 49-50; Oakes (a), p. 110-113.

[^58]:    ${ }^{200}$ Mintrop, p. 23.
    ${ }^{201}$ Mintrop, p. 8, citing Elmore, 1997.

[^59]:    ${ }^{202}$ Sobol, p. 17.

