

Research Underpinnings of the Committee’s Review

Committed to improving student achievement and charged with analyzing “current impediments to excellence” and exploring “ideas and best practices relevant to California,” the Committee was determined from its inception that its efforts to provide a high-quality education to every student in the state would be grounded in the most up-to-date and compelling research on effective practice wherever possible — that its recommendations would be supported by research demonstrating that student achievement gains will result from them.

Introduction

The Committee’s diverse membership of seasoned educators, policymakers, and entrepreneurs brought with them a deep awareness of a large body of pre-existing research that would be relevant to the Committee’s work. To support that work, members and staff identified and reviewed the most relevant research findings. This included a review of the academic literature on school finance, school governance, teacher/administrator quality, and early childhood education. While the existing resources were extensive and would take months for the Committee and staff to study and discuss, it quickly became evident that too little of this research shed much light on California-specific issues. Thus, the Committee determined to obtain additional research on key issues of sufficiency and efficiency in California’s educational spending and delivery and in governance, as well as critical factors impacting the ability to attract, prepare, and retain highly qualified and motivated teachers and administrators to be able to provide the education envisioned by proponents of a new educational model.

The Committee began to work with a consortium of four foundations — the Bill & Melinda Gates Foundation, The William and Flora Hewlett Foundation, the James Irvine Foundation, and the Stuart Foundation — that were developing the scope of work for a set of California-specific education finance studies. Coordinated through Stanford University’s Institute for Research on Education Policy & Practice (IREPP), the Getting Down to Facts investigations were formally requested by the Committee, Superintendent of Public Instruction Jack O’Connell, Senate President Pro Tempore Don Perata, Assembly Speaker Fabian Nuñez, and Secretary of Education Alan Bersin. The purpose of the project, from the requestors’ perspective, was to support investigation and policy and fiscal recommendations on needed reform in public education. As a formal requestor of this study, the Committee advocated for broadening the scope of these studies to incorporate integral issues beyond education adequacy; the foundations and Stanford researchers coordinating the project graciously agreed. Ultimately, Getting Down to Facts helped shape the Committee’s deliberations and findings and especially helped to confirm with rigorous research many of the working assumptions about California’s finance and governance system that the Committee had used for nearly two years preceding the release of Getting Down to Facts.

The Committee also examined the reports, background documentation, and even minutes of the proceedings of several other organizations that earlier had examined California’s public education system. Chief among these resources were the Joint

Legislative Committee to Develop a Master Plan for Education (1999–2002, discussed in detail below), the California Constitution Revision Commission (1994–96), and the California Commission on Educational Quality (1987), among others. The Committee further examined the reform efforts being carried out in many other states and municipalities to learn from their findings to the greatest extent possible; some of the key reports from other jurisdictions are summarized in Appendix H.

Finally, the Committee hired professional staff and several graduate school students to conduct its own research and develop an extensive set of topic-specific policy briefs. The Committee divided into subcommittees for each of the four charge areas — finance, governance, teachers, and administrators — and each subcommittee was independently supported by these staff. Those subcommittees examined detailed information gathered from all of these sources to inform the development of options and preliminary recommendations, which were then vetted by the full Committee at its monthly meetings.

The findings of this broad inquiry were sobering, as the depth of California’s structural deficiencies — the lack of infrastructure to support a culture of continuous improvement — was made evident, and the Committee recognized that many of the same problems California faces today were identified as impediments to success 20 years ago.

At the same time, the Committee is encouraged by the many promising efforts being undertaken elsewhere and by the energies being exerted across the nation to improve education. Those efforts tell us that California is far from alone in facing this challenge, that others share a vision of comprehensive and coherent reform to overcome them, and that there is a public will to take on this challenge.

Two particular inputs had importance in the Committee’s work, both in terms of shaping deliberations and influencing final recommendations: the Getting Down to Facts project and the 2002 California Master Plan for Education. Their key findings are summarized below.¹

Getting Down to Facts: School Finance and Governance in California

For more than 18 months, an extraordinary array of scholars and education professionals from 32 institutions undertook an unprecedented inquiry into the current state of California school governance and finance.

Background

Initially, the Getting Down to Facts studies were aimed primarily at (1) understanding how California allocates and spends the money it uses for K–12 education and (2) determining the adequacy of those funding mechanisms and funds in meeting the high standards the state has set for its students.² The Committee conducted an intensive review of the proposed foundation-supported research and collaborated with Stanford University professor Susanna Loeb, director of the research project, and representatives of the project funders to provide feedback on the initial proposals with the intent of modifying the proposed studies and adding new studies to the project. This served the mutual benefits of ensuring that the Committee would have access to high-quality research and that the body of research would be more comprehensive and coherent for all who wish to use it as the basis for proposals to reform education finance and delivery. As a result of this interaction, the research consortium expanded its scope of work to include research in areas of governance, fiscal efficiency, employment policies, professional compensation, and other important issues critical to the Committee’s objectives. The project researchers addressed three broad and inter-related questions, plus the many secondary issues that impact them, in 23 cited research studies and a project summary:

1. What do California school finance and governance systems look like today?
2. How can the state use available resources more effectively to improve student outcomes?
3. To what extent are additional resources needed so that California’s students can meet the goals the state has for them?

Principal conclusions

The Committee's own investigations and deliberations proceeded during the course of the Getting Down to Facts research. When the draft studies were made available, the Committee devoted nearly two months to examining their findings and using them to inform the Committee's work. The Committee was struck by the studies' portrayal of an education system that structurally impedes effective teaching and learning.

The IREPP summary paper of the 23 studies by Susanna Loeb, Anthony Bryk, and Eric Hanushek of Stanford University was very to the point: *"Quite simply, the finance and governance system is broken and requires fundamental reform, not tinkering around the edges."*³ This assessment was based on evidence found throughout the project of widespread structural impediments to success and a resulting lack of sufficient student achievement. Although this project was initiated as a costing-out of a high-quality education, a chief finding was that "financial investments will only significantly benefit students if they are accompanied by extensive and systemic reforms. Without accompanying policy reforms, the substantial gains in student outcomes that Californians need are unlikely to accrue." The researchers found unmistakable evidence that the system for public education in California is "not making the most efficient use of its current resources," meaning that "only directing money into the current system will not dramatically improve student achievement to meet expectations" and that "what matters most is the way in which the available resources are used."

The researchers recognized that "no one program or intervention will fix the system," stating that "clearly California has tried this approach again and again." The message of the entire collection of studies is that a fundamental change will be needed if California is to provide a high-quality school system; picking a small subset of reforms and ignoring the others most likely will have few benefits. Moreover, the researchers found that "producing dramatic improvement in student learning will require the state to create the infrastructure needed to support an education system committed to continuous improvement."⁴

Study finds current system results in unacceptable outcomes

While the summary paper concluded that piecemeal reform was not a viable path for dramatic improvement, the studies provided a timely call to action by carefully reviewing the current student achievement levels in California and how that achievement compares to other states. "Despite the development of challenging education standards and sustained attention to school improvement over the past decade, California continues to lag behind other states in achievement scores," and "on many different measures of achievement, California's students fall far below those in other states."⁵

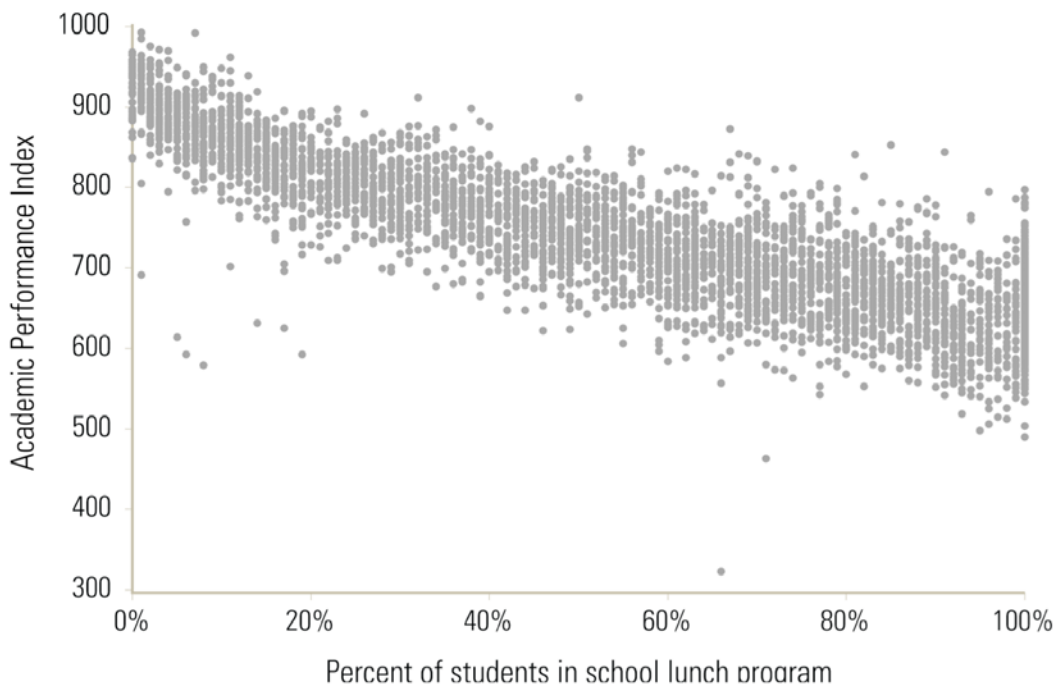
On the 2005 National Assessment of Educational Progress (NAEP), California ranked seventh lowest in 8th grade math in comparison to the 49 other states and the District of Columbia; perhaps more telling, the *average* California student is competitive with just the *bottom quarter* of students in Massachusetts. The story is at least as bad in other subjects for 8th-graders. California performed third lowest in reading, ahead of only Hawaii and the District of Columbia, and second lowest in science, ahead of only Mississippi.

The summary paper noted that "some suggest that California's position simply reflects the large minority population in the state, but the facts on achievement belie this." Broken down by student subgroups, the results still were bleak. For example, "in math, California was 15th from the bottom for white students, 4th from the bottom for Hispanic students, and 11th from the bottom for black students. Seventy percent of Hispanic students in Texas score higher than the average Hispanic student in California. Even children of college graduates in California scored 15th from the bottom relative to their peers in other states." The researchers therefore conclude that "California schools do not do well for any group. Significant progress will require fundamental and comprehensive change."⁶

IREPP also showed that California schools are not doing well against California’s own standards. Despite significant recent gains on the California Standards Test, only 42 percent of students are proficient or above on the English language arts test, and only 40 percent of students are proficient on the mathematics portion across grades 2–11. Meeting the No Child Left Behind (NCLB) goal of 100 percent proficiency will take a significant improvement.

The principal adequacy study focused particularly on the Academic Performance Index (API), which is a composite measure (on a scale of 200–800) of a school’s performance across grades 2–11 and multiple subjects.⁷ The state has established an interim goal of 800 points, substantially lower than the NCLB target of all students proficient or above (over 875). Only about 20 percent of schools have met the state’s interim target, and a vast majority are elementary schools; only 3 percent of high schools have met the state’s API target. The graphic “Percent of Students Participating in Subsidized School Lunch Program and API K–5 and K–6 Schools, 2004” illustrates the correlation of income to school performance: Virtually no schools serving a high proportion of economically disadvantaged students are near the state’s API target.⁸ The Sonstelie study shows similar results for English learners. Because more than half of the state’s students are eligible for free or reduced-price lunches, and one-fourth of students are English learners, the state will need to do a much better job of educating these targeted populations to achieve its desired outcomes.

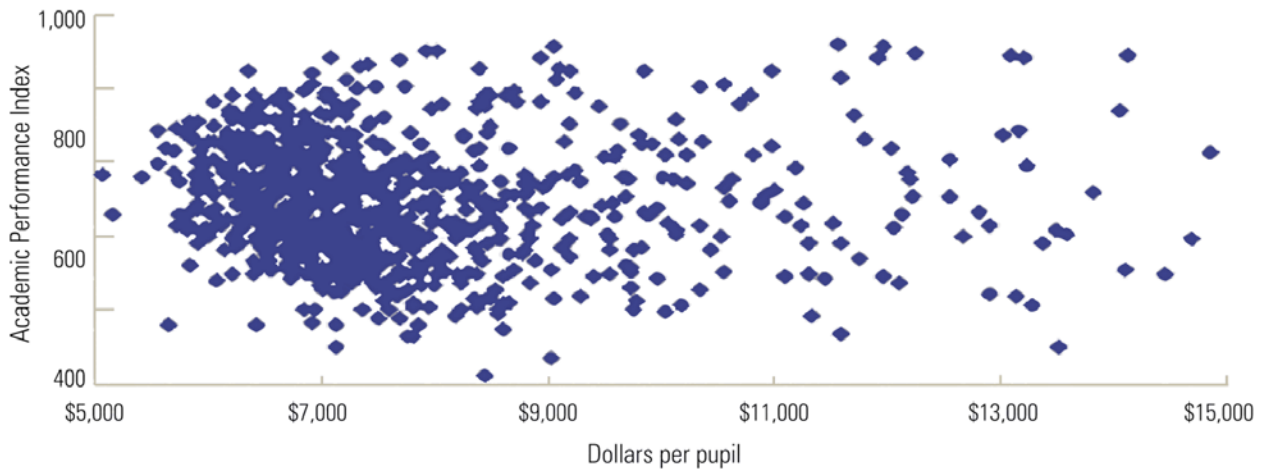
Percent of Students Participating in Subsidized School Lunch Program and API, K–5 and K–6 Schools, 2004



Source: Sonstelie, Jon (2007).

Differing from popular belief, the studies showed little direct relationship between the aggregate amount of funding a district receives and its average API (demonstrated in the graphic “District API and Spending per Pupil 2004–05”).⁹ The study identified low-spending and high-spending schools with high achievement and a similar mix of schools with low achievement. The study concluded that this lack of a distinct link between funding and student outcomes makes it difficult to determine the additional cost of meeting a specified state or federal achievement target.

**District API and Spending per Pupil 2004–05
Data from Imazeki (2007/GDTF)**



Source: Imazeki, *Getting Down to Facts*

Study finds state lacking in each of the Committee’s charge areas

Beyond the overall findings, the researchers found the state falls short in every one of the Committee’s four areas of focus: teacher and administrators, finance, governance and accountability, and data. The study also found direct relationships between the shortcomings in one area and those in another, especially the inter-related problems in the finance and governance systems.

Current policies do not adequately support teachers and administrators

Susanna Loeb and Luke Miller found that current teacher policies do not let state and local administrators make the best use of the pool of potential teachers, nor do the policies adequately support current teachers.¹⁰ Teacher education and professional development requirements often are disconnected from the knowledge and skills needed to be effective in the classroom. And while Loeb and Miller cited some evidence that high-quality teacher education can improve teaching, policies that create incentives for teachers to obtain generic credits (such as required master’s degrees) are costly for teachers and districts and result in little benefit for students while mitigating the potential benefits that can result from needs-based professional development. Salary schedules were found to have adverse impacts on the ability to meet the greatest challenges: Similar salaries across subjects lead to shortages in fields that present greater outside opportunity or that have greater preparation requirements or more difficult work; and similar salaries across schools lead to teachers sorting based on non-wage characteristics of the schools.

Bruce Fuller and other Policy Analysis for California Education (PACE) researchers also found that California’s administrators face numerous constraints that impede their effectiveness. California has significantly fewer administrators per pupil than other states, yet its compliance-driven system forces them to spend more time on paperwork. Thus, principals have less time to be instructional leaders. National data also show that California’s principals have more difficulty dismissing teachers than in other states because of the constraints of both state policy and local contract provisions. Principals and superintendents say having more control over dismissing weak teachers would be the most important factor for improving student outcomes — though they only would be interested in dismissing one or two teachers at the average school, suggesting the importance would lie with the change in teacher incentives that would result if a principal had this authority.¹¹ In addition, California lacks effective teacher evaluation capacity to help principals and lead teachers make decisions about teachers’ careers. Principals at “beating the odds schools” often are able to dismiss teachers (or encourage them to leave) and work creatively with the policy and contracting requirements.¹²

Finance: Current system is complex, irrational, inequitable, and inefficient

The IREPP summary report concludes that studies overall “share a common conclusion that while some resources help student learning, some, either intentionally or unintentionally, do not.”¹³ Therefore, “how dollars translate to resources is fundamental to understanding the link between dollars and student outcomes.” The researchers concluded that the current finance system is (1) complex and irrational, (2) inequitable by any measure, (3) highly centralized and inefficient at allocating resources, and (4) dependent on unstable funding sources.

Complex and irrational. District spending levels are largely a historical artifact of the 1970s, combined with a confusing array of categorical programs that does not appear to systematically address differences in needs across districts. The system is confusing and requires substantial and costly compliance work by schools and districts. In their respective studies, Michael Kirst and Thomas Timar found that California’s school finance system is “extraordinarily complex” and “has no coherent conceptual basis.”¹⁴ IREPP specifically concluded that the system “is not intentionally designed as a coherent mechanism for meeting state education goals or meeting student needs.”

Inequitable by any measure. The project conclusion is decisive: “Overall, California’s school finance system fails to provide for an equitable distribution of funds between districts and students. The simple inequity in resource allocation is further exacerbated by the availability and usage of volunteer time in wealthier districts.”¹⁵ Various studies found inequities in operational funding, facility funding, and voluntary contributions:

- **Operational funding.** Notwithstanding that California has been subject to financial equalization across districts, in part dictated by settlement of *Serrano v. Priest*, the project concluded that there is wide variation in spending across California school districts. Susanna Loeb, Jason Grissom, and Katharine Strunk found that, “[a]cross all funds, the difference in total expenditures in a district at the 25th percentile of spending and a district at the 75th percentile of student-weighted spending is more than \$3,000 per student. Even limiting ourselves to a much more exclusive category from the general fund that does not include capital spending, the difference between the 25th and 75th percentile of student-weighted spending is more than \$1,000 per student.”¹⁶ Compounding these disparities, the current finance system neither “treat[s] similar districts similarly nor effectively account[s] for needs differences by funding different districts differently.” Demographic and organizational characteristics that reasonably could correlate with spending disparities across districts — such as poverty level, racial and ethnic makeup, urban status, and district grade span — only account for a small portion of the variation in spending. For example, 20 percent of districts with the highest proportions of students in poverty, English learners, or special education students do not reveal the highest average spending.
- **Facilities funding.** Facilities funding contributes significantly to enlarging the differences in spending across districts, very much along the same lines of socio-economic status. Eric Brunner determined that in unified school districts, the differences between the 75th and 25th percentiles of facility revenue per pupil exceed \$10,000 and similar disparities in facilities funding exist in elementary and high school districts.¹⁷ Although recent policy changes have begun to address wealth-based disparities, Getting Down to Facts nevertheless concluded that “wealthier districts, those with greater assessed property values per pupil, have higher facilities funding, on average, reflecting differences in demand and their willingness to pay” such that “these districts are able to raise substantially more revenue through local general obligation bond issues and consequently tend to have higher total revenue per pupil.”
- **Voluntary contributions.** Voluntary contributions of money and time further exacerbate the variation in resources across districts. Bruce Fuller *et al.* found, for instance, that “elementary schools, for example, rely on volunteers to help staff classrooms: 55 percent said that they rely on volunteers ‘a great deal’ to help staff classrooms while another 34 percent say they do so ‘sometimes.’”¹⁸ They also draw on parents and other volunteers for tutoring (15 percent, a great deal; 34 percent, sometimes) and clerical assistance (17 percent, a great deal; 24 percent, sometimes). High schools rely on volunteers more heavily for organizing after-school and sports activities (35 percent, a great deal; 41 percent, sometimes).”

Moreover, these usages were highly proportional to wealth: “Principals in higher-income communities reported substantially more frequent use of volunteers to provide clerical work, adult supervision at morning arrival or playground duty, tutoring, and help running sports activities than did principals in poorer communities.” Fuller *et al.* found the disparities to be wide: “Dividing elementary schools in half based on the percent of students receiving subsidized lunch, 76 percent of high-income principals report substantial reliance on volunteers for classroom assistance, compared with 38 percent in lower-income schools; these numbers are 24 percent versus 7 percent for clerical assistance and 22 percent versus 5 percent for tutoring.”

Highly centralized and inefficient at allocating resources. The structure and operation of California’s finance system constrain local players in multiple ways, severely hampering the ability of local districts and schools to respond to the needs of their students. The project concluded that “not only does the state determine revenue levels, but it also prescribes more of what the dollars should be spent on than do other states.”¹⁹ Constitutional limits on local property taxes restrict districts’ ability to raise additional funds for school operations. Although there may be no absolute finding about whether state-determined allocations are or are not in the best interest of students, the evidence in California is that “districts on average are allocating resources more effectively when given flexibility than when the allocation is determined by the state.”²⁰

Loeb, Bryk, and Hanushek noted that “restrictive categorical funding programs limit districts’ and schools’ ability to respond to the accountability system and to student needs. They also present substantial paperwork requirements, which on top of low staff-to-student ratios, reduce the time available to focus on instruction and on students, more generally. Late budgets further constrain planning and make it difficult for administrators to allocate resources effectively. Constraints on local revenue generation also may reduce community monitoring of schools ...”²¹

In addition, Loeb, Bryk, and Hanushek documented that the school finance system does not treat districts equitably. Although “there is little argument for the state to give districts that are very similar very different levels of funding,” they found that “California does just that, due to 30 years of sequential and often conflicting reforms resulting in current spending formulas.” At the same time, the system “also does not compensate districts for clearly different costs associated, for example, with the labor market for teachers in the region or with the students that they serve.” Their indisputable conclusion: “Clearly, fundamental changes are needed in the funding structure so as to more rationally address these similarities and differences.”²²

Funding and policies are often unstable: Loeb, Bryk, and Hanushek concluded that “the instability of revenue for schools combined with the complexity of the system to make it even more difficult for local administrators to plan effectively.” Kirst found that “stock price volatility and the state’s relatively progressive personal income tax have created years of boom and bust for California schools.”²³ Reinforcing the impact of these uncertainties, more than three-quarters of superintendents surveyed stated that “knowing the budget earlier would be a great deal of help or essential for improving outcomes for students.”²⁴

Finance: Current funding level is inadequate to achieve goals

Various studies from the project show that there is little relationship between the level of funding and student outcomes. This reiterates the summary study’s overall conclusion that investing more money in the current system is not likely to lead to a different result. Because there is such a weak relationship between funding levels and student outcomes, the various Getting Down to Facts studies estimate a wide range of funding levels that would support an “adequate” education (ranging from \$1 billion to \$1.5 trillion more than currently being spent).²⁵ In addition, since these studies build on all of the shortcomings and inefficiencies of the current finance system, it should not be surprising that some of the studies suggest that the state would need to invest significantly more than the current funding level.

California spends less than other states. Using data for the 2004–05 academic year, Loeb *et al.* found that California districts spend, on average, \$10,593 per average daily attendance (ADA).²⁶ Considering only “student spending” (excluding capital

spending), districts spend \$8,074 per ADA on average from all funds. When adjustments are made for state-specific costs and salary differentials, it is estimated that New York spends 75 percent more than California; Texas, 12 percent; Florida, 18 percent; and the rest of the country, nearly 30 percent. While California spends less than other states overall, teachers in California are the highest paid in the nation. The combination of low spending and high salaries results in California having fewer educators (teachers, administrators, support teachers, and teacher aides and assistants) per pupil than other states.

The state can learn from schools that beat the odds. Research on schools that are “beating the odds” — by producing high student achievement in settings serving largely economically disadvantaged students — found that schools with similar resources have very different student outcomes: Some districts simply appear to get higher student achievement from the available resources than others.²⁷ Although there is a strong relationship between student outcomes and student background characteristics, the research demonstrated that among schools serving similar student groups, some schools are far more successful than others at facilitating learning. The American Institutes for Research (AIR) determined that “successful school analyses can be used to see whether there are some resource allocations or, more general, practices that appear to support student outcomes.” Not surprisingly, researchers found no magic formula. Rather, AIR concluded that “it is how a complex system works together towards its goals. The combination of factors said to be contributors to the [beating the odds] schools seemed unique to each school.” Still, AIR stated that “some factors were mentioned frequently enough to emerge as themes, including the existence of high-quality teachers and staff, implementation of a standards-based curriculum, and coherent instruction.” Other conclusions include the following:

- **Among schools that serve a high proportion of students in poverty, even the most successful rarely meet state achievement goals.** As with schools serving more advantaged populations, schools serving largely economically disadvantaged students obtain very different results. Nonetheless, the challenges of educating these students are sufficient that current approaches very rarely bring average performance up to state goals.
- **There is no one best practice for resource use, though some commonalities emerge.** Interviews with administrators at particularly successful schools suggest that there are two closely related factors that are common across these schools:
 - *High-quality teachers responsible for delivering the content of the curriculum to their students.* They are held accountable for ensuring that students understand the main content areas that are covered in the curriculum. Some of the common traits of these successful schools are that they have strong leaders among the teaching staff, the teachers are dedicated and collegial with high morale, and the principals have set high expectations that have been clearly articulated.
 - *Coherent instruction, implementing a standards-based curriculum.* An important component of instructional coherence is having a schoolwide vision or set of common goals related to instruction and ensuring that vision encompasses a standards-based curriculum.

Professionals judge that schools serving disadvantaged students needed more resources. In two different studies, panels of professional educators who were surveyed produced recommendations for school improvement: “adding resources to reduce class sizes, extending the instructional day and year for all students, and ... hiring specialists to work with small groups of students and ... fostering professional development opportunities for teachers.”²⁸ These panels endorsed “added resources for early education and extended day and year programs specifically for schools with high proportions of students in poverty or with high numbers of English learners.” They “emphasized that student achievement wasn’t necessarily dependent on the number of personnel staffed at the school level, but on how their roles and time were allocated.”

The project questioned existing school finance systems, including California’s, that fail to account for differences in the cost of educating students from different backgrounds. Specifically, the summary study suggested that any state attempting to hold its schools to a particular standard will need to provide a higher level of resources to schools serving a higher portion of economically

disadvantaged students.²⁹ The studies said that a lion’s share of any additional investments should be made to assist economically disadvantaged students and English learners. The Sonstelie study further suggested that the state transform the current finance system, driven largely by categorical programs, to a weighted-pupil funding system in which the funding a school or district receives would depend on the type of students served.³⁰ Thus, schools serving students with additional needs would receive a higher level of funding. Specifically, the Chambers study cited that one “professional judgment survey analysis estimates that for each additional 1 percent of students in poverty, elementary, middle, and high schools require \$111, \$91, and \$49 additional per pupil, respectively, to meet their outcome goal,” while the Sonstelie study suggests that a school could raise its API score by an additional 13 API points for each additional \$1,000 spent per pupil.³¹

Needs of English learners are similar to those of economically disadvantaged. Patricia Gándara and Russell Rumberger reported a “large range of findings with some showing no additional costs [for English learners] after including poverty adjustments, while others find up to 159 percent additional dollars needed. The average is approximately 20 percent additional resources.”³²

These same researchers further note that “[c]ase studies of schools provide some insight into possible resource needs. They show that many schools that are doing well overall are not doing well with English learners. There are indications that additional time is critical, as are computers, materials in multiple languages, attention to non-cognitive issues such as motivation, communication with parents, time for teacher collaboration, and the availability of bilingual personnel even when instruction is in English. Except for the last one, these factors are similar to those that emerge for students in poverty.”

Generally, then, Gándara and Rumberger suggested that the funding needs of English learners largely mirror those of economically disadvantaged students and could be addressed in similar ways.

Governance and accountability undermine incentives for achievement

The IREPP summary concluded from several studies that highly prescriptive finance and governance systems thwart incentives for higher achievement and local schools and districts in their efforts to meet the needs of their students. Extensive restrictions on local resource allocation, for example, keep administrators from responding to accountability incentives. They also lead to sub-optimal allocation of resources in that schools spend money as the regulations demand, not necessarily to meet the needs of their students. Compliance with regulations and associated paperwork also takes away significant time from work with students. Principals in California spend more time on administrative activities because of the bureaucratic structure of the California governance system; this leaves less time for other school leadership activities, such as mentoring, curriculum development and review, and professional development.³³ At the same time, constant policy changes resulting from a continually changing state policy and budget environment hinder planning and frustrate school and district staff.

The research identified five areas that characterize an effective governance system.³⁴ It found California lacking in all areas, specifically the following:

- **Accountability** — In California, accountability is viewed as additional compliance, rather than the foundation of the system. Other states that have pursued high-stakes accountability decentralized decision making as part of its reform. California did not and instead layered accountability on top of a highly centralized decision-making process. As a result, the incentives created by accountability have not likely been as effective to motivate local innovation in California because of a lack of local flexibility necessary to make changes in response to the incentives normally created by an accountability system.
- **Stability** — California’s entire education landscape is unstable. Schools have experienced continual changes in categorical program requirements, voluminous and prescriptive statutes, assessments, and curricula, all depending on the whims of the state policymakers in office at any given time. Because the main funding source, Proposition 98 funding, is directly tied to the state’s General Fund budget, school revenues have tended to be volatile over time, going through periods of feast or famine. Finally, staff turnover at all levels contributes to instability.

- **Innovation, flexibility, and responsiveness** — In California, compliance is stressed over creativity, and the state’s one-size-fits-all approach constrains districts’ ability to meet local students’ needs. Because changes in the system often require locals to take their problems to Sacramento to have them addressed, school districts cannot respond quickly to changes in their needs.
- **Transparency** — Lines of authority are unclear, especially at the state level. The current state governance structure provides uncertainty about who is in charge and leads to finger pointing when problems arise. Decision makers throughout the system suffer from a lack of information because of inadequate information systems. Parents have difficulty accessing information about their schools to participate in the process. And the influence of special interest groups reduces the public’s ability to know what is happening in its school system.
- **Simplicity and efficiency** — California’s system is overly complex and fragmented.

The summary study stated that “it seems clear to us that the massive improvements in student learning desired in California will entail a major, sustained commitment to improving governance.” It concluded that “the extraordinary amount of regulation in California combines with low numbers of school administrators, flawed teacher policies and a lack of information to hinder effective use of the available resources.”³⁵

Data not available to support decision making

The IREPP summary concluded that the existing capacity within California for “designing optimal policies is shockingly weak,” in large part because “we cannot be confident that we can recognize and weed out programs that are ineffective at improving student achievement.”³⁶ The lack of knowledge about the effectiveness and efficiency of California schools stems from a general lack of quality data about schools and the components that make up the education process, as well as the lack of a research and evaluation programs to test the effectiveness of reform strategies. Remarkably, notwithstanding the widely observed deficiencies of the public school system, “we have had very little data available on students, teachers, schools, and districts that linked them together over time in ways that would allow us to assess the effects of policy interventions.”

Loeb, Bryk, and Hanushek further stated: “California clearly lacks good information about the effects of policies and programs. Many of the past disappointments with educational policy can be traced to the fact that schools and decision makers never received accurate information on the outcomes of policies that they had put in place. Programs are continued or replaced on an entirely haphazard basis, not on the basis of clear evidence about impacts on student performance. Second, for the first time districts and schools are collecting data that if utilized effectively could vastly and relatively quickly improve the knowledge base. Should we take swift and definitive actions to synthesize these data into usable forms and combine this with increased local decision flexibility and capacity to utilize information, we could be able to relatively quickly make significant gains in our understanding of beneficial and detrimental education policies.”

The state lacks a true culture of data. Principals indicate that they do not use data to help evaluate student progress, the quality of the education programs serving those students, and the quality of the professional development programs serving school staff.³⁷ The state gathers data through multiple collections, the data sit in disparate databases that do not work together, and the information flows are one-way, from the district to the state. By not valuing data and the investments needed to implement a high-quality data system, the state and its schools cannot realize an important resource to change the system. Pointing to models such as Florida, the researchers determined that California should establish a protocol and system for unified data collection that follows students and teachers over time, links them together, and correlates them together with programs and resources they experience to evaluate effectiveness. They pointed out that “the most advanced states currently have put together systems to record policies and performance of individual students from pre-K through college and even beyond into the labor force” so that “a school administrator can track how students are progressing, how different teachers and programs are affecting this performance, and the effectiveness of different uses of resources.” Researchers noted that “with carefully linked data on

students and teachers, the state Department of Education would be able to assess the efficacy of different programs for failing schools” and “parents could ... see directly how their school is doing relative to other schools serving a similar population.”

Current plans to upgrade existing data collection systems will not provide California the capacity to use performance data or the clarity on resource flows and financial issues it must have to inform successful reform of K–12 public education. The IREPP summary concluded that “the state has seen a large number of districts enter into fiscal chaos, in substantial part because the existing data systems did not provide sufficient information about the fiscal situation,” and that “parents today do not get transparent information about performance in a school or about programs and resources.”³⁸ Stated most starkly, “on the programmatic and resource side, virtually no usable data are currently available.”

Loeb, Bryk, and Hanushek also criticized the lack of evaluation throughout the system (state, district, and school level) to inform future decisions. The status quo is that “evaluation at all levels is missing.” “Experiences with programs implemented in one district could inform policy decisions in other districts, but this rarely happens.” Thus, “without this evaluation, it is difficult to select appropriate professional development, to utilize teachers for their strengths or to dismiss those who are continually ineffective.” Again, as matters now stand, “superintendents and principals are constrained along multiple dimensions, including prescriptive categorical programs, a convoluted education code, and difficulty dismissing ineffective teachers.” It also noted that “the state Department of Education also has little capacity to support the work of districts and schools.” Therefore, the applicable principle is once again both common-sensical and absent from the K–12 public education system in California: “There simply is no substitute for linking decisions to student outcomes and for acting on evidence generated about effectiveness.”³⁹

Getting Down to Facts provides a foundation for reform

While Getting Down to Facts did not offer formal recommendations, the studies’ conclusions in many areas so logically lead to recommendations that the Committee highlights some of the more important ones here. The summary report recognized that “no one program or intervention will fix the system” and that “clearly California has tried this approach again and again.” The Committee quotes at length the project’s essential conclusions, calling for development and implementation of a comprehensive and integrative systems approach for fundamental and broad-scale reform:

California would benefit from systems that recognize the complexity of the task and the state of our knowledge. It would implement reforms that improve the ability of decision makers at all levels to make good decisions for students. Such a system would improve the alignment between the accountability system and the decision-making responsibilities, increasing flexibility at the local level. It would improve information collection, both at the state level where data should follow students over time and link them with the resources they receive and at the local level where networks of teachers and administrators could learn from each other’s experiences. It would refine policies to attract and retain high quality teachers and administrators, learning from the effects of the policies it implements. It would simplify its school finance formulas so that similar districts would be treated similarly and differences across districts would be treated reasonably and consistently. It would also target resources to improve the outcomes of students in poverty most of whom are unable to reach state goals in the current system. And for all school districts, it would make the state budgeting process more predictable, removing the peaks and valleys in annual appropriations, and establishing distributional decisions earlier in the spring so that schools and districts could be more strategic in determining how best to use their resources for the next academic year.

Finally, we cannot emphasize enough that asking the question, “how much money will it cost to achieve state goals for students?” is meaningless without also asking “how can we develop a system that makes better use of the resources available?” California is so far from achieving its outcome goals for students that marginal changes are unlikely to produce

the desired outcomes. Instead such progress requires a new approach to reform, an approach that allows state, district and school decision-makers to improve their practice and the opportunities available to California's students.

The message of the entire collection of studies is that a serious fundamental change will be needed if California is to provide a high quality school system. Some changes are easier than others. Some changes are more appealing than others in that they require less fundamental change. But picking a small subset and ignoring the others most likely will have few benefits.⁴⁰

In addition to these overall conclusions from the IREPP, the Committee believes that five specific areas of recommendations strongly supported by the research merit discussion:

- **Provide greater flexibility.** The state should simplify and relax state regulations to allow greater local flexibility for resource allocation. Only with such action can the full benefits of an outcomes-based accountability system be realized: by allowing local educators to make decisions that are best for their students. One approach to achieve this proposed streamlining is to transform the state's finance system to a weighted-pupil formula that distributes the funding based on factors of student need.
- **Finance system should recognize differential needs and costs.** The state's funding system should reflect differential needs and costs. The studies suggest that a lion's share of any additional financial investments in the K–12 education system should be made to assist economically disadvantaged students and English learners. In addition, the finance system should recognize the differential costs of hiring teachers across regions of the state. A reformed finance structure should be equitable across districts, unlike the current system.
- **Enhance transparency.** Finance and governance reforms should improve the level of transparency, enhancing the ability to hold all accountable.
- **Experiment with teacher and administrator policies.** The state should pursue new approaches to pre-service education, in-service professional development, due-process procedures, evaluation, and compensation — all to support the recruitment and development of effective teachers and educational leaders.
- **Invest in data systems and research and evaluation.** The state should invest in information systems and ongoing research and evaluation efforts to create an education system committed to continuous improvement.

The California Master Plan for Education

In 1999, the California Legislature passed Senate Concurrent Resolution 29, calling for the creation of a new Master Plan for Education. The aim of the Master Plan was “to provide a coherent educational system that is attentive to learner needs, literally from birth through old age.” Its two primary goals were: “to provide every family with the information, resources, services, involvement, and support its needs to give every child the best possible start in life and in school; and to provide every public school, college, and university with the resources and authority necessary to ensure that all students receive a rigorous, quality education that prepares them to become a self-initiating, self-sustaining learner for the rest of their lives.”

The resolution created a joint legislative committee, comprised of members of both houses, to conduct the necessary investigation and develop the new Master Plan. Chaired by State Senator Dede Alpert, who now serves as Vice Chair of this Committee, the Joint Committee brought together some 300 educators and researchers, stakeholders, business people, civic leaders, and others to form seven citizens' working groups that, along with a total staff of eight professionals, would have the capacity to process extensive research, discuss issues absent the politics of the Capitol, and advise the joint committee on the best policy options to achieve its mandate. These working groups spent nearly two years developing their recommendations and assisting the Joint Committee in processing them, leading to the final report, the California Master Plan for Education, issued in 2002.

It is particularly noteworthy that, in addition to Senator Alpert, five members of the Governor’s Committee on Education Excellence participated on these working groups; two other members served as expert witnesses for or prepared documents used extensively by the legislative body; and the Joint Committee’s chief consultant now serves as the executive director of this Committee. Because of this prior involvement, the Committee was well-grounded not only in the findings of the Master Plan, but in the extensive research and rationales that supported its development. Nevertheless, this Committee has brought fresh eyes and fresh research to its charge, mindful that its job is not to replicate the 2002 Master Plan or even to update its findings and recommendations. The Committee’s task is to offer judgment that will support the Governor’s hopes and ambitions for all of California’s children.

Vision

The “foundational principle” informing the 2002 Master Plan was “that an effective and accountable education system must focus first and foremost on the learner.” With this in mind, the vision offered was one that provided “clear statements of expectations and goals [and] ... facilitate[d] flexibility in responding to local needs and taking advantage of opportunities.” It stated:

California will develop and maintain a coherent system of first-rate schools, colleges, and universities that prepares all students for learning and for transition to and success in a successive level of education, the workplace, and society at large, and that is fully responsive to the challenging needs of our state and our people.

The promise of the Master Plan was to fulfill the state’s constitutional mandate. The report declared that “California’s requirement of compulsory education for all children must be viewed as a contract between the state and our students/parents, complete with rights and responsibilities. Every school-age student in California has a fundamental constitutional right to a high-quality, state-provided education, which we believe includes a rigorous curriculum that prepares students for successful transition to both work and postsecondary education. Accordingly, the state must provide all students with the resources, instruction, and support necessary to enable them to achieve the competencies that the state’s academic content standards, college admission requirements, and the competitive work place demand.”

The focus of the Master Plan, then, was to engage every child, and the final report examined “what is required to provide a high-quality education [and] ... sought to facilitate the critical evolution from access to success, by focusing on greater academic achievement and career preparation across the full spectrum of students at all levels.” The Master Plan necessarily “sought to create effective and comprehensive accountability for the entire education system by delineating authority and responsibility for all its participants in a manner that ensures each can be held accountable for ensuring all students learn.” In recognition of the “cyclical nature of California’s ‘boom and bust’ economy, which has so dramatically shaped and reshaped educational opportunity,” the Master Plan “underscored the importance of Californians’ taking a long-term approach to our collective investment in education.”

Findings

Tragically, no different than today, the final Joint Committee report concluded that “[t]he sobering reality of California’s education system is that too few schools can now provide the conditions in which the state can fairly ask students to learn to the highest standards, let alone prepare themselves to meet their future learning needs.” Also unchanged in any material respects are the following “additional compelling issues” that undergirded the Master Plan:

- The students who have been served least well in California’s public schools, colleges, and universities — largely students from low-income families and students of color — also make up an ever greater proportion of California’s population; the state must extend to them the same degree of educational promise that has been provided to preceding generations of California students.
- California’s K–12 system operates without a clear vision or direction, with the result that it is susceptible to constant and major changes by policymakers that impede schools’ ability to plan for and deliver an education that meets the needs of students.

- California’s K–12 education system is governed by a fragmented set of entities with overlapping roles that sometimes operate in conflict with one another, to the detriment of the educational services offered to students. In addition, fragmentation and isolation prevent K–12 and postsecondary education institutions from effectively aligning and reducing the obstacles students face as they transition from one education sector to another.
- California’s educational institutions often are too rigidly structured to accommodate the increasingly diverse needs of the state’s students.
- The continued economic viability of the entire state depends on a high-quality education system that uses effective strategies to help learners achieve their education potential and objectives, that responds to high-priority public needs, and that continuously engages in efforts to envision the future learning needs of Californians for successful transition to the rapidly evolving world of the modern economy. Providing all students the opportunity to achieve their highest potential will enable them to pursue greater economic prosperity over a lifetime, better serving both them and society.

The final report also concluded that “[i]n addition to the foregoing structural issues, there is increasing concern over the disparity in quality of education that our children are receiving.” The findings then are the findings now: “California no longer has any racial or ethnic group that is a majority of the state’s population, yet schools serving large concentrations of low-income students, as well as those serving large numbers of Blacks, Latinos, and Native Americans, disproportionately receive fewer of the resources that matter in a quality education, resulting in lower student achievement. In urban and rural schools, which serve these students in higher concentrations, researchers estimate that as many as half of high school seniors leave school without the skills they need to succeed in further education or the world of work. The implications at the personal and societal level are enormous.”

The report noted that “California’s business community is increasingly concerned that California’s low performance in state and national testing is occurring during a period in which students are required to have more substantial knowledge, and the ability to apply that knowledge, as well as more technical workplace skills in the post-industrial economy.” The Committee could identify little or no current improvement on the following performance indicators cited in the Master Plan to support the alarming statement five years ago that “the ranks of working poor are also expanding and California is evolving, minute by minute, into a two-tiered society.”

- Barely half of California 4th- and 8th-graders (52 percent in both cases) demonstrated even basic competence in mathematics as measured by the 2000 administration of NAEP. Only 15 percent of 4th-graders and 18 percent of 8th-graders demonstrated proficiency in mathematics that year.
- NAEP scores from 1998 reveal that 48 percent of 4th-graders and 64 percent of 8th-graders were basic readers, while fewer than one-quarter of 4th- and 8th-graders were proficient or advanced readers.
- Only 56.9 percent of Latino students who entered high school in 1996 graduated four years later. Black students had a similar graduation rate of only 57.8 percent. In contrast, Asian and White students graduated at rates of 86.3 percent and 77.6 percent, respectively.
- Among the graduates of California’s public high schools, White students are roughly twice as likely as their Black and Latino peers to attain California State University (CSU) and University of California (UC) eligibility, and Asian graduates are roughly twice as likely as their White counterparts to attain CSU and UC eligibility — a relationship that has existed since 1983.
- Despite the selective nature of admission to CSU and UC, about half of all freshmen admitted to CSU during the past decade have required remedial instruction in mathematics or English, or both, while about one-third of UC freshmen have required remediation in English.
- The 2000 Employment Policy Forum report indicates that as many as 70 percent of students entering the workforce do not have sufficient skills to adapt to the simple writing needs of a business environment.

- The National Alliance of Business reports that a 1998 survey of 430 CEOs of product and service companies, identified in the media as the fastest-growing sector of U.S. business over the last five years, found that 69 percent of them reported the shortage of skilled, trained workers as a barrier to growth, up 10 percent from the year before.

Even with the benefit of 20-20 hindsight, the Master Plan’s call for comprehensive and broad-scale systemic reform, largely ignored in the intervening years, remains urgent and correct, a plea to end the waste of potential of another generation of schoolchildren. The report noted that “[t]hese data are indicative of the huge gap that exists between what many Californians need from their educational system and what they are actually receiving. To date, this gap has been only marginally affected by the many major reforms that have been imposed on our public schools, colleges, and universities since the mid-1980s. It provides stark evidence that a piecemeal approach to reforming education is ineffective. A comprehensive, long-term approach to refocusing education in California is clearly needed; and this approach must have a clear focus on improved student achievement.”

Research and recommendations

Within the Master Plan, many of the recommendations and their underlying empirical bases offer guidance for the Committee’s current efforts to reform and rejuvenate California’s system of K–12 public education. Perhaps most telling is the insight articulated repeatedly throughout the Master Plan that neither piecemeal solutions nor a mere increase in resources to prop up the status quo will solve anything; rather, a coherent action plan is essential. The Committee briefly summarizes here those recommendations of the Master Plan most pertinent to the Committee’s charge:

Teaching and leadership

The Master Plan sought to ensure that every child would be taught by a high-quality, effective teacher. It directly addressed the state’s capacity to prepare sufficient numbers of teachers:

- **The state should increase the California’s postsecondary capacity to prepare sufficient numbers of qualified educators, especially from among racial, ethnic, and linguistic groups. (Recommendation 6.4)**

The final report determined that the availability of qualified teachers varies dramatically among schools, pointing to “serious shortages” in low-performing schools. It contrasted teacher experience in the state’s lowest- and highest-performing schools, listing the following as reasons for the differentials:

- Lack of a professional culture for teaching and learning.
- Lack of time and space for professional development and collaboration.
- Lack of effective, supportive leadership.
- Dirty, unsafe, and overcrowded campuses and classrooms.
- Lack of support staff.
- Lack of up-to-date instructional materials and technology.

The final report, citing numerous studies, concluded that “[i]n California’s high-performing schools, conditions are nearly the opposite of those found in low-performing schools: There is a professional culture that respects teaching and learning; professional staff are supported in their efforts to continually improve their effectiveness in promoting student learning; school sites are well-maintained; school leaders build and maintain effective partnerships with parents, community groups, and local businesses; and instructional materials are current and aligned with California’s academic content standards. The challenge for the state, and the operational responsibility of local districts, is to ensure that such conditions exist within every public school in the state.”

The Master Plan stated that educators of children living in poverty need additional resources to succeed and recognized that “[s]pecial efforts must be made to attract to these schools qualified teachers who have the disposition and passion to persist in challenging environments, and these teachers must receive the support necessary to enable them to improve their effectiveness.” It sharply criticized existing staff development activities as “consist[ing] largely of workshops or institutes that do not provide the clinically based or collaborative activities that research has indicated are some of the most powerful and effective types of development activities ... [or] the follow-through focus of continuing coaching, mentoring, and reflection that can make theoretical lessons pertinent to the practical classroom world ...” It characterized existing development programs as “incoherent and disconnected,” referencing a study by the Center for the Future of Teaching and Learning, and concluded that resources devoted to professional development are “insufficient and too stratified by categorical funding streams.” The following recommendations addressed these concerns:

- **The state should provide additional resources to attract and retain the finest educators for schools serving high concentrations of students living in poverty. (Recommendation 6.6)**
- **The state should support the creation of professional development schools that partner postsecondary institutions and low-performing schools.** These professional development schools should focus on increasing the production of teachers motivated and appropriately prepared to effectively promote achievement of students enrolled in these schools. **(Recommendation 6.8)**
- **The state should provide funding for 10 days of staff development annually, phasing in these benefits with the most challenged districts; should support staff development that is consistent with school improvement plans approved by those districts and with state standards; and should support models of embedded staff development. (Recommendations 6.9, 6.10, and 6.11)**
- **The state should establish a career ladder for teachers to reward exceptional teachers for staying in the classroom (Recommendation 7) and provide incentive funding to school districts to create career ladders to reward teachers for demonstrated knowledge, expertise, and effective practice (Recommendation 7.1).**
The Master Plan recognized that “[t]he expertise of teachers can make or break a school, and we must find ways of capturing, focusing, and rewarding the expertise of teachers within this most important setting.” To attract and hire more academically qualified teachers, the Master Plan recommended **increasing the capability of California colleges and universities by expanding programs for forgivable loans and teaching fellowships. (Recommendations 8 and 8.1)**

The Master Plan recognized the importance of effective school leaders who are empowered to manage schools more effectively and noted the particular challenges of attracting the best principals to the most challenging schools. To address these concerns, it recommended that:

- **The state should encourage and support districts’ providing school principals with greater authority to use human and fiscal resources in different ways to achieve greater success in promoting student achievement. (Recommendation 16.1)**
- **Districts should increase salaries for administrators serving low-performing schools. (Recommendation 16.3)**

Finance

The final report reviewed research suggesting “that it is just as important to consider how resources are used as it is to determine what resources are available.” The Master Plan envisioned a retooled system for education finance that therefore “will be about how well we are providing the resources we believe are necessary to make possible the education system we desire” — in other words, a system for finance at the service of a system for high-quality education, rather than the other way around. As explained in the final report, “[w]e would commit ourselves to providing adequate compensation, benefits, and working conditions that would position California to attract and retain education personnel with professional qualifications and attitudes that would match our

vision of public education at all levels. We would modify our compensation schedules and reward systems to provide opportunities for increased compensation without requiring excellent teachers to leave the classroom or disproportionately devote their time to research unrelated to excellence in teaching and learning. We would earmark a modest proportion of state-funded research to advance our knowledge of what works in promoting learning and achievement among diverse student groups, in recognition of the fact that the greater public benefit derives from Californians who develop a disposition for learning and acquire from their educational experiences the tools of learning that enable them to continue to learn over a lifetime.”

Joint Committee members recommended that:

- **K–12 finance should be grounded in the actual costs of meeting California’s education goals for a high-quality education for every student, and proposed that an external commission develop the specific formula and model. (Recommendation 44)**

The Master Plan recognized that assuring equitable attainment of those goals would require differential funding to accommodate differential needs but that the existing abundance of categorical programs add unnecessary complexity and impediments to local flexibility; it therefore recommended a very limited set of adjustments to the base and particularly that:

- **The state should allocate monies on the basis of student characteristics that mark a need for additional resources, such as family income and English learners. (Recommendation 45.2.)**

Governance and accountability

The Master Plan conceived of governance and accountability as being interdependent, noting that “[h]ow California structures and governs education is crucial to our commitment to infusing greater accountability in public education.” It saw standards-based accountability as a foundation of the educational system, not as a program within it, envisioning that the state would establish standards and provide support, while local districts would make decisions regarding delivery, and independent accountability would ensure that all responsibilities are met. Summarizing its most pertinent recommendations:

- **Authority over the operations of California’s pre-K–12 public education system, including management of the Department of Education, and ultimate responsibility for the delivery of education to California’s pre-K–12 public education students should both reside within the Office of the Governor via the Secretary of Education. (Recommendation 26)**
- **The Governor should continue to appoint the State Board of Education, which should be limited to state policy matters specified by the Legislature. (Recommendation 26.2)**
- **The independently elected Superintendent of Public Instruction should be responsible for all aspects of non-fiscal accountability for public education, including managing student and system assessment and evaluation; ensuring that civil rights and other protections are provided; implementing intervention in failing schools; and serving as an independent education spokesperson and advocate. (Recommendation 27)**

The Master Plan envisioned a more constructive approach to accountability than has been implemented in California — one that promotes success and prevents failure rather than one that simply redresses failure after it happens. It recommended that the state should develop:

- **A system of accountability and improvement, with appropriate rewards and interventions, that will promote continuous improvement of student achievement. (Recommendation 41)**
- **A long-term strategic plan for the meaningful use of accountability data and indicators that are linked to state educational goals. (Recommendation 41.5)**

- **A series of progressive interventions in K–12 education that support low-performing schools’ efforts to build their organizational capacity, develop high-quality programs and support student learning, particularly in schools of the greatest need; and a series of progressive rewards that recognize schools for significant improvement and high achievement. (Recommendation 41.6)**
- **A series of definitive actions to apply as consequences to any entity within the public education system that fails to meet its responsibilities, up to the loss of control of its responsibilities. (Recommendation 41.7)**

Data

The Joint Committee’s report decried California’s lack of data and useful information on which to effectively evaluate performance, policies, and practice. It further noted the lack of analytical capacity by the state to better understand statewide and model program effectiveness. It recommended that:

- **An independent commission should be established to, among other things, serve as California’s statewide education data repository; and evaluate the extent to which all public education institutions are operating consistent with state policy priorities. (Recommendation 39)**

Early childhood education

The Master Plan strongly endorsed the proposition that quality preschool can set a foundation for success in school and life and can especially improve the achievement of children living in poverty. It recommended a series of inter-related policies to support early child development:

- **Provide voluntary access to formal preschool programs to all 3- and 4-year-old children, beginning with those living in poverty. (Recommendation 3)**
- **Require full-day kindergarten for all children and the alignment of preschool guidelines and kindergarten standards, curricula, and services. (Recommendation 4)**

Summary

The 2002 Master Plan was ambitious, requiring the “creation of a framework to guide educational policy for all aspects of education, from early childhood education to postsecondary education levels, driven by an uncompromised commitment to promote student achievement and the ability to learn for a lifetime.” It explicitly “reject[ed] the notion that public education can serve only a proportion of its learners well and that student achievement must be distributed along a ‘normal curve.’ ”

Though the Committee has arrived at its conclusions in separate ways, members have been struck by the similarity of the Master Plan’s recommendations for repairing the state’s flawed K–12 education system. Specific recommendations differ, but the underlying data and research are remarkably similar.

Endnotes

¹ The summary that follows represents the Committee's determination of that which it found most relevant to its work from the Getting Down to Facts research project. Concurrent with the March 2007 public release of the 23 research reports, IREPP released its own summary paper of the research project in whole, *Getting Down to Facts: School Finance and Governance in California*. That paper was collaboratively authored by Susanna Loeb, Anthony Bryk, and Eric Hanushek, all of Stanford University, with the intent of representing an IREPP consensus opinion of the most important aspects of the 1,700 pages that comprised the studies. Throughout the Getting Down to Facts portion of this chapter, the Committee relies on that paper for description and analysis of the body of research, in an effort to present a value-neutral assessment of the information. Individual quotes extracted from specific research studies also are derived from the summary paper, unless otherwise specifically cited. Elsewhere in this technical report, commentary on the research findings and methodology from the Getting Down to Facts project will be provided by the Committee as it cites findings of individual research studies.

² Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007) *Getting Down to Facts: School Finance and Governance in California*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

³ *Ibid.*

⁴ *Ibid.*

⁵ *Ibid.*

⁶ *Ibid.*

⁷ Sonstelie, Jon (2007) *Aligning School Finance with Academic Standards: A Weighted-Student Formula Based on a Survey of Practitioners*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

⁸ *Ibid.*

⁹ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

¹⁰ Loeb, Susanna, and Luke Miller (2007) *A Review of State Teacher Policies: What Are They, What Are Their Effects, and What Are Their Implications for School Finance?*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

¹¹ References include Susanna Loeb, Anthony Bryk, and Eric Hanushek (2007); and Bruce Fuller, Susanna Loeb, Nicole Arshan, Allison Chen, and Susanna Yi (2007) *California Principals' Resources: Acquisition, Deployment, and Barriers*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

¹² Pérez, María, Priyanka Anand, Cecilia Speroni, Thomas Parrish, Phil Esra, Miguel Socias, and Paul Gubbins (2007) *Successful California Schools in the Context of Educational Adequacy*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

¹³ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

¹⁴ See the two studies Michael Kirst, Margaret Goertz, and Allan Odden (2007) *Evolution of California State School Finance with Implications from Other States*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University; and Thomas Timar (2007) *Financing K–12 Education in California: A System Overview*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

¹⁵ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

¹⁶ Loeb, Susanna, Jason Grissom, and Katharine Strunk (2007) *District Dollars: Painting a Picture of Revenues and Expenditures in California's School Districts*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

¹⁷ Brunner, Eric (2007) *Financing School Facilities in California*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

¹⁸ Fuller, Bruce, Susanna Loeb, Nicole Arshan, Allison Chen, and Susanna Yi (2007).

¹⁹ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid.*

²³ Kirst, Michael, Margaret Goertz, and Allan Odden (2007).

²⁴ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

²⁵ See the four adequacy studies Jon Sonstelie (2007); Jay Chambers, Jesse Levin, and Danielle Delancy (2007) *Efficiency and Adequacy in California School Finance: A Professional Judgement Approach*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University; Jennifer Imazeki (2007) *Assessing the Costs of K–12 Education in California Public Schools*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University; and William Duncombe and John Yinger (2007) *Understanding the Incentives in California’s Education Finance System*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

²⁶ Loeb, Susanna, Jason Grissom, and Katharine Strunk (2007)

²⁷ Pérez, María, Priyanka Anand, Cecilia Speroni, Thomas Parrish, Phil Esra, Miguel Socias, and Paul Gubbins (2007).

²⁸ See Jon Sonstelie (2007) and Jay Chambers, Jesse Levin, and Danielle Delancy (2007).

²⁹ Loeb, Susanna, Anthony Bryk, Eric Hanushek (2007).

³⁰ Sonstelie, Jon (2007).

³¹ See Jon Sonstelie (2007) and Jay Chambers, Jesse Levin, and Danielle Delancy (2007).

³² Gándara, Patricia, and Russell Rumberger (2007) *Resource Needs for California’s English Learners*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

³³ Fuller, Bruce, Susanna Loeb, Nicole Arshan, Allison Chen, and Susanna Yi (2007).

³⁴ Brewer, Dominic, and Joanna Smith (2007) *Evaluating the “Crazy Quilt”: Educational Governance in California*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

³⁵ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

³⁶ *Ibid.*

³⁷ Fuller, Bruce, Susanna Loeb, Nicole Arshan, Allison Chen, and Susanna Yi (2007).

³⁸ Susanna Loeb, Anthony Bryk, and Eric Hanushek (2007) makes these conclusions based on several papers on the state’s information systems including Mary Perry, Isabel Oregon, Trish Williams, Robert Miyashiro, Jannelle Kubinec, Laurel Groff, Phillip Wong, and Robert Bennett (2007) *School District Financial Management: Personnel Policies and Practices*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University; Janet Hansen (2007) *Education Data in California: Availability and Transparency*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University; and Ida Oberman, Jim Hollis, and Don

Dailey (2007) *Bringing the State and Locals Together: Developing Effective Data Systems in California School Districts*, Getting Down to Facts, Institute for Research on Education Policy and Practice, Stanford University.

³⁹ Loeb, Susanna, Anthony Bryk, and Eric Hanushek (2007).

⁴⁰ *Ibid.*