

Teaching and California's Future

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The Center for the Future of Teaching and Learning

Working to improve education for all students by strengthening the teaching profession

Teaching and California's Future

California's Teaching Force 2010: *Key Issues and Trends*

The Center for the Future of Teaching and Learning
and

California State University
University of California, Office of the President
WestEd

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PREFACE

For more than a decade, the Center for the Future of Teaching and Learning has supported the Teaching and California's Future (TCF) initiative to provide California policymakers with objective and timely data on the state's teacher workforce. TCF has five central goals:

1. Every student will have fully prepared and effective teachers.
2. Every district will be able to attract and retain fully qualified, effective teachers.
3. Every teacher will work in a safe, clean facility conducive to learning; have adequate materials with which to teach; and have the guidance and support of a capable leader.
4. Every pathway into teaching will provide high-quality preparation and be based on California's standards for what students should know and be able to do.
5. Every teacher will receive high-quality support as he or she begins teaching, as well as continuing professional development, to ensure that he or she stays current in his or her field.

Each year, the Center publishes a report on the status of teaching profession. This year's report focuses on the implications of the recent budget cuts and policy shifts for the state's teacher workforce. The report is targeted toward a broad audience of policymakers, education leaders, philanthropic organizations, and researchers, with particular attention to issues relevant to the new governor, state superintendent of public instruction, and new legislators as they prepare to take office.

In writing this year's report, we were challenged by the availability of less statewide data—the result of the transition to the state's new longitudinal data system. Specifically, teacher authorizations and teaching assignments were not collected, thus limiting our ability to provide policy-relevant information such as the distribution of underprepared teachers in California. Furthermore, publicly available data on implications of budgeting decisions across districts is limited. We supplemented statewide data with original data collected from a geographically diverse cross section of focus districts and universities in order to assess the impact of budget cuts on current and prospective teachers. Research for this report was conducted by a team at SRI International, an independent research and consulting organization.

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We also extend our appreciation to the Teaching and California's Future Cosponsors, Task Force Members, Advisors, and The Center for the Future of Teaching and Learning's staff and Board of Directors for their insights and suggestions throughout the development of this report.

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ABBREVIATIONS

API	Academic Performance Index
ARRA	American Recovery and Reinvestment Act
BTSA	Beginning Teacher Support and Assessment
CALPADS	California Longitudinal Pupil Achievement Data System
CalSTRS	California State Teachers' Retirement System
CALTIDES	California Longitudinal Teacher Integrated Data Education System
CCSESA	California County Superintendents Educational Services Association
CCTC	California Commission on Teacher Credentialing
CDE	California Department of Education
CDF	California Department of Finance
CORE	California Office to Reform Education
CSIS	California School Information Services
CSR	Class Size Reduction
CST	California Standards Test
CSTP	California Standards for the Teaching Profession
CSU	California State University
CTA	California Teachers Association
DQC	Data Quality Campaign
ELPD	Professional Development for Teachers of English Learners
LAO	Legislative Analyst's Office
LAUSD	Los Angeles Unified School District
LBUSD	Long Beach Unified School District
LEA	Local Education Agency
MRPDP	Mathematics and Reading Professional Development Program
NCLB	No Child Left Behind Act of 2001
PLC	Professional Learning Community
QEIA	Quality Education Investment Act
RttT	Race to the Top
SB	Senate Bill
STAR	Standardized Testing and Reporting
TAP	Teacher Advancement Program
TCF	Teaching and California's Future
TOSA	Teacher on Special Assignment
TPA	Teaching Performance Assessment
UC	University of California

EXECUTIVE SUMMARY

Within California's volatile fiscal and policy context, getting a fully prepared and effective teacher into every classroom has never been more important. Rising expectations for student performance have placed even more pressure on teachers to assist students in meeting the state's rigorous standards, yet multiple years of budget cuts have led to layoffs, employment uncertainty, and fewer prospective teachers in the pipeline. These same cuts have diminished support for practicing teachers and for those in preparation programs while simultaneously increasing teachers' responsibilities, reducing their professional learning and growth opportunities, and reducing their compensation. Increased accountability requirements and the concomitant focus on achievement trends have led the state and a number of districts to explore alternative methods for placing and evaluating teachers. And in the midst of all of these changes, the data systems that policymakers and practitioners need to guide reforms remain incomplete.

Overall student achievement trends in California have been rising. For example, since 2002–03, the percentage of California students scoring proficient or above on the California Standards Test (CST) has risen from about a third to about one half. But the wide disparity between the academic achievement of African American and Latino students on the one hand and White and Asian students on the other has remained steady over the decade. Moreover, California has committed to getting all its students to the level of proficient or above on the CST by 2013–14, but the current achievement trajectory is not steep enough to meet this federal accountability requirement. When we overlay current trends with federal accountability targets, it becomes apparent that California will need to significantly ramp up its efforts to have any chance of reaching those targets.

Yet while expectations are rising for students and their teachers, resources are diminishing. The financial crisis has resulted in drastic budget cuts at the state and district levels over the last several years. From 2007–08 through 2010–11, the state's schools have suffered well over \$20 billion in cumulative cuts, including direct cuts to instructional resources; furthermore, cuts to funding for a statewide data system have made it more difficult for policymakers to understand how to best allocate future resources. State cuts have been partially offset by an infusion of federal stimulus dollars, but these funds are not sufficient to cover districts' budget shortfalls. Moreover, there is little expectation that these supplementary federal funds will be available in the future.

As resources for education have contracted, districts have had to make tough choices about where to make cutbacks and where to maintain services and supports, with wide-ranging implications for students and teachers. According to data released by the California Teachers' Association, layoff notices were issued to more than 26,000 teachers (nearly 10% of the workforce) in March 2010, with over 14,000 outstanding as of August. Remaining teachers are facing additional challenges, including larger class sizes, less time for planning and instruction, and less take-home pay; furthermore, budget-related reductions in support personnel (e.g., counselors, instructional aides) leave teachers with the difficult choice of taking on more responsibilities or leaving students' needs unmet.

At the same time, teachers are receiving less support at all stages of the teacher development system as a result of cuts to teacher preparation programs and to resources for teacher induction and professional development. Legislative action meant to help districts weather the budget crisis (e.g., flexibility of categorical funds for professional development, relaxation of penalties for districts exceeding class-size reduction targets) has helped some districts maintain core operations and avoid further layoffs, but this flexibility has also led to the elimination of a great deal of district-directed teacher mentoring, support, and professional

development. As a result, responsibility for teacher development and support is increasingly shifting to school sites and to the teachers themselves. This shift puts increased pressure on school leaders, who are charged with deploying scarce resources to support teachers and ensure their effectiveness. Additionally, in light of concerns of a “funding cliff” in 2011 when current federal stimulus funding ends, many districts appear to be highly cautious about how to allocate these funds so as not to be forced to make more drastic cuts later. Put simply, in the 2010–11 school year, the California teacher workforce faces a critical tension between expectations and resources.

It is within this evolving budget and policy context for California's teachers that the Center for the Future of Teaching and Learning presents its 12th annual report on the status of the teaching profession in California. These reports, part of the Center's Teaching and California's Future (TCF) initiative, are meant to provide California policymakers with objective and timely data on the state's teacher workforce, which is of particular importance this year as a new governor, a new state superintendent of public instruction, and many new legislators prepare to take office. The report is based on an analysis of statewide trends, as well as an in-depth look at a select number of focus districts and focus universities distributed across several regions in order to provide policymakers with a real-time understanding of what is happening on the ground.

The report is organized around four key themes: the contraction of the teacher workforce and other issues affecting the teacher supply pipeline; the weakening of the teacher development system in the context of reductions in funding; ongoing efforts to define and evaluate teacher quality; and the need for a fully developed, robust longitudinal statewide data system.

CHANGING CONDITIONS, FEWER PROSPECTS: THE STATUS OF THE TEACHER WORKFORCE

Budget cuts have had a dramatic impact on California's teachers, students, and schools, with the recent highly publicized teacher layoffs only one part of a larger trend. California's teacher workforce remained relatively stable for most of the last decade, but beginning in 2007–08 the workforce began to contract. At the same time, fewer aspiring teachers are entering preparation programs, suggesting that fewer new teachers will be prepared to enter the job market in the near future. Although this trend may appear on the surface to be a natural adjustment to a shrinking labor market, a confluence of other factors—including upward trends in both teacher retirements and projected increases in student enrollment—suggest that the need for newly trained teachers may soon increase.

Key findings:

- From 2007–08 to 2009–10, the total number of teachers in California declined from 310,361 to 299,666, the lowest number in a decade, and it is likely that this number has continued to fall in 2010–11.¹ Budget cuts and the associated teacher layoffs have contributed to the contraction of the workforce, but the dropping numbers can be also attributed in part to a gradual but steady decline in student enrollment that has been occurring since 2004–05.
- As the size of the workforce has decreased, the number of novice and underprepared teachers has dropped dramatically. Many schools have stopped hiring new teachers, and novice teachers are often the first to be laid off because of the prevalence of “last-hired, first-fired” policies. As a result, the number of first-

¹ As of the publication of this report, statewide 2010–11 data were not yet available.

and second-year teachers in California declined by 50% (from more than 36,000 to just over 18,000) between 2007–08 and 2009–10.

- Perceiving fewer job openings and facing reductions in funding for teacher preparation programs, fewer prospective teachers are entering the profession. Between 2001–02 and 2007–08, the number of enrollees in teacher preparation programs dropped by 45%, from more than 75,000 to fewer than 45,000. Not surprisingly then, California is issuing fewer preliminary credentials, down 36% from 2001–02 to 2008–09.
- Taken together, these trends indicate that teachers face a challenging job market, with fewer employment opportunities statewide, especially for new entrants to the profession.
- Just as the teacher pipeline is drying up, student enrollment is projected to increase—especially in many of California's inland counties—and anticipated teacher retirements suggest that demand for teachers may ratchet up in the near future, particularly if districts restore cut positions once the budget situation improves. Because the teacher preparation system will need time to accommodate an increase in the demand for teachers, these projections raise concerns about the system's ability to provide enough qualified professionals to fill positions as they become available.

INCREASED DEMANDS, DIMINISHED SUPPORT: TEACHING IN TOUGH TIMES

California's challenging financial situation has forced districts to make tough choices about how to allocate increasingly scarce resources. Depending on how their districts have elected to address budget challenges, many teachers are facing some combination of larger class sizes, a shortened academic year in which to provide instruction, less time and fewer resources for planning and professional development, and less take-home pay, all while working toward ever-increasing expectations for their students.

To make matters worse, as teachers take on these additional challenges, the state's fragile teacher development system has become increasingly strained, with teachers receiving less support to improve their teaching at all stages of their careers. In the years immediately before the recent budget challenges, California was beginning to build up a coherent system of teacher development in which resources and programs to train and support teachers were being implemented in a more aligned and thoughtful manner. However, the systemic nature of this support is now being dismantled due to lack of funds. There have been cutbacks and related programmatic changes at every point in the system, as districts have been allocated fewer dollars for teacher supports and have been given the flexibility to use these funds to offset revenue gaps elsewhere. As a result, responsibility for teacher professional development and support is increasingly shifting to school sites and to the teachers themselves.

Key findings:

- In response to the state budget cuts, districts have increased class size and reduced time for teachers to plan and deliver instruction, holding teachers to the same rising standards with more students in their classes and fewer days in the instructional year. In addition, shortened school years and furlough days translate into reduced compensation for teachers.

- Budget cuts have also led to increased responsibilities for teachers inside and outside of the classroom. Many districts have made deep cuts to positions such as teachers' aides, nurses, counselors, and librarians, leaving teachers with the difficult choice of taking on more responsibilities or leaving students' needs unmet.
- In teacher credentialing programs, budget constraints and associated programmatic changes are limiting the time and resources available for mentoring and support of teacher candidates. Cuts are also jeopardizing the implementation of the highly regarded Teaching Performance Assessment tool.
- Most state dollars previously targeted for induction, professional development, mentoring, and support programs for new and experienced teachers have been made available for general purposes. In many districts, these dollars have been used to offset other reductions and to avoid additional layoffs, resulting in widespread cuts to teacher supports.
- As districts reduce the time, financial resources, and personnel dedicated to professional development, responsibility for teacher professional development is increasingly left to school and department leaders and to teachers themselves.

ENSURING EFFECTIVE TEACHERS IN CALIFORNIA'S CLASSROOMS

The contraction of the teacher workforce, diminished support for teachers, and increasing accountability requirements have collectively shed greater light on the need to get effective teachers into all California classrooms. Previous Teaching and California's Future reports have consistently highlighted the fact that low-performing schools have often had difficulty attracting and retaining fully prepared and effective teachers. At the same time, these reports have underscored the progress that the state has made in reducing the number of underprepared teachers. We still find, however, that low-performing schools are much more likely to have novice teachers.

We also report on policymakers' efforts to strengthen teacher evaluations so that results can be used for broader purposes, including making employment decisions and targeting resources devoted to strengthening teacher practice. Such a shift in policy requires integrating teacher evaluations into a larger system designed to strengthen the teacher workforce.

Key findings:

- The number and proportion of underprepared teachers across the state has decreased substantially, but low-performing schools are still much more likely to have novice teachers than their higher performing counterparts. In California's lowest performing schools, novice teachers comprised 10% of the faculty (on average), compared with 5% in the highest performing quartile.
- One effect of this maldistribution is that higher percentages of the staff at low-performing schools are likely to be laid off as the workforce contracts due to the prevalence of last-hired, first-fired policies. An examination of teacher distribution patterns within districts across the state uncovers substantial variation, suggesting that local labor markets differ and perhaps that some districts are putting greater emphasis on the equitable distribution of teachers.
- Efforts under way to overhaul teacher evaluation in California are informed by trends suggesting a move toward the inclusion of student outcome measures in teacher evaluation. Leaders in the measurement field urge state and local

policymakers to proceed with caution regarding appropriate uses of these student outcome measures.

- Comprehensive evaluation systems can strengthen teaching if teacher evaluations are part of a larger system designed to support and inform teaching practice. Such evaluation systems work not only by dismissing the very weakest teachers, but also by supporting the vast majority of teachers who are retained and need help to deepen their subject matter content knowledge and improve their pedagogical skills.

CALIFORNIA'S STATEWIDE K–12 DATA SYSTEM: A WORK IN PROGRESS

With the stroke of the governor's veto pen, California's troubled effort to build an integrated statewide K–12 education data system was thrown into limbo in October 2010. The governor cited system performance problems, a lack of "necessary accountability," and high costs as the basis for his veto.

The full story of the state's efforts is a complicated one. Over the past 13 years, California has been laying the groundwork for an integrated statewide K–12 education data system, with CALPADS and CALTIDES intended to make up the backbone of such a system. When fully operational, this system should allow for a variety of policy-relevant longitudinal analyses. However, the process of developing this system has been punctuated by periodic crises, and a range of important issues concerning funding and oversight will continue to challenge the development of this system.

Key findings:

- CALPADS—which will collect and house much of the most critical information on teachers—now includes most of the elements considered to be necessary for a robust data system. However, the state is at risk of not being able to track important trends in the teacher workforce, in part because the data collection process had already been pared down during the transition to a new statewide data system. For example, this year, for the first time in over a decade, we are not able to report on the number and distribution of underprepared and out-of-field teachers in the state.
- The governor's veto of funding for CALPADS and CALTIDES has created uncertainty about the future of California's new K–12 education data system. Engineering and project management challenges had led to a temporary suspension of CALPADS data collection in early 2010 while further testing was conducted, but data collection resumed in August 2010 after testing verified that the system was stable. However, the loss of vetoed funds will most likely undermine efforts to support staff at both the state and local levels to populate and maintain the database, which raises serious concerns about the quality of the data entered into the system.
- Development of the CALTIDES architecture was to start in October 2010, but because of the veto, CDE is estimating that development will not begin until 2011–12. Without CALTIDES, information on teacher credentials and authorizations, including the number and distribution of underprepared teachers, will not be publicly available.
- Policymakers are now on a short timeline to decide whether to reinstate funding for both CALPADS and CALTIDES. This hinges on determinations about the technical capacity of the system and about what entity should oversee the completion of CALPADS.

- In the longer term, the state's requirements about reimbursing districts for reporting on additional data elements raise concerns about the responsiveness and efficacy of the system. The fact that the process of determining the data elements to be included in a statewide longitudinal data system has been driven by efforts to avoid additional state-mandated costs raises serious questions about whether California is building a system that can address the most important K–12 educational issues of the day.

* * *

Our discussion of these issues concerning the disconnect between rising expectations and diminishing resources for California's teachers is intended to be instructive to a range of policymakers and education stakeholders, particularly as a new governor and many other new elected officials prepare to take office in Sacramento. We turn now to the Center for the Future of Teaching and Learning's recommendations for state policymakers and education leaders.

RECOMMENDATIONS FROM THE CENTER FOR THE FUTURE OF TEACHING AND LEARNING

The Center for the Future of Teaching and Learning believes that the current challenging times call for bold and creative action, and we make four recommendations with far-reaching implications. These recommendations address the ways that schools are funded, how teachers are evaluated and given the professional support they need to ensure their effectiveness, and the establishment of a comprehensive data system that can contribute to sound rational decision making at all levels of the education system. Specifically, the Center for the Future of Teaching and Learning recommends that state policymakers take the following actions:

1. Establish an equitable, adequate, and simplified K–12 school funding formula that provides for the continuous improvement of teaching and learning.
2. Stop the erosion of California's teacher development system to ensure every student benefits from quality teaching.
3. Immediately restore the statewide student (CALPADS) and educator (CALTIDES) data systems.
4. Provide a well-prepared, effective, and caring teacher for each and every student.

CHAPTER 1

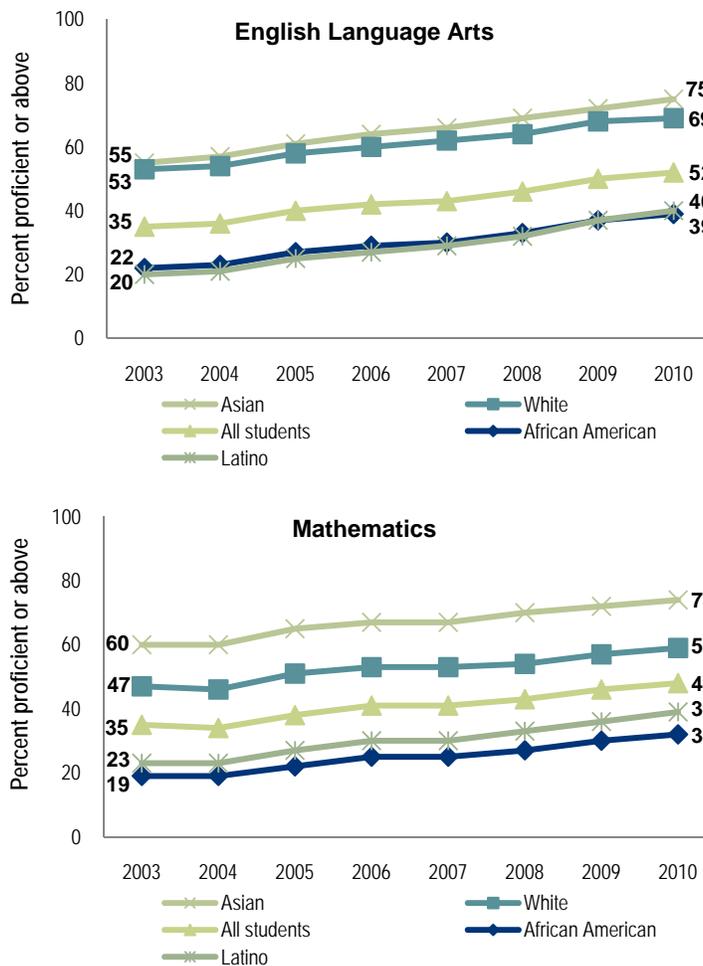
INTRODUCTION

Within California's volatile fiscal and policy context, getting a fully prepared and effective teacher into every classroom has never been more important. Multiple years of budget cuts have led to layoffs, employment uncertainty, and fewer prospective teachers in the pipeline to teaching. These same cuts have diminished support for practicing teachers and for those in preparation programs. At the same time, increased accountability requirements and the concomitant focus on achievement trends have led the state and a number of districts to explore alternative methods for identifying, placing, and evaluating teachers. And in the midst of all of these changes, the data systems that policymakers and practitioners need to guide reforms remain incomplete.

Getting a fully prepared and effective teacher into every classroom has never been more important.

Still, schools are making progress. Since 2002–03, the percentage of California students scoring proficient or above on the California Standards Test (CST) has risen from about a third to about half. Moreover, these improvements have been consistent across racial and ethnic groups (California Department of Education [CDE], 2010a; see Exhibit 1.1).

Exhibit 1.1
CST Results, by Ethnicity, 2003–2010

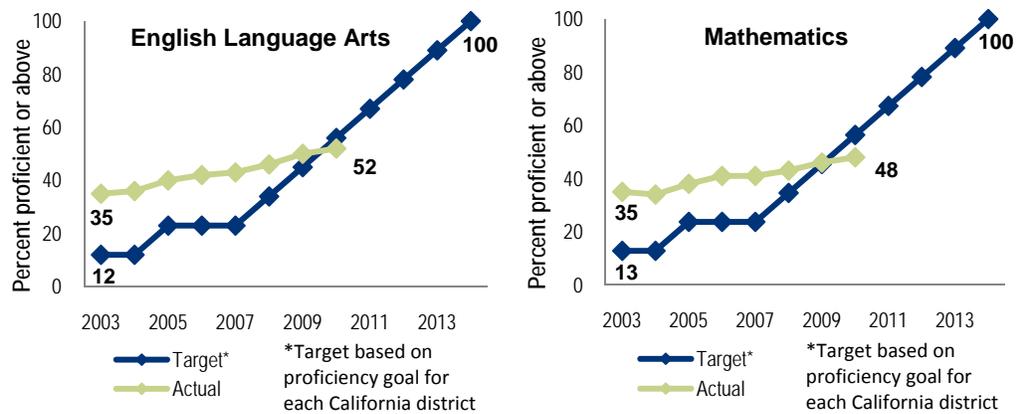


See Appendix A for source and technical information.

Yet these trends also show how far the state needs to go in closing the achievement gap. The wide disparity between the academic achievement of African American and Latino students on the one hand and White and Asian students on the other has remained steady over the decade, as evident in Exhibit 1.1.

Moreover, California has committed to getting all its students to the level of proficient or above by 2013–14, but the current achievement trajectory is not steep enough to meet federal accountability requirements. When we overlay current trends with No Child Left Behind (NCLB) proficiency targets, it becomes apparent that California will need to significantly ramp up its efforts to have any chance of reaching those targets (CDE, 2010a, 2010b; see Exhibit 1.2).²

Exhibit 1.2
CST Results vs. NCLB Proficiency Targets, 2003–2014



See Appendix A for source and technical information.

While expectations are rising for students and teachers, resources are diminishing.

While expectations are rising for students and their teachers, resources are diminishing. The financial crisis has resulted in drastic budget cuts at the state and district levels over the last several years. From 2007–08 through 2010–11, California schools have suffered well over \$20 billion in cumulative cuts, including direct cuts to instructional resources as well as cuts to funds designed to help policymakers understand how to best allocate future resources—for example, funding for new data systems that would allow for longitudinal analyses of achievement and workforce patterns was vetoed by the governor in October 2010.

These cuts have been partially offset by one-time federal funding streams, including approximately \$8 billion from the American Recovery and Reinvestment Act (ARRA) and approximately \$1.2 billion from the recently passed Education Jobs and Medicaid Assistance Act. But these funds are not sufficient to fully cover districts' budget shortfalls, and there is little expectation that additional funds such as these will be available in the future.

As resources for education have contracted, districts have had to make tough choices about where to make cutbacks and where to maintain services and supports, with wide-ranging implications for students and teachers. According to data released by the California

² Furthermore, the state has tentatively adopted new national standards in math and literacy that essentially aim at college readiness for all high school graduates. As documented in our 2009 report, more than a third of high school students currently drop out before graduation, and six in ten of those who do graduate and go on to the state university system must take at least some remedial coursework (Woodworth, et al., 2009).

Teachers' Association (CTA), layoff notices were issued to more than 26,000 teachers (nearly 10% of the workforce) in March 2010, with over 14,000 outstanding as of August (see, for example, Chea, 2010). Remaining teachers are facing additional challenges, including larger class sizes, less time for both planning and instruction, and less take-home pay; furthermore, budget-related reductions in support personnel (e.g., counselors, instructional aides) leave teachers with the difficult choice of taking on more responsibilities or leaving students' needs unmet.

At the same time, teachers are receiving less support at all stages of the teacher development system as a result of cuts to teacher preparation programs and to resources for teacher induction and professional development. Legislative action that has been taken to help districts weather the budget crisis (e.g., flexibility of categorical funds for professional development, relaxation of penalties for districts exceeding class-size reduction targets) has helped some districts maintain core operations and avoid further layoffs, but this flexibility has also led to the elimination of much district-directed teacher mentoring, support, assessment, and professional development. As a result, responsibility for teacher development and support is increasingly shifting to school sites and to the teachers themselves. This shift puts increased pressure on school leaders, who are charged with deploying scarce resources to support teachers and ensure their effectiveness.

Teachers are receiving less support at all stages of the teacher development system.

Additionally, in light of concerns about a "funding cliff" in 2011 when current federal stimulus funding ends, many districts appear to be highly cautious about how to allocate these funds so as not to set themselves up to be forced to make more drastic cuts later. This approach is consistent with trends across the United States. According to a report released by the American Association of School Administrators in April 2010,

The cessation of ARRA dollars, paired with the continued budget strains at the state and local levels and the proposed FY11 federal budget, represent a one-two punch to education funding that will further insulate schools from economic recovery and will likely translate into more budget cuts, more job cuts, and fewer resources for programs and personnel. (Ellerson, 2010)

As of June 2010, more than 170 California districts already had budgets in negative or qualified status as a result of budget projections suggesting that they would not be able to meet their financial obligations through 2010–11 (negative status) or 2011–12 (qualified status). This total represents approximately 16% of all districts across the state, serving approximately 38%—or over 2.3 million—of the state's students, and the number of districts in negative or qualified status is only expected to increase as budget pressures continue.

Put simply, the California teacher workforce faces a critical tension between expectations and resources. The pressure placed on schools by these cuts, combined with rising expectations for student performance, has resulted in recent political and legal action. For example, *Robles-Wong et al. v. State of California*, which was filed in May 2010 and is pending at the time of publication of this report, asserts that the funding system in place for California public education is not sufficiently aligned with state content standards, in effect turning the content standards into an unfunded mandate because of the lack of resources made available to meet them. To correct this misalignment, the suit requests that "the Court compel the State to align its school finance system—its funding policies and mechanisms—with the educational program that the State has put in place" by determining the costs required to fully support the content standards and implementing a new school finance system that fully funds those costs. (California School Finance, 2010)

Responsibility for teacher development and support is increasingly shifting to school sites and to the teachers themselves.

TEACHING AND CALIFORNIA'S FUTURE 2010

In this 12th annual report on the status of the teaching profession in California, the Center for the Future of Teaching and Learning focuses on the implications of this evolving policy and budget context for California's teachers. This report is intended to be instructive to a range of policymakers and education stakeholders, particularly as a new governor and many other new elected officials prepare to take office in Sacramento.

The report is based on secondary analyses of state teacher databases and reviews of legislative and budget documents. In addition, we take an in-depth look at a select number of focus districts and focus universities distributed across several regions in order to provide policymakers with a direct understanding of how teachers and teacher candidates are dealing with the implications of budget cuts.³ Data collection for each of these districts and universities included reviews of publicly available information (e.g., district budget documents and related communication materials), as well as interviews with administrators. Interviews were designed to collect additional budget information and understand how budget cuts are affecting teachers and teacher candidates (e.g., changes in supervision and resources, workplace conditions, levels of support for professional development).

This year's report is organized around four key themes:

- **The contraction of the teacher workforce.** Chapter 2 provides a basic overview of the current status of California's teacher workforce, including reductions in the teacher supply pipeline.
- **The weakening of the teacher development system.** Chapter 3 takes an in-depth look at how districts and teacher preparation programs are responding to reductions in funding and considers how teachers are (or are not) being supported to adapt to more challenging working conditions.
- **The ongoing search for teacher quality and how to evaluate it.** Chapter 4 examines trends in the distribution of teachers and discusses recent efforts to rethink teacher evaluation.
- **The need for a fully developed and expanded teacher data system.** Chapter 5 discusses the state's transitioning data system for tracking the supply, demand, and distribution of teachers.

The report concludes with a summary and a set of policy recommendations from the Center for the Future of Teaching and Learning.

³ To hear from districts representing a range of geographic areas, we selected the largest district in each of the 11 California County of Superintendents Educational Services Association (CCSESA) regions (or two districts per region if the largest district was not a unified district, in which case we selected the largest elementary school district and the largest high school district). Similarly, we sampled the California State University schools with the largest numbers of 2008–09 teaching credentials produced in each of five geographically diverse regions.

CHAPTER 2

CHANGING CONDITIONS, FEWER PROSPECTS:
THE STATUS OF THE TEACHER WORKFORCE

Budget cuts have had a dramatic impact on California's teachers, students, and schools, but the highly publicized teacher layoffs of the last 2 years are only part of a larger trend. California's teacher workforce remained relatively stable for most of the last decade, but beginning in 2007–08 it began to contract. In 2007–08 more than 310,000 teachers were employed in California's K–12 system, but in 2009–10 this number had dropped to less than 300,000, and it is likely that it has continued to fall in 2010–11.⁴ At the same time, fewer aspiring teachers are entering preparation programs, suggesting that fewer new teachers will be prepared to enter the job market in the near future. Although this trend may appear on the surface to be a natural adjustment to a shrinking labor market, a confluence of other factors—including upward trends in teacher retirements and projected increases in student enrollment—suggest that the need for newly trained teachers will soon increase, particularly if districts restore cut positions once the budget situation improves.

In past years, the equivalent chapter of this report contained a wealth of information about how teachers with different types of credentials (e.g., interns) were distributed across different types of schools and teaching assignments. Unfortunately, as the state began transitioning to a new statewide data system in 2009–10, information on teacher assignments and teacher credentials was not collected by the California Department of Education.⁵ We expect that when the new system is fully operational, data on teachers and students will be much more reliable than what is currently available and that we will have access to additional data not currently available. However, until CALPADS (the California Longitudinal Pupil Achievement Data System) and CALTIDES (the California Longitudinal Teacher Integrated Data Education System) are collecting their full complement of data, policymakers and education stakeholders will have limited public data about how teachers are distributed across different types of schools or teaching assignments.

To provide context for issues related to the teacher development pipeline, this chapter presents a review of the limited available data on the teacher workforce. We examine trends in the overall size of the teacher workforce and in the changing demographics of teachers in the system. Additionally, to provide timely and nuanced data, we report on findings from interviews with representatives from five of the largest California State University teacher preparation programs in the state as well as from the available secondary data. We close with a discussion of projected increases in student enrollment and teacher retirements.

Fewer aspiring teachers are entering preparation programs.

Upward trends in teacher retirements and projected increases in student enrollment suggest that the need for newly trained teachers will soon increase.

⁴ As of the publication of this report, statewide 2010–11 data were not yet available.

⁵ Teacher assignments were not collected so that the California Department of Education (CDE) could pilot the newly developed system with a limited set of data. Teacher credential information was not collected because the system CDE is piloting, the California Longitudinal Pupil Achievement Data System (CALPADS), will not collect teacher credential information in the future. That information will be housed in a different system, the California Longitudinal Teacher Integrated Data Education System (CALTIDES). The development of CALTIDES has yet to begin and will be managed by an entirely different state agency, the California Commission on Teacher Credentialing.

REDUCTIONS TO THE TEACHER WORKFORCE

Reductions to the teacher workforce have been a widespread response to the budget crisis.

The teacher workforce has been hit hard by California's budget crisis. More than 16,000 teachers were laid off in 2009 (CDE, 2010c); in 2010, approximately 26,000 California teachers received layoff notices, and approximately 14,000 of these teachers had not been hired back when school began in August (Chea, 2010). The federal teacher jobs bill passed by Congress on August 10, 2010, is expected to bring an estimated \$1.2 billion to California schools (CDE, 2010d) and may save many jobs. However, districts have been carefully weighing their options with regard to how they will spend this money, especially given the state's growing deficit leading to the prospect of midyear cuts.

Districts have cut classroom teaching positions in several ways, including increasing class size, returning teachers on special assignment to classrooms (thereby displacing more junior teachers), and eliminating undersubscribed courses.⁶ (For more information on district-level cuts, see chapter 3.)

Additionally, although no system tracks responses to budget cuts by different types of districts, there is concern that these cuts disproportionately affect students in less affluent districts that lack alternative means of fundraising (e.g., parcel taxes, parent organizations, education foundations). Also troubling is the prospect that the next round of layoffs (for the 2011–12 academic year) will be even more dramatic given concerns about a “funding cliff” in 2011 when supplemental federal funding ends.

After 8 years of relative stability, the overall number of teachers in California declined in 2008–09 and again in 2009–10.

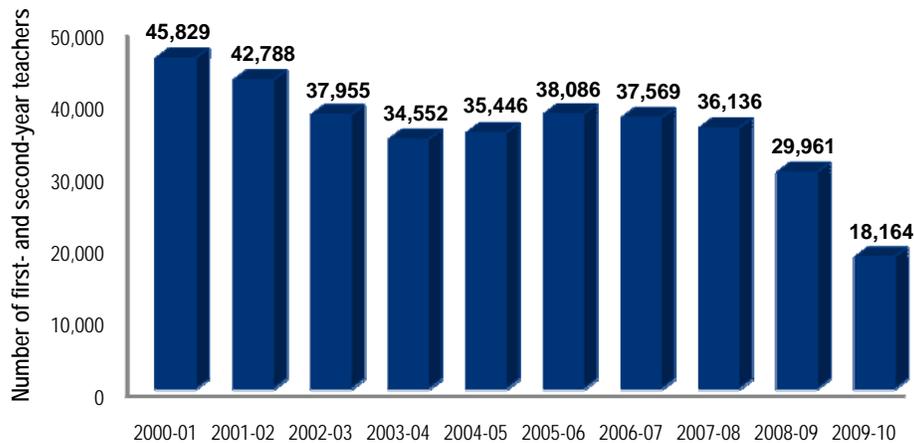
From 2007–08 to 2008–09, the total number of teachers in California declined for the first time in 5 years, from 310,361 to 306,867. This decline accelerated in 2009–10 as the size of the teacher workforce fell to 299,666, the lowest number in a decade (CDE, 2010e; see Exhibit A.1 in Appendix A). Budget cuts and the associated teacher layoffs have contributed to the contraction of the workforce, but the dropping numbers can be also attributed in part to the slow but steady decline in student enrollment that has been occurring since 2004–05. (Future student enrollment trends are discussed later in this chapter.)

As the size of the workforce has contracted, the number of novice and underprepared teachers has dropped dramatically.

With the number of teaching positions in decline statewide, many schools have stopped hiring new teachers. In addition, “last-hired, first-fired” policies mean that recent layoffs have disproportionately affected novice teachers. As a result of these two factors, the total number and percentage of novice teachers have been dropping significantly. Between 2007–08 and 2009–10, the number of first- and second-year teachers in California fell from more than 36,000 to just over 18,000, for a total decline of 50% (CDE, 2010f; see Exhibit 2.1). This drop far outpaces the overall decline in the teacher workforce, as the proportion of novice teachers in the overall workforce has declined from 11.6% to 6.1% during that same period.

⁶ We learned about class size increases, returning teachers on special assignment to classrooms, and eliminating courses during interviews and document reviews with a geographically representative sample of large districts from around the state, as detailed in Chapter 3. For additional documentation of class size growth, see CDE, 2010g; Freedberg & Cabrera, 2009; and Kaplan, 2010.

Exhibit 2.1
Number of First- and Second-Year Teachers, 2000–01 to 2009–10



See Appendix A for source and technical information.

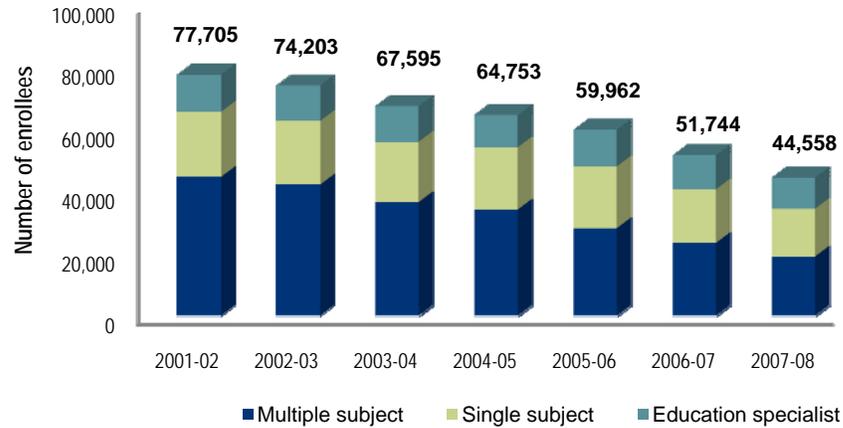
The teacher workforce is both shrinking and changing in composition. The overall number of teachers in California has dropped for the second straight year, and this decline has been paired with a sharp reduction in the number of first- and second-year teachers in the K–12 system. Taken together, these trends indicate that teachers face a challenging job market in the immediate term, with fewer employment opportunities statewide, especially for new entrants to the profession.

FEWER PROSPECTIVE AND NEWLY CREDENTIALLED TEACHERS

Fewer prospective teachers are entering teacher preparation programs.

Between 2001–02 and 2007–08, the number of enrollees in teacher preparation programs dropped by 45%, from more than 75,000 to fewer than 45,000. This trend is driven by a drop in the number of enrollees in multiple-subject programs, but enrollees in single-subject programs are also down slightly (California Commission on Teacher Credentialing [CCTC], 2010; see Exhibit 2.2).

Exhibit 2.2
Number of Enrollees in Teacher Preparation Programs, 2001–02 to 2007–08



See Appendix A for source and technical information.

Note: 2007–08 is the most recent year for which statewide data are available.

Interviews with administrators from the state's largest teacher preparation system, California State University (CSU), indicated that most CSU teacher credentialing programs experienced declining enrollment in 2009–10 and again in 2010–11.⁷ Sources reported that the overall reduction in the number of teacher candidates entering these credential programs has been caused by a combination of supply-side and demand-side forces: Fewer prospective teachers are expected to apply across the CSU teacher preparation system while at the same time some credential programs are accepting fewer applicants because of budget constraints.

“[Prospective] teachers read the newspaper, and if it appears that there will not be jobs, it affects how they view their careers.”

When asked to explain declining credential program application rates, administrators at CSU teacher preparation programs focused on one contributing factor—the perception that teaching jobs are scarce. One administrator explained that “Schools are not hiring as many teachers and they are laying folks off,” and another stated that “The number [of applicants] has been dwindling.” Media reports about teacher layoffs have made prospective applicants reconsider entering the teaching profession.⁸ “[Prospective] teachers read the newspaper, and if it appears that there will not be jobs, it affects how they view their careers,” stated one CSU administrator. Reports about the impact of the budget crisis on school resources may also have made prospective teachers rethink their decisions to enter the profession. Citing a newspaper article describing a teacher who was forced to cut erasers in half to save money (Magee, 2010), a CSU administrator explained that “If I saw in the paper that a teacher was spending her time cutting erasers in half, I don’t think it would be in my self-concept to think that teaching would be a good thing to do.”

Another factor CSU administrators cited as contributing to reduced enrollments is increased tuition. Since the 2008–09 school year, annual CSU fees for teacher credential candidates have increased by \$1,014, and that does not include additional increases at the local CSU

⁷ Because the CSU system closed admissions in spring 2010 due to budget cuts, some individual CSU campuses may have had higher fall 2010 enrollment than might have otherwise occurred because a subset of students may have deferred their applications until the fall 2010 cycle.

⁸ See, for example, ABC news article and accompanying video <http://abclocal.go.com/kabc/story?section=news/state&id=7332173>

level, which may make tuition even higher (CSU, 2009, 2010a). “Tuition has gone up,” stated one CSU administrator, “and with families feeling the impact of other economic factors, sometimes students tell us they can’t come because they can’t afford it.”

Administrators from four of the five CSUs we interviewed confirmed that enrollment in multiple-subject credential programs has been decreasing over the past several years, but three told us that enrollment in single-subject programs has remained relatively steady or grown. This is consistent with California Commission on Teacher Credentialing data describing statewide trends (CCTC, 2010; see Exhibit 2.2). When asked to explain this difference, CSU administrators frequently cited the availability of jobs in math and science. According to one, “There are more math and science opportunities so there is a huge effort to recruit these teachers.” Another CSU administrator believed that the diminished job prospects for multiple-subject credential holders might lead applicants to choose the single-subject program instead, stating that “It’s been well advertised that there is an overabundance of elementary school teachers.”

The CSU system has been hit hard by budget cuts, forcing some local campuses to limit enrollment in teacher credentialing programs.

The CSU system was subject to unprecedented budget cuts from the 2007–08 academic year to the 2009–10 academic year. In 2009–10, state support was down \$625 million, representing a decrease of 21% compared with 2007–08 (CSU, 2010b).⁹ The CSU system implemented several changes to accommodate this reduction, including increased student fees, furloughs, and system-wide limitations to student enrollment. Even after these measures were implemented, however, a \$175 million budget gap remained and local CSU campuses were forced to make further cuts (CSU, 2010b).

In response to these budget reductions, some individual CSU campuses have been forced to accept fewer students. Enrollment reduction occurred system-wide as a result of the spring 2010 enrollment freeze (CSU, 2010c), and in fall 2010 it was also occurring in individual programs, including two of the five in our university sample. Commenting on the applications they received this fall, a CSU administrator said, “Because of budget cuts, we could only accommodate a certain number of teacher [candidates], and it was fewer than who applied.” This campus-level enrollment reduction removes potential teachers from a professional pipeline that is already diminished by fewer applicants.

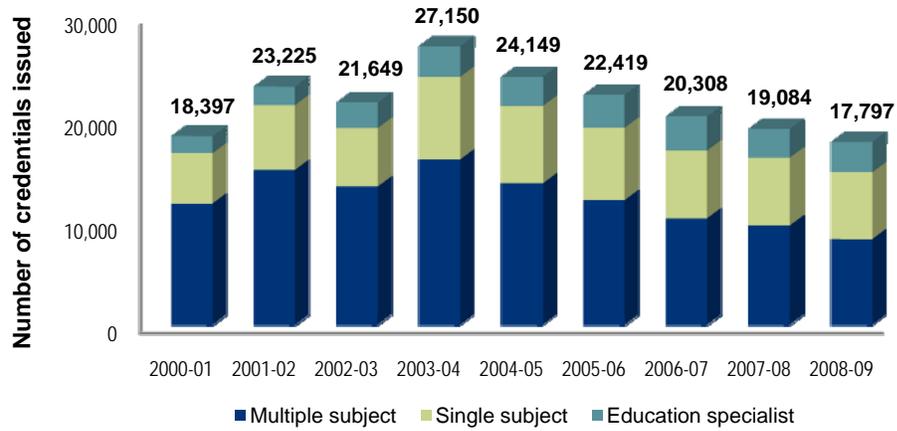
The 2010–11 California state budget restores \$199 million to the CSU system and provides \$60.6 million for enrollment growth (CSU, 2010d). This will enable local campuses to accept increasing numbers of students and help the CSU system begin to rebuild enrollment. However, these funds do not compensate for the cuts of the last 2 years, only returning CSU to 2005–06 funding levels.

Changes in enrollment in teacher preparation programs have resulted in dramatic reductions in the number of teacher credentials being issued.

The decline in preliminary credentials issued is driven by a sharp reduction in the number of multiple-subject credentials (CCTC, 2010; see Exhibit 2.3). In contrast, the production of single-subject and education specialist credentials has remained relatively consistent.

⁹ 2007–08 is the most recent year that can be considered a “normal” budget year for the CSU system (with allocations for increased student enrollment, scheduled increases in compensation, etc.).

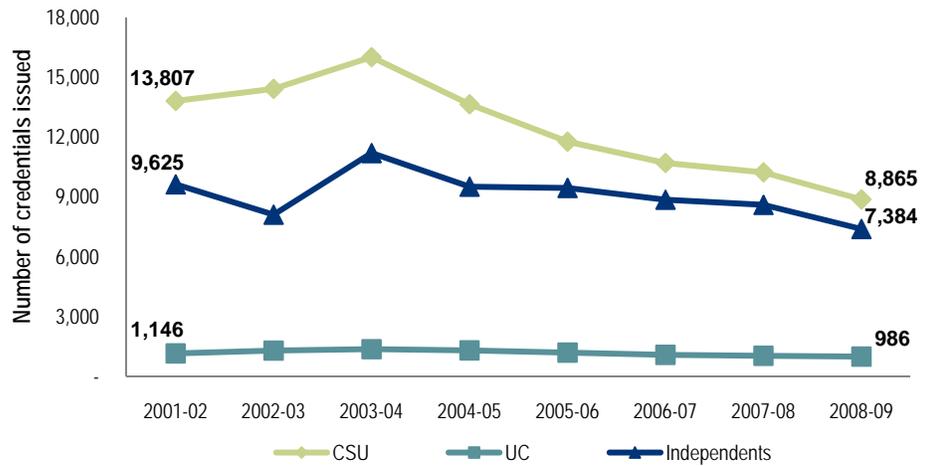
Exhibit 2.3
New Preliminary Teaching Credentials Issued by Universities, 2000–01 to 2008–09



See Appendix A for source and technical information.

Although a drop in credential production is apparent across teacher preparation programs in the CSU, University of California (UC), and independent university systems, this trend is most significant for the CSU system, which had a 36% drop in the number of multiple- and single-subject credentials issued from 2001–02 to 2008–09 (CCTC, 2010; see Exhibit 2.4).

Exhibit 2.4
Multiple- and Single-Subject Preliminary and Intern Credentials Issued by University Sector, 2001–02 to 2008–09



See Appendix A for source and technical information.

ENROLLMENT PROJECTIONS AND ANTICIPATED RETIREMENTS

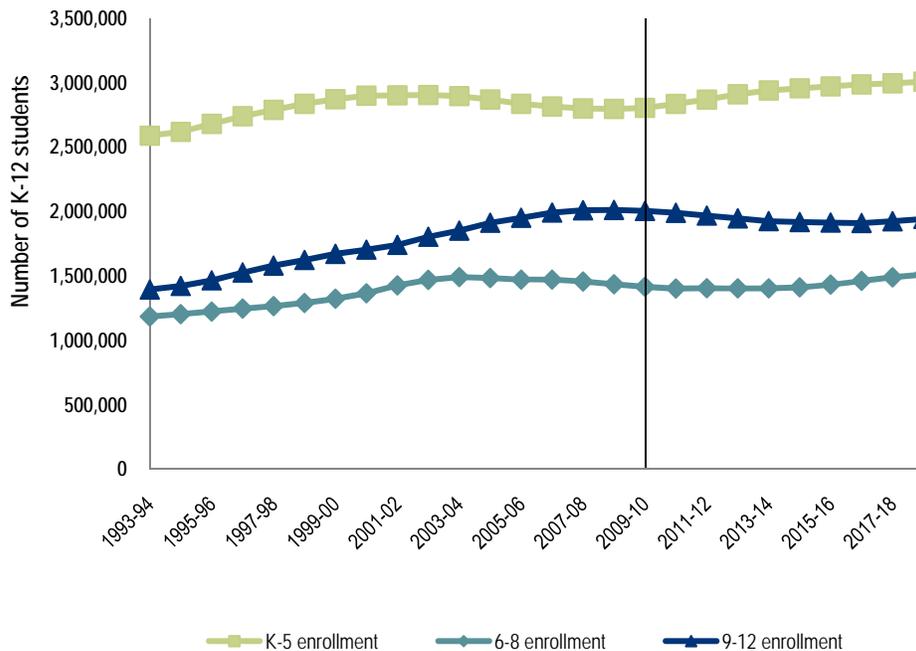
Although the number of multiple-subject credentials continues to drop, student enrollment and teacher retirements are expected to rise.

Although overall K–12 student enrollment has been declining slightly since 2005–06, this trend is projected to reverse. Overall enrollment is expected to increase gradually over the next decade by more than 230,000, or approximately 4%, between 2009–10 and 2018–19 (California Department of Finance [CDF], 2009; see Exhibit 2.5). Notably, the most significant area of growth will be at the elementary level, which is expected to increase by more than 200,000, or 7%, in that same period. In contrast, high school enrollment is expected to decline by nearly 95,000, or 5%, over the next 6 years before beginning to grow after the 2016–17 academic year (CDF, 2009).

This projected increase in enrollment suggests that additional teachers will be needed over the next decade. Yet the teacher development system may not be able to provide sufficient numbers of new teachers to meet this demand. Such a shortage would be especially apparent at the elementary level, as the decline in multiple-subject credentials being issued (CCITC, 2010; see Exhibit 2.3) is at odds with the expected increase in K–5 enrollment (CDF, 2009; see Exhibit 2.5).

The decline in multiple-subject credentials being issued is at odds with the expected increase in K-5 enrollment.

Exhibit 2.5
Actual and Projected K–12 Enrollment, 1993–94 to 2018–19



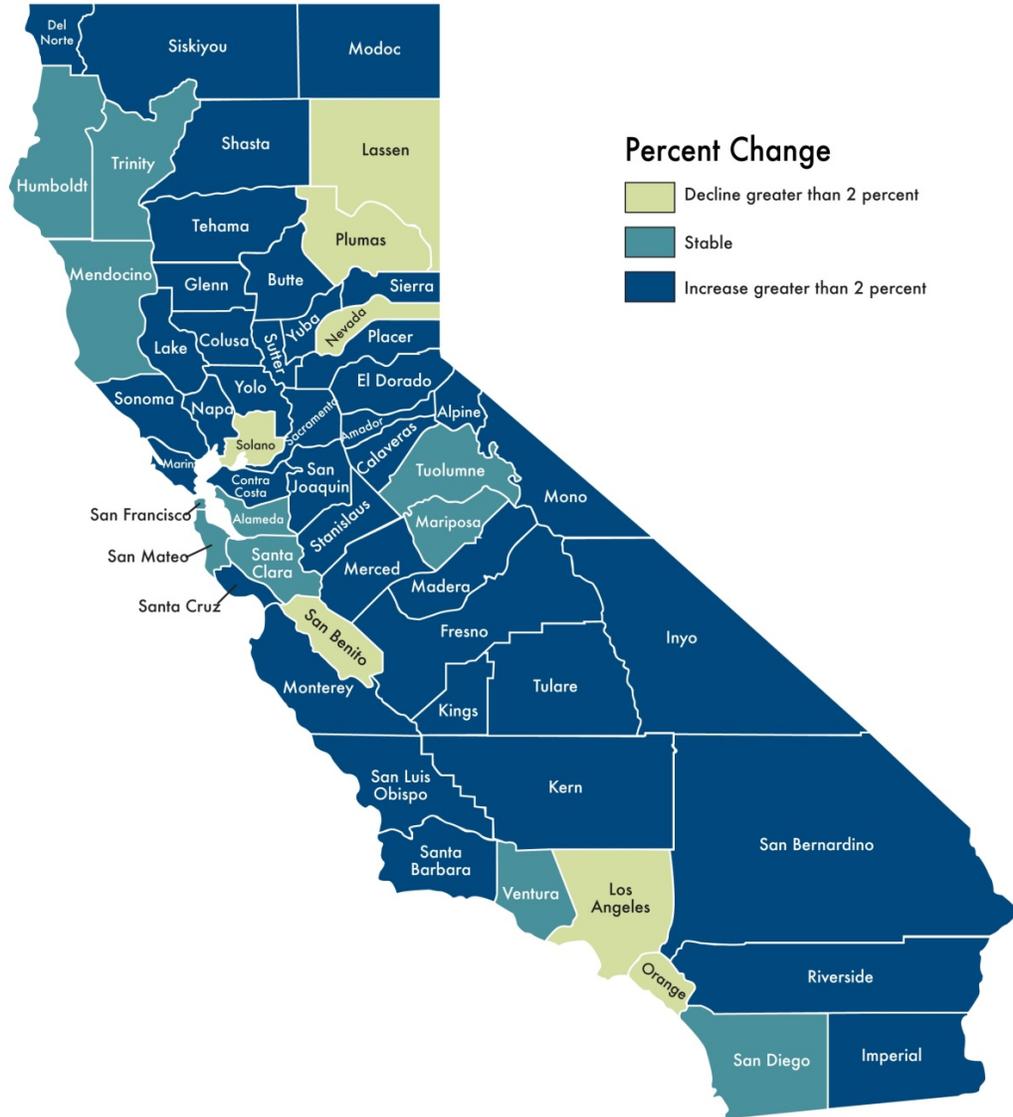
See Appendix A for source and technical information.

Strong regional differences exist in projected K–12 enrollment change. The most recent projections show expected growth in nearly all the inland counties as well as some of the coastal counties, suggesting that the need for future teachers will be most pronounced nearly everywhere but the urban centers of Los Angeles, San Diego, and the San Francisco Bay Area (CDF, 2009; see Exhibit 2.6). Because the majority of the state’s new teachers are

There are strong regional differences in projected K-12 enrollment change.

trained in these three urban centers, districts in the more rural and inland counties where enrollment is projected to grow most rapidly will most likely need to encourage local preparation programs to expand and engage in strategic recruitment and retention efforts to ensure new teachers are available to fill positions where they are needed most.

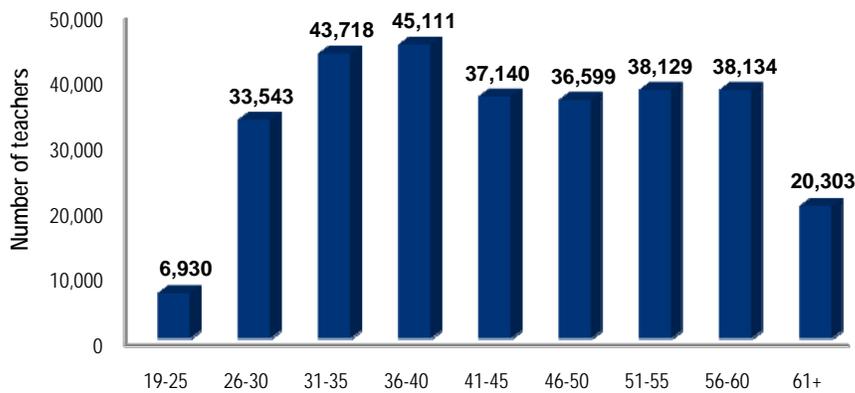
Exhibit 2.6
California Public Graded K-12 Enrollment Change, 2008-18



Source: California Department of Finance, 2009. See Appendix A for further information.

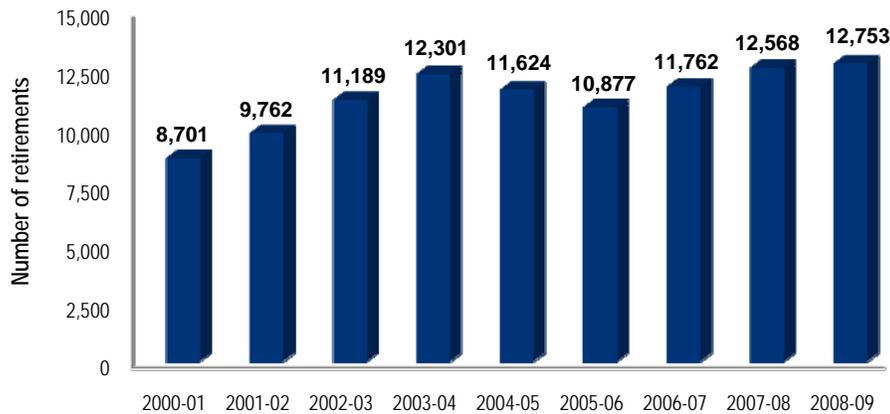
Just as enrollment growth is expected to increase the state's demand for teachers, the current age distribution of the workforce suggests an impending wave of retirements. In 2009–10, 32% of teachers were over 50 (see Exhibit 2.7). Although our interviews with administrators from geographically diverse districts from around the state suggest that some older teachers may be delaying retirement because they are worried about financial security, their departure is inevitable. Our most recent statewide data (2008–09) indicate that educator retirements are on the rise (California State Retirement System [CalSTRS], 2010; see Exhibit 2.8). Furthermore, in response to the budget crisis, some districts are offering incentives for early retirement. We do not yet know how widespread this practice is or how greatly it will affect statewide retirement numbers.

Exhibit 2.7
Age Distribution of K–12 Public School Teachers, 2009–10



See Appendix A for source and technical information.

Exhibit 2.8
Number of California State Teachers' Retirement System (CalSTRS) Membership Retirements, 2000–01 to 2008–09



See Appendix A for source and technical information.

As enrollment in teacher preparation programs declines, we are faced with projected increases in student enrollment and impending teacher retirements; history suggests to us that this combination of factors could lead to another teacher shortage. The teacher preparation system will need time to accommodate an increase in the demand for teachers, and it may be unable to provide enough qualified professionals to fill the open positions. A system-level CSU administrator commented on this danger:

***“It doesn’t take
1 year to prepare
teachers; it really
is a 5-year
process...”***

It doesn’t take 1 year to prepare teachers; it really is a 5-year process. We have freshmen that are deciding to move away from teaching. It is going to take a long time to bring enrollment in teacher preparation back. It is going to be really tough to get people back into the teacher pipeline, and we are going to need them if our enrollment projections are correct.

CHAPTER 3

INCREASED DEMANDS, DIMINISHED SUPPORT:
TEACHING IN TOUGH TIMES

California's challenging financial situation has resulted in drastic budget cuts at the state and district levels, including suspension of the minimum funding guarantees stipulated in Proposition 98. With an uncertain near-term outlook suggesting the possibility of further cuts to district budgets in an already austere environment, districts have needed to make tough choices about where to make cuts and where to maintain services and supports. As a result, teachers across the state are facing substantial challenges. Depending on how districts are addressing budget challenges, many teachers are facing some combination of larger class sizes, a shortened academic year in which to provide instruction, less time and fewer resources for planning and professional development, and less take-home pay, all while working toward ever-increasing expectations for their students. Moreover, many districts have had to make deep cuts to positions such as teachers' aides, nurses, counselors, and librarians, leaving teachers themselves with the difficult choice between taking on additional responsibilities that may detract from instruction and leaving students' needs unmet.

To make matters worse, as teachers take on these additional challenges, the state's fragile teacher development system has become increasingly strained, with teachers receiving less support to improve their teaching at all stages of their careers. In the years immediately prior to the recent budget crisis, California was beginning to build up a coherent system of teacher development in which resources and programs to train and support teachers were being implemented in a more aligned and thoughtful manner. However, the systemic nature of this support is now being dismantled due to lack of funds. Cutbacks and related programmatic changes have been made at every level of the system, with cuts affecting the time and resources available to support teacher credential candidates and to provide professional development, mentoring, and other supports for both beginning and experienced teachers. Funds previously targeted for many of these areas are being used by districts to offset revenue gaps elsewhere. As a result, responsibility for teacher professional development and support is increasingly shifting to school sites and to the teachers themselves.

In the remainder of this chapter, we document ways in which districts are making cuts to program areas affecting teacher responsibilities and consider how teachers are (or are not) being supported to adjust to new working conditions.

INCREASED DEMANDS ON TEACHERS

Demands on teachers as a result of the budget crisis include increases in class size, less time to plan and deliver instruction, and additional responsibilities inside and outside the classroom.

More students. In recent years, many California school districts have increased class sizes in order to cut personnel costs. According to a June 2010 California Department of Education (CDE) survey of California districts, 35% reported increasing average K–3 class size and 18% reported increasing average high school class size in 2008–09, 2009–10, or both years in response to budget shortfalls (CDE, 2010g). Furthermore, according to a recent report by the California Budget Project, California's 2009–10 average class size exceeded the national average by more than 7.5 students—"the largest gap in over a decade" (Kaplan, 2010, p. 1), attributable in part to relaxed financial penalties as of 2009 for schools that exceed targets set

The state's fragile teacher development system has become increasingly strained, with teachers receiving less support to improve their teaching at all stages of their careers.

California's 2009-10 average class size exceeded the national average by more than 7.5 students—"the largest gap in over a decade," according to a recent report.

forth in the K–3 Class Size Reduction (CSR) Program.¹⁰ Of course, the budget crisis has continued to worsen, and evidence suggests additional increases in class size in the current and subsequent academic years. Our review of a geographically representative sample of 13 large districts from across the state (subsequently referred to as focus districts) revealed that many have increased average class size in 2010–11, with current projections suggesting more increases in 2011–12.

Focus districts reported class-size increases of anywhere from an average of two students per class to an average of 10 students per class for 2009–10 and/or 2010–11, increasing average K–3 class sizes from 20 to 1 to anywhere between 22 to 1 and 30 to 1 and increasing average middle/high school classes to as high as 35 to 1. According to the 2010–11 adopted budget for one district that had implemented dramatic class size increases at the elementary level, “For many years, class sizes at the early primary grades were at 30 to 1, prior to the class size [reduction] incentive program becoming available. The statewide financial crisis and the resulting loss of funds necessitate us increasing class size [from 20 to 1 back to 30 to 1] at these grade levels.” This enabled the district to cut 96 teaching positions. This district also increased class size in grades 9–12 from 31 to 1 to 33 to 1 starting in 2010–11.

Other focus districts were adamant that they would not increase class size, opting instead to cut instructional days or reduce salaries to achieve the necessary cost savings. Public documents released by one focus district revealed that “During community budget forums to discuss how to deal with the cuts, district officials learned from parents and guardians that they did not want to see class sizes increase, a cost-cutting measure chosen by many other school districts facing similar budget crises. Instead, [the district and the union] negotiated furlough days” in order to save teacher jobs. The documents quoted one parent as stating that “We didn’t realize that teachers would be fired if we increase[d] class size. We all prefer to cut days of school instead of teachers.”

Less instructional and noninstructional time. The Budget Act of 2009 provided for flexibility in instructional time requirements for districts from 2009–10 through 2012–13, allowing for the reduction of up to 5 days’ worth of instructional time in a given academic year without a decrease in funding. According to the June 2010 CDE survey of California districts, 16% reported having reduced the academic year in 2009–10 (CDE, 2010g). Again, although no statewide numbers are available for 2010–11, reducing the number of instructional days may well be more prevalent across the state in 2010–11 as districts face more severe shortfalls. Many districts are also cutting noninstructional time typically devoted to planning and professional development. Our review of focus districts found that several had planned cuts to instructional time for 2010–11 and several had planned cuts to professional development time, with some overlap between the two strategies.

Focus districts that implemented furlough days for teachers cut between 2 and 4 days of professional development (often resulting in cuts to 50% or more of designated professional development hours for teachers over the course of the academic year) and between 1 and 5 days of instruction. At least three focus districts furloughed teachers for over a week

The Budget Act of 2009 allowed for the reduction of up to 5 days’ worth of instructional time.

¹⁰ The previous K–3 CSR penalty provisions stipulated a loss of 20% of CSR funding for a districtwide teacher-student ratio between 1 to 20.45 and 1 to 21.44; a loss of 40% of funding for a ratio between 1 to 21.45 and 1 to 22.44; and a loss of all funding for a ratio greater than or equal to 1 to 22.45. The current penalties have been relaxed considerably: 5% loss of funding for a ratio between 1 to 20.45 and 1 to 21.44; 10% loss of funding for a ratio between 1 to 21.45 and 1 to 22.44; 15% loss of funding for a ratio between 1 to 22.45 and 1 to 22.94; 20% loss of funding for a ratio between 1 to 22.95 and 1 to 24.94; and a 30% loss of funding for a ratio greater than or equal to 1 to 24.95.

(9 days in one district and 7 days in two others, with the cuts divided roughly evenly between instruction and professional development days).

Fewer student supports. Widespread cuts to such areas as summer school, instructional assistants, counselors, and other personnel and resources frequently dedicated to academic remediation and social/emotional supports for students can result in additional responsibilities for classroom teachers, leaving them with the difficult choice of taking on more responsibilities (e.g., counseling, remediation) or leaving students' needs unmet. The June 2010 CDE survey of California districts found that during 2008–09 or 2009–10 or both years, 48% of districts had cut counselors, nurses, and/or psychologists; 58% had cut district administrators; 29% had cut paraeducators or instructional assistants; and 26% had cut supplemental instruction such as summer school (CDE, 2010g). An administrator from one of the focus districts stated that “[our need] to make reductions in support staff that are assigned to sites... directly impacts teachers’ ability to work with students and families. [We’re losing] things like counselors, paraprofessionals, health and safety [personnel], other support staff...” An administrator from another focus district, which concentrated its personnel cuts on support staff positions to avoid teacher layoffs, reported that “[school] sites and the district are doing the same things and more with far less staff.” An administrator from a third focus district gave a detailed description of the implications of such cuts for teachers:

We reduced the number of intervention teachers, those hired to work with struggling students in English language arts and math... before, [students below grade level] might have had an opportunity to go to a tutor to get assistance in meeting their instructional needs. That opportunity may not exist anymore. So what does that mean to the teacher? It means they will have to find different ways to meet the needs of those students. They still have the responsibility to educate that student, [but] it is left to them—we don’t have the [resources] to support them.

At the same time, many districts are reducing teachers’ compensation.

With personnel costs (salaries and benefits) representing by far the largest line items in districts’ budgets, pressure to reduce such costs is high. As the “budget communication team” from one focus district explained, “Education is a people-rich endeavor. Over 90% of our budget is in positions (teachers, classified support staff, and management). That means that compensation (salaries and statutorily required benefits) must be looked at to achieve any broad-scale solution.” As a result, despite teachers’ increasing responsibilities, reductions in teacher take-home pay were often cited as a favorable alternative to layoffs.

California districts have used a variety of strategies to reduce teachers’ compensation below what would have been projected from a standard step-and-column pay scale. Strategies have included freezes or, in the case of at least one focus district, reductions to the standard step-and-column pay scale; reductions in compensation as a result of instructional and/or non-instructional furlough days; and increases in employee contributions to health insurance premiums and other benefits. According to the June 2010 CDE survey of California districts, 45% reported reductions in compensation for certificated staff in 2008–09 and/or 2009–10 (CDE, 2010g). Again, the expectation is that reductions in compensation have increased in prevalence in 2010–11 as districts continue to face challenging financial conditions.

Our review of focus districts found that the majority had planned furlough days (corresponding with cuts to instructional and/or professional development days as discussed above), and several had implemented some other type of salary freeze or reduction. Freezes to the salary schedule were common across focus districts, with several citing widespread

“[Our need] to make reductions in support staff... directly impacts teachers’ ability to work with students and families.”

Freezes to the salary schedule were common across focus districts, with several citing widespread teacher support for this strategy as a way to avoid or minimize layoffs.

teacher support for this strategy as a way to avoid or minimize layoffs. One focus district reported that members of its teachers' union had voted unanimously to approve a salary freeze.

Additionally, teachers in another focus district—which is currently identified for Program Improvement under No Child Left Behind—took the unusual step of accepting a voluntary across-the-board pay cut without taking furlough days. This was accomplished through a Memorandum of Understanding between the teachers' union and the district, which was approved by 69% of teachers in response to the widespread belief that students needed every instructional day they could get in order for the district to get out of Program Improvement. In a public message accompanying the 2010–11 adopted budget, the district's superintendent explained,

Among many cuts, the Board of Education [had] made the difficult decision to reduce the number of instructional days by five in an effort to save 6.9 million dollars. However, because our teachers knew how valuable instructional days are, they took a bold step to help offset this deficit by agreeing to a 1.93 percent reduction in pay for the next three school years.... [This voluntary pay cut] demonstrates how committed our teachers are to their students and this district.

“Our student teachers receive less monitoring, less mentoring, less supervision, and this has caused a great deal of worry about the quality of the [teachers] who complete our program.”

At the same time that demands on teachers are increasing and compensation is decreasing, fewer resources and structures are available to strengthen their teaching. Over most of the last decade, the California legislature and governor funded a series of initiatives aimed at strengthening the teacher workforce. These initiatives included efforts to recruit new teachers, streamline the teacher credentialing process, strengthen teacher preparation, provide professional development for both new and experienced teachers, and ensure the equitable distribution of experienced teachers and teacher mentors. More recently, however, California's fragile teacher development system has become highly strained as budget cuts have limited funding at all stages—from new teacher preparation to induction to ongoing professional development and support.

LESS SUPPORT FOR PROSPECTIVE TEACHERS

With budget constraints forcing universities to make cuts, enrollees in teacher credentialing programs are receiving less support.

At each of the geographically diverse CSU teacher preparation programs in our sample, we found that student teachers are receiving less support as they enter the classroom for the first time. More specifically, to cut costs, all but one of the focus CSUs have increased the ratio of student teachers to mentors, giving each student teacher less individualized supervision and support.

At one teacher preparation program, the ratio of student teachers to student teaching mentors increased by 50% as of the 2009–10 academic year. However, because increasing the amount of time that faculty spent per teaching unit was a violation of their contract, this CSU reduced the required number of classroom visits that a mentor had to make: Whereas mentors used to be required to visit a student teacher six to eight times per semester, mentors now need to make only four visits. Administrators described this as a significant decrease in support for student teachers. As one administrator for this program stated, “Our student teachers receive less monitoring, less mentoring, less supervision, and this has caused a great deal of worry about the quality of the [teachers] who complete our program.” This is an especially troubling development because student teaching provides important

opportunities for prospective teachers to develop their skills, and training and support for university-based mentors was already limited (Wechsler et al., 2007).

Another CSU has experienced the same 50% jump in the supervisor-to-student-teacher ratio. While the previous ratio allowed for what a program administrator described as “close and careful monitoring,” this administrator stated that increasing faculty responsibilities has damaged the quality of student teaching supervision, making it “very difficult to do the mentoring that we like to do.”

A more encouraging side effect of reduced resources is that they have driven innovation, specifically through the implementation of technology-based teacher support programs in two of the CSUs in our sample (see Exhibit 3.1).

Exhibit 3.1 Budget Crisis Spurs Innovation

One CSU is piloting an e-supervision program that faculty members believe may be more successful than traditional student teacher mentoring. The e-supervision program has a heavy online component and involves more contact between students and their mentors than what an administrator for this program described as “your traditional drive out to the school site, visit the class for 20-minutes and then leave” model. This administrator asserted that “Our research is telling us that it’s actually more effective.... It’s creating a community of students and their teachers and their program coordinator that never existed before.”

Another CSU is piloting a teaching analysis tool that helps supervisors give comprehensive and constructive feedback to student teachers. An administrator from the program explained, “The students post a video of themselves teaching, and the software allows the faculty member to watch the video and comment in real time so they can give very detailed and specific feedback. I think it’s an outstanding tool that we’re hoping to use to expand the way we give feedback to students. Having the budget crisis gave us the impetus to look into that.”

In response to budget cuts and declining enrollment, teacher credential programs are changing the composition of their faculty.

Teacher credential programs are hiring fewer temporary faculty, putting a hold on the hiring of tenure-track faculty, and/or changing faculty responsibilities.

At all but one of the five CSU teacher preparation programs where we conducted interviews, more tenured or tenure-track faculty are taking on student teaching supervision roles. The CSU administrators we interviewed were mixed in their assessment of whether this is a positive change. For example, an administrator at one program remarked that although some tenure-track faculty are good at supervising student teachers,” others are not and, “as a result, the quality suffers.” Many of these faculty do not have recent K–12 classroom experience, which makes it more difficult for them to mentor teacher trainees. Furthermore, much like classroom teachers, faculty at teacher training programs have many competing responsibilities (e.g., teaching, research, other university service such as committee work), with their workloads continually increasing because of budget constraints.

Another consequence of CSU’s budget cuts is a delay in the hiring of tenure-track faculty. In one program in our sample, eight tenured faculty retired in spring 2010 and the program has been unable to replace them because of budget restrictions imposed by the university administration. As a result, the overall student-faculty ratio has increased. Commenting on the effects of this change, an administrator reported, “Classes that used to max out at 25 are now being assigned 40 students. That doesn’t sound so large for undergraduate, but professional preparation cannot be done in such large classes.” The increased load has taken a toll on remaining faculty given the additional set of responsibilities that they already face. As one CSU administrator explained, “The workload is getting unbelievable.”

Budget cuts jeopardize implementation of the highly regarded Teaching Performance Assessment tool.

Implementation of the Teaching Performance Assessment (TPA)—California's comprehensive teacher candidate assessment and a requirement for credentialing programs—has become more difficult in light of budget cuts to universities. All the administrators from CSU teacher preparation programs we have spoken with agreed that the TPA has had a positive impact on teacher credential candidates, but they are worried about the expense of these thorough evaluations.

“I think [the TPA has] been very effective... especially in the area of working with English language learners and working with students with disabilities.... Unfortunately, it’s very expensive, an added expense for us that we have to absorb out of our budget.”

One administrator from a CSU stated that “I think [the TPA has] been very effective... especially in the area of working with English language learners and working with students with disabilities.... Unfortunately, it’s very expensive, an added expense for us that we have to absorb out of our budget.” Another CSU has found the detailed performance information gleaned from the TPA to be valuable for its own institutional improvement. An administrator explained that the program is now able to measure “how our folks have done in different subject areas. It’s really exciting, the first time we’ve had data where we can see what we need to improve on.” But the administrator also remarked on the cost, saying, “What is upsetting for us is that it [the TPA] costs so much money. The legislators have no idea.” An administrator at a third CSU teacher preparation program expressed similar support for the value of the TPA but expressed extreme frustration about its costs: “We estimate the costs [of the TPA] at \$450 per student, and it is unconscionable that this was mandated without any extra support from the state of California.”

LESS SUPPORT FOR BEGINNING AND EXPERIENCED TEACHERS**Widespread cuts to district-run professional development programs are limiting the support available to teachers at all stages of their careers.**

Most state-supported teacher professional development and support programs are financed through “categorical funds” targeted for specific programs. However, nearly all categorical funds associated with teacher professional development and support are currently subject to flexibility provisions that were designed to help districts balance their budgets in the face of recent and current shortfalls. For program funds in Tier III of categorical flexibility, districts have full discretion on how to allocate these funds to backfill general fund shortfalls and offset revenue gaps in other areas.¹¹ The flexibility provisions, which were initially implemented in 2009 and are currently set to sunset at the end of the 2012–13 academic year, have allowed districts to avoid more substantial cuts to teaching positions and other personnel-related expenses than might otherwise have occurred.

¹¹ Before 2009, spending of categorical funds was restricted to expenses related to the programs those categorical funds were allocated to. In order to provide districts with additional flexibility to address budget shortfalls, legislation that accompanied the Budget Act of 2009 divided the state’s categorical funds for education programs into three tiers, with varying levels of funding cuts and varying levels of flexibility for programs in each tier. For programs in Tier I, there were no funding cuts, no additional flexibility in the use of funds, and no ability to waive statutory requirements. Programs in Tier II were subject to funding cuts, with no additional flexibility in the use of funds and no ability to waive statutory requirements. Funds for programs in Tier III—which includes nearly all state-supported teacher induction and professional development programs—were subject to cuts, but districts were given full flexibility to use those funds “for any educational purpose,” with districts permitted to waive statutory requirements for these funds. These flexibility provisions are slated to remain valid through the end of the 2012–13 academic year.

However, because nearly all state funds for professional development were subject to Tier III categorical flexibility, associated savings from the movement of these resources into general funds have often come at the expense of professional development, mentoring, and other support for remaining teachers. Additionally, funding levels for these categorical programs were cut substantially in the 2008–09 and 2009–10¹² budgets relative to 2007–08 levels, making less funding available for these programs even before districts decided what proportion of that funding to roll into general funds.¹³ See Exhibit 3.2 for details on cuts to funding for state-supported teacher induction and professional development programs.

Flexibility provisions for categorical funds have allowed districts to avoid more substantial cuts to teaching positions. However, associated savings have often come at the expense of support for remaining teachers.

¹² Although the Budget Act of 2010 had been finalized at the time of this report's publication, the final appropriation amounts for many education programs (e.g., with control item reductions applied) had not yet been publicly released. Due to this delay, and because appropriations for these programs in the Budget Acts of 2009 and 2010 were nearly identical, we include data from the Budget Act of 2009 in Exhibit 3.2.

¹³ Note that because a professional development stipulation is attached to federal Title I funds, any Title I district must still provide funding for professional development even if all state professional development funds are swept into the general fund. However, Title I professional development funds represent only a small proportion of what would previously have been provided when state-supported professional development was fully funded.

Exhibit 3.2
Recent Funding Changes to Selected State Teacher Induction and Professional Development Programs

Program	Description	Flexibility Tier	2007–08 Funding*	2009–10 Funding*	% Change
Teacher Credentialing Block Grant	Provides funding for Beginning Teacher Support and Assessment (BTSA), a 2-year statewide induction program for new teachers consisting of orientation, mentoring, formative assessments, and professional development. New teachers earn their professional clear credentials upon completion of program.	III	\$128,700,000	\$90,400,000	- 29.8
Certificated Staff Mentoring Program	Provides incentives for experienced teachers who agree to teach in low-performing schools and to mentor intern teachers and newly credentialed teachers in their first 2 years of teaching.	III	\$11,700,000	\$8,600,000	- 26.5
Professional Development Block Grant	Includes Instructional Time and Staff Development Reform, Teaching as a Priority, and Intersegmental Staff Development (College Readiness Program and the Comprehensive Teacher Education Institute).	III	\$274,700,000	\$218,400,000	- 20.5
Peer Assistance and Review	Provides services to experienced teachers aiming to improve their skills or content knowledge.	III	\$30,100,000	\$23,900,000	- 20.6
Mathematics and Reading Professional Development Program (MRPDP) and Professional Development for Teachers of English Learners (ELPD)	Provides standards-aligned professional development and follow-up training for mathematics and reading teachers. Consists of 120 hours of professional development, including 40 hours of professional development for English language learner instruction. Note that these were two separate line items prior to the Budget Act of 2008.	III	\$56,700,000 (\$31,700,000 for MRPDP + \$25,000,000 for ELPD)	\$45,500,000	-19.8
Bilingual Teacher Training Program	Assists kindergarten through grade 12 teachers who already possess a basic credential in attaining authorizations to provide English Language Development, Specially Designed Academic Instruction in English, and primary language instructional services to English learners.	III	\$2,100,000	\$1,700,000	-19.0
National Board Certification Incentive Program	Provides districts with funds to award teachers who hold National Board for Professional Teaching Standards certification and who teach in low-performing schools (API deciles 1–5). A one-time incentive award of \$20,000 is paid in \$5,000 installments for 4 consecutive years.	III	\$6,000,000	\$2,400,000	-60.0

* Numbers are rounded to the nearest \$100,000.

Source: CDE, 2007; CDE, 2009.

Cuts to training and support specifically for beginning teachers. Several training and support programs for new teachers are subject to Tier III categorical flexibility, including the Beginning Teacher Support and Assessment program and the Certificated Staff Mentoring Program. According to a survey of California school districts administered by the Legislative Analyst's Office (LAO) in fall 2009 and released in spring 2010, at least some BTSA funds were shifted to general funds in 37% of districts (LAO, 2010). Although districts retain an incentive to provide BTSA to make it easier for new teachers to earn their clear credentials, it appears that a number of districts are trimming BTSA wherever possible, providing only what is necessary to fulfill the minimum requirements. Because many districts have limited openings and are hiring fewer new teachers, it would be logical to expect that less funding would be needed for new teacher induction programs; however, the quality of these programs for remaining new teachers also seems to be suffering.

As an administrator from one of the focus districts explained,

People are in survival mode. People are not doing extensive planning right now. BTSA used to fund a lot of the work we did with beginning teachers, but all of that became flexed, all that money's gone... we retained a skeleton staff to do bare minimum requirements for issuing credentials, and that's it.

An administrator from another district lamented, "We don't have that much money to offer the level of staff development and workshops and training that we used to offer our new teachers. It is just not there."

Cuts to training and support for all teachers. The reduction and reallocation of categorical funds further limit many supports designed for new and experienced teachers alike. According to the LAO's fall 2009 survey of California school districts, at least some categorical funds for each of several major professional development and support programs were shifted to general funds in a majority of districts. For example, 69% of districts reported shifting categorical funds from the Professional Development Block Grant, 55% from the Math and Reading Professional Development Program, and 59% from the Peer Assistance and Review program (LAO, 2010). Likewise, reviews of district documents and interviews with our focus districts suggest that the flexibility provision is being used widely. In 2010–11, an administrator from one focus district explained, "Because of the decision at the state level to take a whole bunch of categorical [funds] and turn them into general fund dollars, we've lost huge amounts of funding that normally would have gone to support professional development and instructional resources." The reduction and reallocation of these resources present challenges to both new and more experienced teachers who seek to gain expertise with content and pedagogy and are working to keep up with the evolving expectations and responsibilities of their teaching assignments.

Our review of focus districts' budget cuts indicates that providers of school-based professional development and support—including teachers on special assignment (TOSAs) and other dedicated school- and district-level staff positions—were frequently cut, as were instructional resources. One administrator in a focus district that cut all its TOSAs explained that "We know we need to have coaches, people working in classrooms, and there's just no money to do that." An administrator from another district concurred: "The main cuts I'm aware of were made with support staff. The district tried their best to keep as many teachers in the classroom as possible."

In addition to personnel, a range of other instructional resources also have been subject to cuts. For example, the June 2010 CDE survey of California districts revealed that 58% reported having cut funding for instructional materials in 2008–09, 2009–10, or both years (CDE, 2010g), and multiple focus districts reported that they were suspending textbook

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adoptions and making other cuts to instructional resources for 2010–11 or had already done so in prior years.

As a result of cuts to district resources for professional development programs and other teacher supports, ongoing teacher development is increasingly the responsibility of individual schools and teachers, leading to variations in availability and quality.

As districts cut some combination of time, financial resources, and personnel dedicated to professional development and support, teachers are increasingly dependent on whatever support is available at the school and department level. Our interviews with focus district administrators revealed that school- and department-level support for teacher development often varies widely in availability and quality both within and across districts. While research shows that school-based support is critical for new and experienced teachers alike,¹⁴ district-provided professional development programs are typically designed to guarantee that teachers update their skills and receive training aligned with district priorities (e.g., academic content standards, a new textbook adoption, or an initiative to close the achievement gap). Attempts to align professional development with district priorities may be jeopardized when professional development is provided exclusively at the school site. Indeed, our review of focus districts revealed that as professional development has become decentralized to school sites, the availability and quality of the professional development that does occur vary widely. Some districts are making the best of available resources to provide professional development aligned with district priorities, but many have not been able to ensure that their priorities are reflected in the school-level professional development that does occur or do not have sufficient information to even track what is being provided.

Attempts to align professional development with district priorities may be jeopardized when professional development is provided exclusively at the school site.

An administrator from one focus district, which cut all its teacher on special assignment positions, described the implications of devolving responsibility for professional development to the school site:

Teachers are really becoming responsible for their own professional development... [One of my program managers] says to teachers, “Look to your left, to your right, in front of you, and in back of you. Those are the people that can support you.”... We are relying more on teachers to work in collaborative groups and build on their own expertise now that we do not have curriculum specialists.

This administrator added that “For the most part, we can [no longer] send people out to sites to support individual teachers. If we get a call that an individual teacher needs support, we would have to look for another teacher in that teacher’s school to provide the needed support or work with the principal to get the needed support.” While such embedded professional development can be powerful, it depends on a teacher with the necessary skills being present in the school and available to provide the necessary assistance, which may not be given in light of teachers’ already overloaded schedules.

The district referenced immediately above sought to address the challenge posed by cutbacks by providing structured opportunities for teachers in like content areas to meet on their own time. The administrator we spoke to explained that this form of professional development is designed to help to develop teacher leaders without taxing the district’s limited professional development resources:

Participants can come together to talk, to discuss issues within a specific curricular area, and then they can take what they learned back to their own

¹⁴ See, for example, Louis, Leithwood, Wahlstrom, & Anderson, 2010.

schools and departments. There are five to six meetings per year. So we are relying more on the resources within our district rather than sending someone in to do something for teachers. In a way, it is a positive—we are tapping in to our own talent. The people who participate are the true leaders.

In districts such as this one that have been able to prioritize remaining resources to ensure that school-provided professional development is consistent with district priorities, relying on existing teacher leaders and helping to develop new ones can be a strategy for partially overcoming the current budget challenges. Indeed, this administrator added, “We believe we have built enough capacity within our own district that we don’t need to look outside for help. We need to start helping ourselves.” An administrator from another focus district that had returned teachers on special assignment to the classroom concurred:

Our coaches were some of the best and the brightest [and they are] going back into the classroom. In terms of diminished district support [because we have] fewer coaches, that’s exactly what happened. So we’re having to work differently, building capacity at the school-site level. A lot of the [reassigned] coaches continue to help their colleagues but from the classroom level.... And teachers need to lean on each other more to have meetings and dialogues around student work and to develop skill sets at the relevant grade level or content/department level.

Another of the focus districts made explicit efforts to target remaining district-provided professional development toward supporting professional learning communities (PLCs). While the initial impetus to support and encourage PLCs predates the recent budget cuts, an administrator in this district reported leveraging PLCs to ensure that teachers continue to receive district-aligned professional development now that cuts have been made.

In contrast to the districts attempting to be strategic with limited remaining resources, administrators from many other focus districts reported that remaining professional development provided at individual school sites had not been aligned with central office goals or priorities, often because the central office lacked the time, remaining expertise, or other necessary resources to ensure this alignment given the extent of other competing priorities. An administrator from one such focus district—which cut all TOSAs, nearly all central professional development materials and resources, and four of seven district professional development days—revealed that the district had not been able to be at all strategic in this area. “There is no [longer any] money to do any sort of centralized professional development. It is left to the sites to organize their own professional development.” This administrator added

In a district like [ours], we have all of the regular professional development needs—how you bring new teachers into the district, how you induct them, professional development around the basic core curriculum, all of that. And then on top of that, we have some really specific needs with targeted populations—specialized professional development to make sure that teachers have strategies in hand to work well with students with whom we haven’t been successful historically. We’d launched a number of different initiatives and projects that were very focused in those areas, and we’ve had to cut back tremendously in those areas. So we’re not only losing resources to do basic professional development, but also, at a time when it’s even more urgent that we address issues around, for example, the achievement gap, we’ve substantially reduced resources to be able to do that. So for example, we engaged with 10 of our schools last year, really focusing on

“We are relying more on the resources within our district... We are tapping into our own talent.”

“Teachers need to lean on each other more...”

pedagogy for urban students. In the normal course of events, we would want to expand to more schools and teachers. Instead, we've had to cut 75% of that program.

“We do realize that these cuts are supposed to be temporary, but you can't say “this is my best.” You're not able to do your best... Instead of being productive or innovative, you're just surviving.”

An administrator from another district further illustrated this challenge, noting that “[since] we reduced...professional learning days, which would have been set aside for training on district initiatives, to zero...we don't have a venue to provide that type of training in a systematic way.” Another administrator illustrated how budget cuts had not been strategic:

The budget cutting strategy was to try not to fill vacancies. Unfortunately, some vacant positions were critical [in terms of providing teachers with necessary support].... The work still exists, the need still exists, and it trickles down to the [teachers in the] classroom. We do realize that these cuts are supposed to be temporary, but you can't say “this is my best.” You're not able to do your best. It's survival mode. Instead of being productive or innovative, you're just surviving.

As responsibility for teacher professional development and support falls to individual teachers and schools, teachers are being asked to do more with less and are under increased scrutiny to show results. In the next chapter, we discuss the growing interest in revamping teacher evaluation to ensure a focus on teacher effectiveness.

CHAPTER 4

ENSURING EFFECTIVE TEACHERS IN CALIFORNIA'S CLASSROOMS

Within the context of rising expectations, diminishing resources, and a contracting teacher workforce, the demand for a fully qualified and effective teacher in every classroom is greater than ever. We know that teachers are the most important in-school factor influencing student achievement.¹⁵ Getting more students to reach proficiency and closing the achievement gap will require more effective teachers, which will in turn require aligned support at every level of the teacher development system. The reality of teacher layoffs focuses ever-greater attention on the issue. As one district leader explained, “We have fewer teachers, so the ones who remain have to be the best, most qualified, and most effective to make sure that we continue to give our kids access to rigorous instruction.”

The data released as part of the Teaching and California's Future initiative, however, has indicated in previous years that low-performing schools have often had difficulty attracting and retaining fully prepared and experienced teachers. In response to this maldistribution of teachers, numerous policies have been put in place at both the federal and state levels. Along with shifts in the labor market (e.g., fewer new teachers), these policies have narrowed disparities between high- and low-performing schools.¹⁶ Still, as we report in this chapter, issues of maldistribution remain.

We also report on new efforts to explore innovative systems for identifying effective teachers and ensuring that they reach those students who need them most. Policymakers are considering ways of strengthening teacher evaluations that include multiple measures, such as instructional practice and student outcomes. The goal is to be able to use evaluation results for broader purposes, including making employment decisions and targeting resources devoted to strengthening teacher practice. As we discuss, such a shift in policy requires integrating teacher evaluations into a larger system designed to strengthen the teacher workforce not only by dismissing the very weakest teachers, but by supporting the vast majority of teachers who are retained and need help to deepen their subject matter content knowledge, improve their pedagogical skills, and otherwise develop and evolve in order to best contribute to the success of their students.

EQUITABLE DISTRIBUTION OF TEACHERS

The equitable distribution of teachers across schools has been recognized as a significant challenge at both the state and federal levels for several years. This annual publication has highlighted inequities in the distribution of California's teachers across schools for over a decade. Likewise, a review of national data found that schools with the highest proportions of poor and minority students were more likely than other schools to have inexperienced teachers (National Center for Education Statistics, 2000). In response, policymakers at both the federal and state levels have enacted policies aimed at improving the distribution of novice and experienced teachers. While progress has been made, teachers continue to be maldistributed across California schools. This maldistribution—combined with recent

“We have fewer teachers, so the ones who remain have to be the best, most qualified, and most effective to make sure that we continue to give our kids access to rigorous instruction.”

Policymakers at both the federal and state levels have enacted policies aimed at improving the distribution of novice and experienced teachers.

¹⁵ See, for example, Ferguson & Ladd, 1996; Hanushek, 1992; Hanushek, Kain, & Rivkin, 2005; Rockoff, 2004; Sanders & Rivers, 1996.

¹⁶ See past Teaching and California's Future's reports, available online at http://www.cftl.org/Our_Publications.htm

teacher layoffs based on seniority—has led to high rates of teacher turnover in some of the state's hardest-to-staff schools.

Policies at both the state and federal levels are designed to remedy the unequal distribution of teachers across schools.

At the national level, the No Child Left Behind Act of 2001 (NCLB) makes an important statement regarding equity. In addition to the commonly known highly qualified teacher provisions, NCLB includes a lesser known equity provision requiring states to report whether poor and minority students are disproportionately taught by inexperienced, unqualified, and out-of-field teachers. In California, lawmakers have also embedded teacher distribution policies within state-level reforms. Exhibit 4.1 highlights some of the state and federal actions targeting teacher distribution across schools.

Exhibit 4.1
Efforts to Remedy Inequitable Distribution of Teachers Across Schools

Policy	Provisions
NCLB highly qualified teacher provisions (2001)	Requires states and districts to take steps to ensure that poor and minority children are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers.
<i>Williams v. State of California</i> settlement (2004)	Requires the state to provide students with adequate facilities, sufficient instructional materials, and teachers who are qualified to teach.
SB 1655 (Scott, 2006)	Allows principals in low-performing schools the right to refuse requested transfers into their school, potentially giving them more control over the makeup of their teaching staff.
SB 1209 (Scott, 2006)	Requires districts accepting additional alternative certification funds to equitably distribute interns across schools, ensuring that low-performing schools do have disproportionately more interns than other schools in the district.
SB 1133—Quality Education Investment Act ¹⁷ (Torlakson, 2006)	Requires that by the end of 2010–11 districts with schools receiving QEIA funds equitably distribute teachers across schools according to years of experience such that the average years of experience in a district's lowest performing schools is equivalent to or greater than the average years of experience across all district schools.

The Williams settlement (2004) requires, among other things, that qualified teachers be equitably distributed across schools. In 2006, the legislature implemented policies that effected the distribution of teachers by giving principals more control over staffing, regulating the distribution of interns, and requiring schools receiving Quality Education Investment Act (QEIA) funding to be staffed with teachers with at least as much experience, on average, as the district as a whole. The monitoring of these policies varies, resulting in an uneven understanding of their implementation.

¹⁷ The Quality Education Investment Act of 2006 (QEIA) was established in the settlement agreement for *CTA et al. v. Schwarzenegger et al.* to provide funding that was owed under the Proposition 98 guarantee in 2004–05 and 2005–06. It provides \$2.9 billion to K–12 education over a 7-year period from 2007–08 to 2013–14. Funds are being used to implement class size reduction and improve working conditions in API decile 1 and 2 schools.

As part of the Williams settlement, county offices of education are required to report on certain aspects of teacher quality, but these include only teacher misassignment,¹⁸ vacancies, and credentials (Purdue, 2010). Average years of teacher experience are not reported in this way. The California Department of Education is scheduled to report to the governor and legislature on QEIA's implementation every 2 years. In January 2010, CDE released the first progress report, stating that compliance in distributing teachers has been met, despite initial concerns voiced by local education agencies (LEAs). LEAs had noted that because of labor agreements and teacher supply issues, it would be difficult to hire more experienced teachers into traditionally hard-to-staff schools. However, these concerns faded somewhat as the state's financial crisis unfolded. The CDE report describes how budget cuts led many LEAs to abandon class size reduction policies in non-QEIA schools, resulting in an excess of experienced teachers who were often transferred to QEIA schools. The budget crisis also forced layoffs of inexperienced teachers, many of whom worked in QEIA schools. Both of these budget-related effects helped to raise average years of teacher experience at QEIA schools and aided districts in meeting this QEIA requirement (CDE, 2010h). The effects of Senate Bills 1655 and 1209 on the distribution of teachers are unknown, with no publicly reported information available on the distribution of interns in districts that receive alternative certification funding¹⁹ and no data available on principals utilizing the right to refuse transfers in low-performing schools. However, concern about the distribution of intern teachers remains.

NCLB's highly qualified provisions are meant to ensure that every school is staffed with effective teachers. However, a recent court decision challenged California's definition of highly qualified. In September 2010, a federal appeals panel in San Francisco ruled that teachers who are still in training (i.e., interns) cannot be classified as "highly qualified" under NCLB. The ruling, a reversal of the court's previous decision in *Renee v. Duncan*, states that doing so "impermissibly expands the definition of 'highly qualified teacher'...by including in that definition an alternative-route teacher who merely 'demonstrates satisfactory progress toward' the requisite 'full state certification'" (United States Court of Appeals for the 9th Circuit, 2010). Under this new ruling, intern teachers would no longer be deemed "highly qualified." Although the court case is not yet final, it could have serious ramifications for the distribution of intern teachers (CDE, 2010i). As of 2009–10, data on the distribution of intern teachers still reveals a skewed distribution, with approximately 50% of the state's interns concentrated in California's lowest performing (API decile 1-3) schools.²⁰

Despite policies targeting teacher experience levels in the lowest performing schools, inequities in California schools remain.

While the overall number of novice teachers has declined substantially in recent years, our analysis of 2009–10 teacher workforce data reveals that novice teachers remain maldistributed (see Exhibit 4.2). In fact, in California's lowest performing schools, novice teachers comprised 10% of the faculty (on average), compared with 5% in the highest performing quartile.

A federal appeals panel in San Francisco ruled that teachers who are still in training (i.e., interns) cannot be classified as "highly qualified" under NCLB.

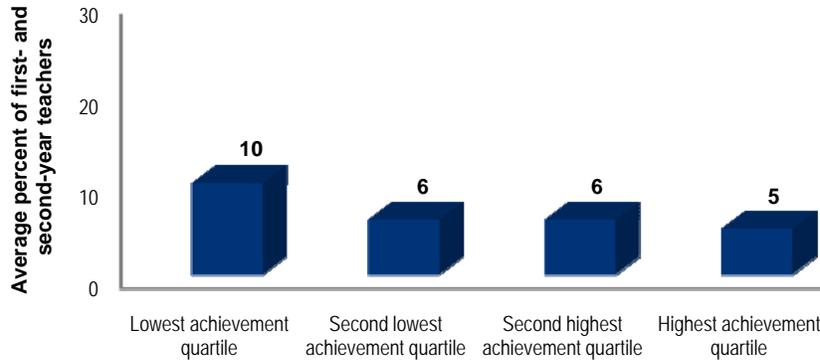
Our analysis of teacher workforce data reveals that novice teachers remain maldistributed.

¹⁸ Assignment of teachers to a role outside their subject area or grade level credential.

¹⁹ When the legislature placed intern program funding under Tier III of categorical program flexibility, all legal requirements enhanced under SB 1209 regarding intern distribution and reporting were suspended.

²⁰ Note that the analysis of the distribution of interns by school-level API (Academic Performance Index) rank included only those interns teaching at schools that received a school rank between 1 and 10. There were a total of 5,530 interns, 1,003 of whom were excluded from this analysis because they taught at a school that did not receive an API rank.

Exhibit 4.2
Average Percentage of First- and Second-Year Teachers,
by School API Quartile, 2009–10

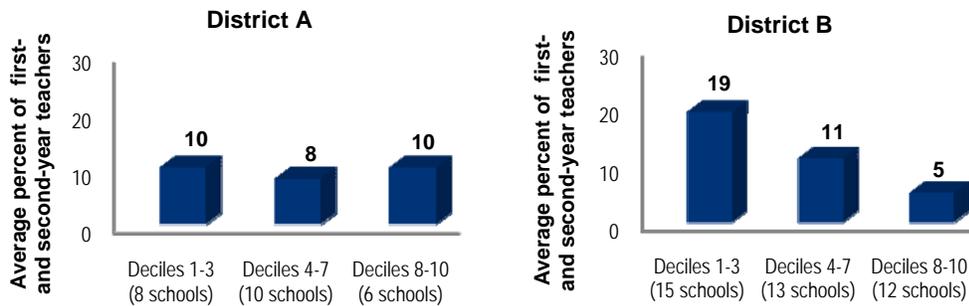


See Appendix A for source and technical information.

An examination of teacher distribution patterns by district uncovers substantial variation

While this pattern is repeated in districts across the state, an examination of teacher distribution patterns by district uncovers substantial variation, suggesting that local labor markets differ, and perhaps that some districts are putting greater emphasis on the equitable distribution of teachers. Exhibit 4.3 presents the average percentage of novice teachers by school Academic Performance Index (API) level in two of our 13 focus districts.²¹ In District A, novice teachers are relatively evenly distributed across API deciles, whereas novice teachers in District B are maldistributed across API deciles.

Exhibit 4.3
Average Percentage of First- and Second-Year Teachers in Two Focus Districts,
by School API Decile, 2009–10



See Appendix A for source and technical information.

²¹ We examined the distribution of novice teachers within each of our 13 focus districts; we present data from two districts that have a reasonable number of schools in each API category (at least 20%) and reflect the two ends of the distribution continuum.

Schools with high proportions of novice teachers suffer disproportionately from policies that stipulate layoffs of the least senior teachers first.

California is one of 14 states where statute stipulates that teacher layoffs be determined on the basis of seniority, with the least senior teachers being let go first (National Council on Teacher Quality, 2010a). This practice is commonly known as a “last-hired, first-fired” policy. The only exceptions to the rule in California law are to protect less experienced teachers who hold a particular credential or skill not held by more experienced teachers in the school. District officials may also deviate from last hired, first fired to comply with constitutional requirements to provide equal education under equal protection laws, but this exception is not commonly used. Layoff policies, as well as tenure and dismissal policies, are governed solely by the Education Code (sections 44932 to 44956) and cannot be negotiated by local school boards or unions.

The policy of “last hired, first fired” has the potential to create unintended consequences for schools that are traditionally hard to staff. As described above, low-performing schools tend to have higher proportions of novice teachers and, as a result, are more likely to be affected by district-wide reductions in force. An administrator from a large urban district expressed frustration with the teacher turnover the last-hired, first-fired policy causes at her district’s hardest to staff schools, noting “hardest to staff schools have the least senior teachers, and [those schools] are going to have, in some cases, half of their teachers or more who get pink slips. A school can’t count on having the same teachers from one year to the next.” A recently filed lawsuit sought to address inequities that arise when a school is disproportionately impacted by teacher layoffs.

Reed v. State of California highlighted the effects of last-hired, first-fired policies in some of Los Angeles Unified School District’s (LASUD) lowest performing schools. The suit claims that disproportionate layoffs in three low-performing schools in LAUSD resulted in a violation of students’ right to equal education. At these schools—each of which was in the state’s lowest API decile at the time—the proportion of teachers in the school who were issued layoff notices in 2009 (60%, 48%, and 46%) far exceeded the district average of 18%. The suit alleged that such high proportions of layoffs in these schools in spring 2009 resulted in myriad inequities, such as higher numbers of teacher misassignments—as many of the vacancies from these layoffs were filled by teachers who were assigned to classes they were not credentialed to teach—and a revolving door of substitute teachers. A preliminary injunction was issued in May 2010 blocking any further layoffs due to budget shortfalls in these three middle schools; in October 2010, the parties reached a settlement that prevents layoffs based on seniority in 25 API decile 1–3 schools with highest teacher turnover and up to 20 new schools that would be disproportionately affected by teacher turnover. The settlement also requires that retention incentives be created for teachers and administrators in these schools.²² While this may remedy the unintended effects of last-hired, first-fired policies in LAUSD schools, the settlement does not offer remedies for schools outside LAUSD.

Two failed legislative proposals in the 2009–10 session sought to provide a statewide remedy to the concerns raised in *Reed v. State of California*. Senate Bill 1285 (Steinberg) would have directly addressed concerns from the lawsuit by reaffirming that schools and districts can deviate from last-hired, first-fired policies in cases where equal education is at risk. Moreover, the bill sought to change state policy to ensure that first- and second-year teachers are distributed proportionately in districts. Finally, the bill would have placed limitations on the termination of teachers who provide instruction in the state’s lowest performing schools (i.e., ranked in deciles 1–3 on the API), requiring that the number of

Low-performing schools tend to have higher proportions of novice teachers and, as a result, are more likely to be affected by district-wide reductions in force.

²² See <http://www.schoolfunding.info/ReedSettlementOutlineFINAL.pdf>

layoffs issued at any given school not exceed the proportion of teachers given notice or terminated in the school district as a whole. Another failed bill, authored by Senator Huff (Senate Bill 955), also would have resulted in changes to the way teachers are laid off. SB 955 would have given discretion to local districts, allowing them to deviate from seniority-based layoffs. For example, districts would have had the option to use teacher performance as a criterion for determining layoffs. School districts, county offices of education, and charter schools also would have been authorized to assign, reassign, and transfer teachers and administrators on the basis of effectiveness and subject matter needs rather than years of experience. If passed, these bills would have allowed for alternatives to years of experience in determining teacher placement, and discussions continue at the state level to address these concerns. For example, at its November 2010 meeting, the State Board of Education put forth a proposal for public comment that “would permit districts to consider a number of factors when deciding how layoffs in particular schools should be done” (Fensterwald, 2010). The factors might include API scores; attendance, truancy, and dropout rates; and rates of teacher turnover.

Making such changes will require better measures of teacher effectiveness. We turn next to the topic of teacher effectiveness and new efforts to evaluate teachers.

MEASURING TEACHER EFFECTIVENESS

Policymakers at all levels—federal, state, and local—have begun to take a closer look at current practices regarding evaluation and are considering new ways to define and measure teaching quality.

Although years of experience, credential status, and advanced degrees have often served as proxies for teacher quality, education leaders and policymakers have long sought to understand the traits that characterize more effective teachers and the practices associated with more effective teaching. Effectiveness is typically defined in terms of ultimate student outcomes; however, efforts to evaluate individual teachers have generally relied heavily on observed teaching practice, while most academic research on the subject has relied on state and national assessments of student learning in mathematics and reading/language arts.

In recent years, policymakers at all levels—federal, state, and local—have begun to take a closer look at current practices regarding evaluation and are considering new ways to define and measure teaching quality. In this section, we describe some of these recent efforts to revamp teacher evaluation systems in California and across the nation. We begin with a review of current practices.

Current teacher evaluation tools are not designed or implemented to inform teacher development or improve teaching practice.

California's basic teacher evaluation system was established in 1971 under the Stull Act, which specifies the frequency and components of observations and evaluations. The act was amended twice to expand the scope of evaluation, adding the required review of instructional strategies in 1983 and the review of student test results in 1999 (Legislative Analyst's Office, 2008). These additions are included among the areas specified in the Education Code for evaluation:²³

- The progress of pupils toward the standards established pursuant to the state-adopted academic content standards as measured by state-adopted criterion-referenced assessments
- The instructional techniques and strategies used by the employee
- The employee's adherence to curricular objectives

²³ California Education Code Section 44662

- The establishment and maintenance of a suitable learning environment, within the scope of the employee's responsibilities.

Districts develop their own evaluation systems that align with these areas of measurement, subject to local bargaining agreements. For example, districts can choose whether to use either the California Standards for the Teaching Profession (CSTPs) or National Board for Professional Teaching Standards to assess teacher practice.²⁴ Likewise, local districts determine the role that student test results play in evaluations.

In accordance with the Stull Act, a typical teacher evaluation requires observers to rate teachers on a number of items as (1) meets standards, (2) does not meet standards (unsatisfactory), or (3) not observed, leaving little to no room for degrees of proficiency. Exhibit 4.4 presents a sample of how the first four CSTPs might be evaluated under the Stull Act.

Local districts determine the role that student test results play in evaluations.

**Exhibit 4.4
Excerpted Sample Stull Act Evaluation Tool**

<u>Rating Definitions</u>			
1. Meets Standards			
2. Unsatisfactory - Does not meet Standards			
3. Not observed			
NOT ALL ELEMENTS MUST BE EVALUATED – THOSE NOT OBSERVED SHOULD BE NOTED			12/15
STANDARD I – Engaging and Supporting All Students in Learning			1 2 3
1.1	Connect students' prior knowledge, life experience, and interests with learning goals		
1.2	Use a variety of instructional strategies and resources to respond to students' diverse needs		
1.3	Facilitate learning experiences that promote autonomy, interaction, and choice		
1.4	Engage students in problem solving, critical thinking, and other activities that make subject matter meaningful		
1.5	Promote self-directed, reflective learning for all students		
STANDARD II – Creating and Maintaining Effective Environments for Student Learning			1 2 3
2.1	Create a physical environment that engages all students		
2.2	Establish a climate that promotes fairness and respect		
2.3	Promote social development and group responsibility		
2.4	Establish and maintain standards for student behavior		
2.5	Plan and implement classroom procedures and routines that support student learning		
2.6	Use instructional time effectively		
STANDARD III - Understanding & Organizing Subject Matter for Student Learning			1 2 3
3.1	Demonstrate knowledge of subject matter content and student development		
3.2	Organize curriculum to support student understanding of subject matter		
3.3	Interrelate ideas and information within and across subject matter areas		
3.4	Develop student understanding through instructional strategies that are appropriate to the subject matter		
3.5	Use materials, resources and technologies to make subject matter accessible to students		
STANDARD IV - Planning Instruction & Designing Learning Experiences for All Students			1 2 3
4.1	Draw on and value students' backgrounds, interests, and developmental learning needs		
4.2	Establish and articulate goals for student learning		
4.3	Develop and sequence instruction, activities, and materials for student learning		
4.4	Design short-term and long-term plans to foster student learning		
4.5	Modify instructional plans to adjust for student needs and respond to ongoing assessments		
4.6	Plan instruction around the adopted content standards and frameworks		

Source: Excerpted from the teacher evaluation handbook of one of our focus districts.

²⁴ California Education Code Section 44661.5

Recent studies suggest that neither teachers nor administrators find the evaluations to be helpful as a means of improving instruction. Our 2007 study on the status of the teaching profession in California focused on how teaching is measured and how those measures are used to strengthen practice at each stage of the teacher development continuum, from teacher preparation to hiring to evaluation of and support for teachers. We found that once tenure was obtained, evaluations were of little use. One teacher echoed the views of many when she explained that “evaluations become more of a record-keeping process than one that is tied to improving teacher practice.” Educators also felt that because observations are announced, teachers are able to prepare so that administrators are unable to evaluate a typical period of instruction (Wechsler et al., 2007). A more recent report from Accomplished California Teachers (2010), an organization comprised of National Board certified and other accomplished teachers, supports these findings. It found that the Stull-format evaluation did not provide teachers with guidance on “common standards, did not have a uniform approach to looking at the quality of teaching, was narrowly focused on a few indicators of satisfactory teacher performance, and was not intended to recommend targeted areas to help improve teacher performance.” Given these findings, the authors recommend that the state move toward more meaningful evaluations that include performance assessments, an array of student outcomes, and connections to professional development, among other things (Accomplished California Teachers, 2010).

Neither teachers nor administrators find the evaluations to be helpful as a means of improving instruction

Efforts are under way to overhaul teacher evaluation in California.

In response to the federal Race to the Top (RttT) competition, California proposed a new evaluation system that incorporated multiple measures, including measures of student growth, and that would be used in both tenure and promotion decisions (California Race to the Top, 2010a). Even though California did not receive federal RttT funding to support these reforms, some of the districts that had signed on as official partners in the state’s application are working to advance the proposed work of reforming teacher evaluations. In a press release from September 2010, the Superintendent of Public Instruction stated that

Last month, LAUSD hosted the 6 other school districts who comprised our RttT working group, and their collective bargaining partners, to begin the important work of creating fair and meaningful teacher and principal evaluations using multiple measures, based at least 30% on student growth. This work will continue. We have already formed the California Office to Reform Education (CORE), which was created specifically to continue the benefits of LEA collaboration and will now receive funding from foundations to do some great work (California Race to the Top, 2010b).

Additionally, at its November 2010 meeting, the State Board of Education considered two proposals that would raise awareness about teacher evaluation, one targeted toward sharing information about best practices and the other requiring districts to report on evaluation processes and aggregate results on the School Accountability Report Card. Finally, the board discussed a proposal to create incentives for districts to revamp their teacher evaluation systems to meet specific criteria, including basing 30% of the evaluation on student outcomes (Fensterwald, 2010).

Even before RttT, some California districts were pursuing teacher evaluation reform. In April 2009, the LAUSD Board of Education called for the establishment of a task force to focus on the issue of measuring teacher effectiveness. In April 2010, the district’s Teacher Effectiveness Task Force recommended that evaluations include multiple measures of teacher practice such as gradated rubrics that have clear definitions of what is expected, value-added student outcomes, parent/student feedback, collaboration, and self-evaluation.

The task force also recommended that evaluations have “real ramifications” *and* inform support and feedback for teacher improvement (Los Angeles Unified School District, 2010).

Of course, California's movement toward a new teacher evaluation system is occurring within a broader national context. We turn now to a discussion of national trends and the growing interest in including student outcome measures in teacher evaluation.

National trends suggest a move toward the inclusion of student outcome measures in teacher evaluation.

Interest in including student outcomes as a measure of teacher effectiveness is developing in virtually all education arenas, from the federal government to state governments to local districts and foundations. At the national level, RttT ignited the discussion on evaluation reforms by requiring states to remove barriers to linking state-level data on student achievement or student growth to teachers and principals for the purpose of teacher and principal evaluation. In response, California passed Senate Bill 19 (Simitian), which allows for the linking of state-level student and teacher data and removes the prohibition against use of those data for evaluation and employment decisions. Further, California lawmakers passed Senate Bill X5_1 (Steinberg), affirming long-standing state policies that call for districts to use student test score data for evaluation and employment decisions so long as the use of these data is in line with local bargaining agreements.

Other states have been more prescriptive regarding the role of student achievement in teacher evaluation. A number of jurisdictions require districts to include student outcomes in specific or minimum proportions. Some jurisdictions have further specified the use of evaluations in tenure or promotion decisions. Exhibit 4.5 provides more information on other states' systems. For California to move forward with similar requirements, it will have to provide districts with additional resources to support the associated changes in local policy and practice. California law prohibits state-level mandates that will cause local districts to incur unfunded costs, and revamping teacher evaluation will not be cost neutral for districts.

Interest in including student outcomes as a measure of teacher effectiveness is developing in virtually all education arenas.

Exhibit 4.5
Recent Teacher Evaluation Policy Shifts in Other Jurisdictions

State	Policies
Colorado	<ul style="list-style-type: none"> • SB 10-191 (Great Teachers and Leaders bill), passed in 2010, requires that annual teacher and principal evaluations be based at least 50% on student growth measures. • Veteran teachers with two consecutive “ineffective” ratings on evaluations will be returned to probationary status. • Teachers displaced from jobs have 12 months, or two hiring cycles, to find a position before being cut from payroll (as compared with the current system where they continue to receive pay).
Delaware	<ul style="list-style-type: none"> • Policies adopted in January 2010 (in response to RttT) require evaluations for teachers and administrators based on student performance beginning in 2011–12 and stipulate that evaluations are to be used for tenure, compensation, and promotion decisions. • State will contract with a third party to provide coaching support for administrators in implementation of evaluation system.
Florida	<ul style="list-style-type: none"> • With RttT funding, districts have agreed to base 35% of teacher evaluations on student achievement growth and another 10% on other student achievement measures.
Illinois	<ul style="list-style-type: none"> • Passed the Performance Evaluation Reform Act in January 2010, requiring evaluations to be based at least 50% on student growth.
Rhode Island	<ul style="list-style-type: none"> • Adopted the Educator Evaluation Systems Standards in December 2009, requiring teacher evaluations to be based primarily (51%) on student growth. • Placement of teachers must be made by mutual consent on the basis of school needs rather than seniority. • Provides peer mentoring for teachers in high-need districts.
Tennessee	<ul style="list-style-type: none"> • To compete for RttT, state passed SB 7005, the Tennessee First to the Top Act, in January 2010, requiring 50% of total evaluation scores to be based on student achievement (including 35% of total evaluation scores based on value-added measures).
Washington, DC	<ul style="list-style-type: none"> • District first adopted IMPACT performance assessment system in 2009–10 school year, requiring 50% of teacher evaluation to be tied to individual student growth, 5% to be tied to school-level student growth, 35% depending on instructional practice, and 10% to be based on commitment to school community (proportions vary for teachers without individual student test data).

For additional information, see National Council on Teacher Quality, 2010b, and the Department of Education websites for each state and for Washington, DC.

Although value-added modeling and the use of student achievement growth scores to measure teacher effectiveness are growing in popularity among policymakers, leaders in the measurement field urge state and local policymakers to proceed with caution regarding appropriate uses of these measures.²⁵ In a recent report, a group of academic researchers including experts in teacher evaluation, educational measurement, and test-based

²⁵ A value-added measurement of student outcomes measures changes in student growth over time while taking into consideration past student performance and other factors. Because value-added models measure growth rather than status, they are recognized as more accurate measures of the impact of an intervention on student learning.

accountability detailed problems associated with the heavy reliance on test scores to evaluate teachers. Some of the problems concerned the statistical misidentification of effective teachers (including measurement error, imprecision, instability, and the nonrandom sorting of teachers and students). Practical problems included the fact that many teachers—including most secondary school teachers and all kindergarten through second-grade teachers—do not teach classes that are subject to the kinds of standardized tests that would enable value-added measures of student progress. Unintended negative consequences included disincentives to work with the neediest students and the prospect of narrowing the curriculum (Baker et al., 2010). Likewise, a recent study commissioned by the U.S. Department of Education found that the margin of error in value-added scores is higher when fewer years of data are available or when calculations are done at the individual rather than school level (Schochet & Chiang, 2010). In light of these concerns, leaders in the measurement field recommend that value-added scores be just one part of a larger, more comprehensive evaluation structure (Milanoski, Heneman, & Kimball, 2009).

Given the limitations of using student achievement to measure teacher effectiveness, measures of instructional practice and other teacher attributes gain importance. Moreover, systems designed to both support teacher development and serve as the basis for employment decisions are likely to require a more comprehensive set of measures.

Comprehensive evaluation systems can be used to support and inform teacher development.

Some states and districts are now requiring, by law that evaluations play a more significant role in employment decisions, but very few specifically call for the use of evaluations to inform teacher development. This failure to consider teacher evaluation in the context of teacher development perpetuates the problem identified by the New Teacher Project in *The Widget Effect*: 73% of surveyed teachers did not receive evaluations that documented areas for development, and of those who did, only 45% found the identification of improvement areas to be useful. The report emphasized that school and district leaders often lack the necessary information to assess instructional performance or support growth among “the broad plurality of hard-working teachers who operate in the middle of the performance spectrum” (Weisberg, Sexton, Mulhern, & Keeling, 2009).

Recent events in the District of Columbia further illustrate the importance of designing evaluation systems that can support teacher development. The district's new evaluation practices, designed to identify effective and ineffective teachers, have gained substantial national attention. Yet of the 4,000 teachers in the district, only 75 (less than 2%) were dismissed in 2009 for being “ineffective” (Torque, 2010). An important public policy question is therefore: how the system can support and train the 98% of teachers who remain in the classroom so that they become increasingly effective.

Foundations that are funding new teacher evaluation and measurement initiatives have included supports for teachers. The Gates Foundation's Measures of Effective Teaching project has invested in several large urban districts to develop teacher evaluation systems that include multiple measures and result in more meaningful tenure decisions, differentiated pay based on effectiveness, strategic placement of teachers, and targeted professional development. Likewise, the Milken Family Foundation has supported the Teacher Advancement Program (TAP), which uses a multidimensional rubric based on the Danielson Framework for classroom observation to foster open discussions of teaching practice and increase collaboration in schools. Under TAP, teachers are assigned mentors who meet with them both before and after observations to discuss instructional practice in depth, and data from the rubric are combined with value-added data to determine professional development needs for individual teachers. A recent evaluation of the program found that the targeted

Leaders in the measurement field recommend that value-added scores be just one part of a larger, more comprehensive evaluation structure.

New teacher evaluation and measurement initiatives have included supports for teachers.

professional development and one-on-one support for teachers is central to the TAP system (Daley & Kim, 2010).

The first lesson from earlier and existing efforts to strengthen teacher evaluation, then, is the need to use a comprehensive approach that includes multiple measures of teaching effectiveness. The second lesson concerns the importance of using the results of these more comprehensive evaluations to develop teachers' knowledge and skills.

CHAPTER 5

CALIFORNIA'S STATEWIDE K–12 DATA SYSTEM:
A WORK IN PROGRESS

With the stroke of the governor's veto pen, California's troubled effort to build an integrated statewide K–12 education data system was thrown into limbo in October 2010. The governor cited system performance problems, a lack of "necessary accountability," and high costs as the basis for his veto (California Office of the Governor, 2010). The full story of the state's efforts is a complicated one, with much progress punctuated by periodic crises. In this chapter, we review California's efforts to lay the groundwork for an integrated statewide K–12 education data system over the past 13 years, the setbacks to implementation that the state has faced, the details of the funding cuts and the current status of California's new data system, and important issues that will continue to challenge the development of this system.

Over the past 13 years, California has been laying the groundwork for a statewide K–12 education data system.

In 1997, the state legislature took a step toward streamlining K–12 data collection activities by establishing California School Information Services (CSIS). CSIS created a new data submission system, enabling districts to meet state and federal reporting requirements by submitting student and educator data electronically. District participation in this electronic reporting system was voluntary.²⁶ In 2002, Senate Bill 1453 (Alpert) officially moved California's educational data collection activities from the institutional level (i.e., reported at the district or school level) to the individual level (i.e., reported at the teacher or student level). Individual-level data are not only required to respond to No Child Left Behind reporting requirements, but are also necessary to evaluate state educational programs and investments and are the most meaningful data for districts in their efforts to improve student achievement. By June 2005, CSIS had assigned a unique number to every K–12 public school student in the state. SB 1453 also authorized the development of the California Longitudinal Pupil Achievement Data System (CALPADS) to house K–12 student-level data as well as some educator-level data (e.g., courses taught, employing school and district; see Exhibit 5.1). The California Department of Education is responsible for the management and oversight of the development and implementation of CALPADS. Although the legislation authorizing CALPADS passed in 2002, the contract to build it was not awarded until December 2007.

The full story of the state's efforts is a complicated one, with much progress punctuated by periodic crises.

Collecting Teacher Data. Collecting data at the individual student level was an important step in building a longitudinal data system, but critical information about teachers was still missing. Without individual teacher-level data, the state could not answer basic and important longitudinal questions about teacher credentials, authorizations, assignments, retention, or mobility. To this end, in 2006 Senate Bill 1614 (Simitian) authorized the California Longitudinal Teacher Integrated Data Education System (CALTIDES). The California Commission on Teacher Credentialing was charged with maintaining the credential information for CALTIDES and assigning a unique teacher identifier to the over 300,000 credentialed individuals in the state, a task that was completed in May 2008. Although the contract has been awarded, development of the CALTIDES architecture has

²⁶ According to a RAND report, CSIS was "intended to (1) build the capacity of LEAs to implement and maintain (their own) comparable effective and efficient pupil information systems, (2) enable the accurate and timely exchange of pupil transcripts from LEAs to postsecondary institutions, and (3) help LEAs transmit state and federal reports to the California Department of Education." For more information, see Vernez, Krop, Vuollo, & Hansen, 2008.

yet to begin. Together, CALPADS and CALTIDES were designed to make up the backbone of the state's integrated K–12 education data system.

Exhibit 5.1 Teacher Data in CALPADS

Although named the California Longitudinal Pupil Achievement Data System, CALPADS will collect and house much of the most critical information on teachers.

Although named the California Longitudinal Pupil Achievement Data System, CALPADS will collect and house much of the most critical information on teachers. CALPADS will include the following teacher information:

- Gender
- Race/ethnicity
- Employing school and district
- Assignment(s) (e.g., seventh-grade mathematics, English language development course, third grade)
- Highest level of education
- Participation in an induction program
- Employment status (e.g., tenured, probationary),
- Participation in a multiple-teacher instruction strategy (i.e., team-teaching or job sharing)
- Designation as “highly qualified” or “not highly qualified” under NCLB

The California Longitudinal Teacher Integrated Data Education System (CALTIDES) will house teacher credential and authorization information but will not collect any teacher workforce participation information such as where teachers are working or what they are teaching. All workforce participation information will be collected and housed in CALPADS.

CALPADS now includes most of the elements considered to be necessary for a robust data system.

We can judge the strength of the emerging system using national criteria established by the Data Quality Campaign (DQC).²⁷ DQC identified 10 “essential elements” that all state longitudinal student-level data systems should include (see Exhibit 5.2). Since 2005, DQC has administered an annual survey of all 50 states, the District of Columbia, and Puerto Rico to track state progress in developing longitudinal data systems that include the 10 essential elements. California's statewide K–12 data system went from having only 1 of these 10 essential elements in place in 2005 to 8 of 10 in 2009.

²⁷ DQC is a national organization whose charge is to “encourage and support state policymakers to improve the availability and use of high-quality education data to improve student achievement.” For more information, see <http://www.dataqualitycampaign.org/>

Exhibit 5.2
Data Quality Campaign's 10 Essential Elements for a Robust Longitudinal Student-Level Data System

Data Quality Campaign's 10 Essential Elements	Elements Included in California's K–12 Data System	
	2005	2009
1. Statewide student identifier	No	Yes
2. Student-level enrollment data	No	Yes
3. Student-level test data	No	Yes
4. Information on untested students	Yes	Yes
5. Statewide teacher identifier with a teacher-student match	No	Yes
6. Student-level course completion (transcript) data	No	No
7. Student-level SAT, ACT, and Advanced Placement data	No	Yes*
8. Student-level graduation and dropout data	No	Yes
9. Ability to match student-level P–12 and higher education data	No	No**
10. State data audit system	No	Yes

Source: Data Quality Campaign (<http://www.dataqualitycampaign.org/survey/states/CA>)

*In 2009, California reported that the data system did not collect Advanced Placement data but did collect SAT and ACT student-level data.

**In 2008, SB1298 required California's three higher education systems (community college, CSU, and UC) to establish a process to issue, maintain, and report information using the unique student identifiers. The three systems are required to report on their progress annually.

With all but two of the essential elements in place, California's emerging K–12 data system should allow for a variety of longitudinal analyses that were not previously possible, such as

- Monitoring student outcomes over time (e.g., tracking the movement of students among the proficiency bands of the Standardized Testing and Reporting [STAR] exams over several years)
- Investigating trends in relationships among data elements, such as the relationships among student outcomes, program participation, and school characteristics (e.g., percentage of students in a school who score proficient or above or who are eligible for free or reduced-price lunch)
- Monitoring teacher mobility, job-taking rates, and the relationships between student outcomes and teacher preparation routes.

While continuing to highlight the 10 essential elements, DQC expanded its focus in 2009, attending to the policies and practices that states need to create sustainable data systems that are used to improve state outcomes. These policies and practices are known as the “10 state actions.” According to this different set of criteria, California—like most states—has far to go (see Exhibit 5.3). In 2009, no state had all 10 state actions in place, the majority of states (38) had between 1 and 3 state actions in place, and five states, including California had no state actions in place.

California's emerging K-12 data system should allow for a variety of longitudinal analyses that were not previously possible.

Exhibit 5.3
Data Quality Campaign's 10 State Actions for Ensuring the Use of Data to Improve System and Student Performance

Data Quality Campaign's 10 State Actions	State Action Evident in California?
1. Link data systems with early learning, postsecondary education, workforce, social services and other critical agencies	No*
2. Create stable, sustained support for a robust state longitudinal data system	No*
3. Develop governance structures to guide data collection, sharing and use	No*
4. Build state data repositories (e.g., data warehouses) that integrate student, staff, financial and facility data	No
5. Implement system to provide timely access to information	No
6. Create progress reports using individual student data to improve student performance	No
7. Create reports using longitudinal statistics to guide systemwide improvement efforts	No
8. Develop a P–20 workforce research agenda	No*
9. Promote educator professional development and credentialing to ensure educators know how to access, analyze and use data appropriately	No*
10. Promote strategies to raise awareness of available data.	No*

Source: Data Quality Campaign (<http://www.dataqualitycampaign.org/survey/states/CA>)

*DQC has identified required components (essentially subactions) that need to be met under each state action in order for DQC to indicate that a particular state action is "evident." The number of components for each state action varies, ranging from 2 to 8. California has at least one component "evident" for each of the state actions identified by an asterisk.

Although California did not yet have any of these recommended actions in place at the time of the 2009 survey, some were in the process of being developed. For example, Senate Bill 1298 (Simitian 2008) required that state- and federally funded preschools and child care centers, as well as California's public postsecondary institutions, use the statewide student identifier for their students and to report data to the state using these identifiers.²⁸ SB 1298 also required that the State Chief Information Officer convene a working group to develop a strategic plan related to data collection, sharing, and use, which aligns with the DQC's State Action 3 (develop governance structures to guide data collection, sharing, and use). California's responses to DQC's 2009 survey on state actions indicated that the state had made progress in establishing some of the required components in each of six state actions (identified by an asterisk in Exhibit 5.3).

There have been serious setbacks to CALPADS development and implementation.

Pilot testing for CALPADS began in the 2008–09 school year, and serious problems with the system emerged. Complaints about the system's slow speed and lost data and reports of the inability to enter data poured in from districts across the state. In part in reaction to these complaints, CDE pared down data collection for the 2009–10 school year. For example, course assignments for every teacher in the state were not collected. CDE also did not

²⁸ Center-based child care and development programs have not been required to implement or maintain unique student identifiers because no appropriation for this purpose has been provided in the annual Budget Act or another statute.

collect information about teacher credentials and authorizations that will ultimately be available through CALTIDES, development of which has yet to begin. Consequently, policymakers have no information on certain key data points, such as underprepared teachers or out-of-field teaching, for the 2009–10 school year.

In January 2010, an independent firm issued the first of four audit reports on the development, implementation, and management of CALPADS. The first report identified “significant issues with the system and project representing a threat to the success of CALPADS from both an engineering and project [management] standpoint” (Sabot Technologies, 2010a, p. 4). Problems with the new system forced CDE to suspend data collection via CALPADS in February 2010 (CDE, 2010j). The suspension of K–12 data collection was catapulted into the spotlight as it coincided with California’s application for federal Race to the Top funds and the U.S. Department of Education’s public criticism of the inability of California’s data system to link student and teacher data for the purpose of evaluating teachers.²⁹ Meanwhile, the CALPADS developer (IBM) and CDE staff worked to stabilize the system, and in late April a new version of the data collection software was released. Testing of the new software continued through July 2010, with districts asked to enter a limited set of data (enrollment, graduates, and dropouts).³⁰ In August, State Superintendent Jack O’Connell announced that the system was stable and that CALPADS data collection would resume (CDE, 2010k). Despite the resumption of data collection in August 2010, Governor Schwarzenegger vetoed \$6.8 million in funding for CALPADS and \$3.5 million in funding for CALTIDES in the 2010–11 state budget. The veto message included language suggesting that a special session of the legislature consider reinstating the vetoed funding after shifting the project oversight of CALPADS away from CDE to another entity.

The suspension of K–12 data collection was catapulted into the spotlight as it coincided with California’s application for federal Race to the Top funds.

The governor’s veto of funding for CALPADS and CALTIDES has created uncertainty about the future of California’s new K–12 education data system.

CALPADS continues to exist in spite of the governor’s veto. The system is up and running, and districts are being asked to enter in their data. However, the loss of funds will likely undermine efforts to support staff at both the state and local levels to populate and maintain the database. One of the most daunting challenges to implementing CALPADS has been building the capacity of the more than 1,000 districts in the state to enter student- and teacher-level data electronically into that system. On the front lines of this effort has been the California School Information Services (CSIS). CSIS is in charge of training districts on the submission and certification of data into CALPADS as well as manning the CALPADS Service Desk. The governor’s veto of CALPADS funding eliminated 62% of CSIS funding for 2010–11, which amounts to \$3,862,000. The CDE reported that after November 2010 CSIS will no longer have the resources to support districts submitting data to CALPADS, provide ongoing district training, or support the continued development of CALPADS (CDE, 2010l).

²⁹ Although the new system had the technical capability to link student and teacher data, language in the bill that authorized CALTIDES explicitly forbade the state-level linking of student and teacher data for teacher pay, evaluation, promotion, or sanction. SB 19 (2009) removed the prohibition of state-level linking of student and teacher data for these purposes.

³⁰ As a result of the transition to the new data system, CDE did not have data in 2009–10 on teacher authorizations or teacher course assignments. Without these data elements, certain types of analyses were not possible, including analyses of the distribution of certain types of teachers (e.g., underprepared teachers) by specific school characteristics and analyses of the number of teachers teaching a course they did not have an authorization for.

The lack of district capacity to participate fully in the system is a real threat to CALPADS implementation. An absence of support for districts during data submission and certification raises serious concerns about the quality of the data entered into the system. Accurate submission and verification can be a complicated task for districts—especially given cuts to central-office capacity in many districts due to budget shortfalls—and erroneous or inaccurate data may be entered into the system if districts cannot get answers to their questions. The utility of the entire system hinges on the quality of what is entered by individual districts.

The independent auditor noted in its first audit report that growing local dissatisfaction with CALPADS could become a significant barrier to implementation, concluding that CALPADS needed to “pay close attention to gaining and maintaining the confidence of the user community” (i.e., school districts) (Sabot Technologies, 2010a, p. 8). The third audit report in May found that CALPADS had made significant strides in gaining the school districts’ confidence as a result of improvements made to the system and the improved support districts received through CSIS. If such support is not available to districts when questions arise during the submission or certification phases, CALPADS runs the risk of losing districts’ confidence for a second time. In November 2010, the independent auditor released an analysis of the CALPADS veto and warned, “The vetoed funding places all CALPADS expenditures to date at risk by fundamentally risking the success of the system.” (Sabot Technologies, 2010b, p. 7)³¹

An absence of support for districts during data submission and certification raises serious concerns about the quality of the data entered into the system... The utility of the entire system hinges on the quality of what is entered by individual districts.

The governor also vetoed the funds for the development of the new teacher credential data system, CALTIDES. Development of the CALTIDES architecture was to start in October 2010, but because of the veto CDE is estimating that CALTIDES development will not begin until 2011–12. CDE also warns that with this delay, a reprocurement of a vendor contract may be required, further delaying the development start date (CDE, 2010l).

With the governor’s veto, policymakers are now on a short timeline to decide whether to reinstate funding for both CALPADS and CALTIDES and to decide what entity should oversee the completion of CALPADS.

Significant challenges need to be addressed as we move forward with the development and implementation of the statewide data system.

In addition to the issue of funding, California’s ability to move forward with the longitudinal data system will depend on addressing three challenges: technical capacity, choice of an appropriate agency to manage the development of CALPADS, and the mandated cost-reimbursement rules.

Technical capacity: As stated earlier, the independent auditor’s initial report found “significant issues with the system and project representing a threat to the success of CALPADS from both an engineering and project [management] standpoint.” The report included recommendations for remedying problems with the technical architecture, staffing levels and expertise of both CDE and IBM, engineering processes, and project management. Five months later, the independent auditors had found considerable progress, noting that “the testing and defect correction that IBM performed during the stabilization period has produced a system that is vastly more stable, better performing, and generally well accepted by users” (Sabot Technologies, 2010c, p. 3). The district CALPADS data coordinator for Long Beach Unified School District (LBUSD) echoed the independent auditor’s May findings in a letter to legislators on October 23, 2010: “Plainly speaking, the CALPADS system is working. I anticipate having no difficulty at all in meeting data certification deadlines for the current year.” The auditor’s findings and LBUSD’s letter to legislators

³¹ See Appendix B for findings from the November 2010 Sabot Technologies report.

suggest that in spite of the initial implementation challenges, CALPADS is not only salvageable but functioning and currently collecting student-level data (e.g., enrollment, graduates, dropouts).

Oversight: In terms of the appropriate oversight, the governor's veto message suggested that the legislature identify a new entity to manage the CALPADS project and reinstate CALPADS and CALTIDES funding once this new entity has been identified.³² The CALPADS independent auditor had highlighted project management and oversight as serious concerns in its initial report. That report found that CDE was seriously understaffed for a project of this complexity and scale and suggested that the current program manager was serving the roles of what could potentially be four full-time positions. The January audit report also suggested that CDE had not allocated sufficient technical resources, resulting in "a condition where CDE has little visibility, oversight, or control over technical activities, direction, priorities, and decisions." The independent auditor reported that by March, CDE had reallocated some resources, increasing staffing from one program manager to three management/coordination positions. Even with this increase in staffing, the auditor warned that CDE "should be more actively overseeing IBM and monitoring processes, metrics, performance, and progress." As the auditor had been advocating for more active CDE oversight since the audits began in January 2010, the notion of transitioning the CALPADS oversight role to another agency was cited as troublesome:

The possibility of transferring control of the project to another State agency introduces critical risks to schedule, scope, cost, and quality of the project. It is implied by the veto message that one consideration of the Governor's office is to transfer control of the project to another state agency. This is an inherently risk-laden option. CDE and CSIS are the only organizations with the subject matter expertise to manage the IBM contract to completion. The IBM team does not have the expertise to complete the system without subject matter assistance.... CDE and CSIS have, over the past year, made tremendous strides in regaining the trust of the user community.... This trust relationship is non-transferable. It is also very fragile. Any significant misstep, especially in the quality of future releases, would see the good-will earned in 2010 vanish. (Sabot Technologies, 2010b, p.5)

Whether CDE or some other state agency is the appropriate entity to oversee the completion of CALPADS, it is clear that reasonable technical and personnel resources will have to be invested.

Mandated cost reimbursement: A 1979 proposition (Proposition 4) requires that the state reimburse districts for any new state requirements including data collection. This mandated cost reimbursement has narrowed the scope of CALPADS to include only those data elements required by the federal government under NCLB (the state is not required to reimburse districts to fulfill federal reporting requirements) and those data elements that were already collected under existing state data collection activities such as the California Basic Education Data System (CBEDS) (EdSource, 2008).

Independent of technical and oversight issues, long-term progress will be hampered by the state's requirements about reimbursing districts for providing additional data. The fact that efforts to avoid additional state-mandated costs are driving the selection of data elements to be included in a statewide longitudinal data system raises serious questions about whether California is building a system that can address the most important K-12 educational issues of the day. For example, tracking the reasons teachers leave the profession (e.g., maternity

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³² All vetoed funds were allocated at the federal level, so reinstating funding will not require the state to cut spending in other categories to meet the state's balanced budget requirement.

leave, career change, or retirement) will help us understand the nature of teacher attrition, identify the characteristics of schools where teachers leave the profession in high numbers, and develop programs aimed at retaining high-quality teachers. However, collecting these data on teacher attrition is not part of NCLB required reporting and therefore could trigger additional mandated reimbursements to districts.

Mandated cost reimbursement is also likely to affect California's efforts to expand the statewide K–12 data system to include preschool through higher education. In 2008, RAND Corporation and McKinsey & Company produced separate reports on moving California toward a more comprehensive statewide data system that includes information on students beyond the K–12 system. The McKinsey report contained 10 recommendations, including one recommendation to collect approximately 30 additional data elements. These additional data elements are tied to what McKinsey identified as the most important research questions that would not be answerable once CALPADS was established (see Appendix C for the list of questions) (McKinsey & Company, 2008). The RAND report also suggested collecting additional data elements to yield the maximum possible benefits of an expanded statewide data system. However, RAND noted that any additional requirements on institutions to collect data may be considered an unfunded mandate (Vernez, Krop, Vuollo, & Hansen, 2008).

In addition to the threat of additional state costs having narrowed the scope of the state's data system, the requirement for legislative action to add elements to CALPADS data collection activities further threatens the ability of California's future education data system to be flexible and responsive to our changing educational landscape.

The requirement for legislative action to add elements to CALPADS data collection activities further threatens the ability of the data system to be flexible and responsive.

CHAPTER 6

SUMMARY AND IMPLICATIONS

In the 2010–11 school year, the California teacher workforce faces a critical tension between expectations and resources. Rising expectations for student performance have placed even greater pressure on teachers to assist students in meeting the state's rigorous standards, yet budget reductions have translated into increased responsibilities, less support, and reduced compensation. This year's report on the status of the teaching profession focuses on this tension. We document issues related to the contraction and composition of the workforce; diminished support and professional learning opportunities for teachers; efforts to revamp procedures for identifying, placing, and evaluating teachers; and the challenges of putting an effective data system in place to inform state and local policymaking.

The contraction of the teacher workforce. From 2007–08 to 2009–10, the total number of teachers in California declined from 310,361 to 299,666, the lowest number in a decade. Budget cuts and the associated teacher layoffs have contributed to the contraction of the workforce, but the dropping numbers can be also attributed in part to a gradual but steady decline in student enrollment since 2004–05.

As the size of the workforce has decreased, the number of novice and underprepared teachers has dropped dramatically. Many schools have stopped hiring new teachers, and novice teachers are often the first to be laid off because of the prevalence of “last-hired, first-fired” policies. As a result, the number of first- and second-year teachers in California went from more than 36,000 to just over 18,000 (a decline of 50%) between 2007–08 and 2009–10.

Perceiving fewer job openings and facing reductions in funding for teacher preparation programs, fewer prospective teachers are entering the profession. Between 2001–02 and 2007–08, the number of enrollees in teacher preparation programs dropped by 45%, from more than 75,000 to fewer than 45,000. Not surprisingly, then, California is issuing fewer preliminary credentials, down 36% from 2001–02 to 2008–09.

Just as the teacher pipeline is drying up, student enrollment is projected to increase—especially in many of California's inland counties—and anticipated retirements suggest that demand for teachers may ratchet up in the near future, particularly if districts restore cut positions once the budget situation improves. The teacher preparation system will need time to accommodate an increase in the demand for teachers. This situation may require strategic efforts by universities to recruit candidates to credentialing programs in particular subjects and geographic areas, as well as a redoubling of efforts to make the teaching profession attractive to new and experienced teachers alike. In order to evaluate such efforts, stakeholders also need access to a data system that enables them to accurately track and assess teacher workforce and student demographic trends.

Greater demands on teachers coupled with a weakened teacher development system. Budget cuts have forced districts to increase class size and to reduce time for teachers to plan and deliver instruction. As of 2009–10, over a third of the state's districts had increased class size and 16% had cut the academic year (and evidence suggests that more districts made these changes in 2010–11 due to increasingly severe budget pressure). This means that teachers are held to the same rising standards with more students in their classes and fewer days in the instructional year. In addition, shortened school years and furlough days translate into reduced compensation for teachers—CDE survey data suggest that teachers in nearly half the districts across the state are facing reduced pay—and cuts to support personnel such

as counselors, aides, and librarians are leaving teachers with the difficult choice of taking on more responsibilities or leaving students' needs unmet.

As teachers are being asked to do more with less, widespread cuts and programmatic changes have also been made to the professional development and support available to teachers at all stages of their careers. In teacher credentialing programs, budget constraints are affecting the time and resources available for mentoring and supervision of teacher candidates. At the same time, most state dollars previously allocated for induction and professional development for new and experienced teachers have been made available for general purposes due to the budget crisis. In many districts, these dollars have been used to offset other reductions and to avoid additional layoffs, resulting in cuts to teacher supports.

As districts reduce the time, financial resources, and personnel dedicated to professional development, teachers are increasingly dependent on school- and department-level support, leading to wide variation in availability and quality. In short, responsibility for teacher professional development is increasingly left to school leaders and to teachers themselves.

In the years immediately prior to the recent budget challenges, California was beginning to build up a coherent system of teacher development, in which resources and programs to train and support teachers were being implemented in a more aligned and thoughtful manner. However, the systemic nature of this support is now at risk because of the lack of funds. Difficult financial circumstances have necessarily led to difficult choices, and full reinstatement of funding for the teacher development system in the short term is unlikely. Still, the focus on improving student outcomes is at odds with the disinvestment in support for teachers. The notion of accountability rings hollow if we do not also provide the resources for teachers to continually develop knowledge, skills, and expertise to ensure that all students have the opportunity to meet California's ambitious standards.

Ensuring effective teachers in California's classrooms. The contraction of the teacher workforce, diminished support for teachers, and increasing accountability requirements have collectively shed greater light on the need to get effective teachers into all California classrooms. Previous Teaching and California's Future reports have consistently highlighted the fact that low-performing schools have difficulty attracting and retaining the most qualified teachers. These reports have underscored the progress that the state has made in reducing the number of underprepared teachers, which is a positive step.

We still find, however, that low-performing schools are much more likely to have underprepared and novice teachers. In fact, in California's lowest performing schools, novice teachers comprised 10% of the faculty (on average), compared with 5% in the highest performing quartile. One effect of this maldistribution is that low-performing schools are seeing higher percentages of their staff laid off as the workforce contracts. An examination of teacher distribution patterns within districts across the state uncovers substantial variation, suggesting that local labor markets differ and that some districts may be putting greater emphasis on the equitable distribution of teachers.

In an effort to better assess teaching quality, policymakers and practitioners have begun to take a closer look at teacher evaluation policies and practices. The concern is that current teacher evaluation tools are not used to improve teacher performance or to inform employment decisions.

In response to the federal Race to the Top competition, California proposed a new evaluation system that incorporated multiple measures, including measures of student growth, and that would be used in both tenure and promotion decisions. Even though California did not receive RttT funding to support these reforms, some of the districts that had signed on as official partners in the state's application are working to advance the

proposed work of reforming teacher evaluations. As such efforts continue, it will be important to attend to the well-documented technical and logistical problems associated with using student test scores to evaluate individual teachers and heeding calls to continue to rely on multiple measures. Moreover, if stakeholders take care to ensure that any new teacher evaluation system is used not only to inform employment decisions, but also as a core component of the teacher development system, teacher evaluation could be instrumental in helping teachers improve their practice.

The need for a fully developed and expanded teacher data system. Over the past 13 years, California has made much progress in its efforts to build a statewide K–12 education data system, with most of the elements considered to be necessary for a robust data system now in place. However, the system's development has suffered serious setbacks, including delays that led to a suspension of data collection and concerns about both technical capacity and oversight. Further progress was thrown into question recently when the governor vetoed funding for the system.

Despite these setbacks, policymakers and practitioners still need a robust data system to help guide their efforts. This year, for the first time in over a decade, we are not able to report on the number and distribution of underprepared and out-of-field teachers in the state. The state is at risk of not being able to track important trends in the teacher workforce that would inform state and local policy decisions. Moreover, access to federal and private funding will be compromised in the absence of a longitudinal system.

In a time of diminished state resources, a comprehensive and responsive data system is that much more crucial for helping policymakers make informed decisions about where to focus limited state dollars. A unified vision—and the leadership to champion such vision—would go a long way toward resolving the challenges currently impeding the state's progress in developing and implementing the robust data system that California's students and educators deserve.

CHAPTER 7

RECOMMENDATIONS FROM THE CENTER FOR THE
FUTURE OF TEACHING AND LEARNING

Our public school system—and each and every adult within it—is in service of California's students. So critical are teaching professionals to this mission that the single most important in-school variable related to whether students succeed academically is the quality of their teachers. Recognizing this fact, policymakers and education leaders are searching for ways to enhance and strengthen the relationship between teaching quality and student learning.

Despite the current focus on the profession, all signs indicate the teacher development system that provides teachers for our schools is eroding. The workforce is contracting while the student population is once again turning upward, teachers are shouldering a major share of the burden of diminished resources, fewer young people are entering preparation programs, the number of newly credentialed teachers is down, there are fewer first- and second-year teachers, and about one third of the current teacher workforce is approaching retirement age.

These conditions, set against California's disastrous budget climate, cause deep concern that too few of the state's 6.2 million students will have the effective teachers they need to help them become well-educated, productive citizens. But very soon California's education policy leadership will change, and there are a multitude of fiscal and programmatic issues that our new leaders must address quickly. The quality of our state's educational system must be at the top of the list.

To set California's schools back on track, policymakers must bring quality, rigor, and coherence to the teacher development system as a first step in restoring the promise of equitable access for all students to fully prepared and effective teachers. The teacher development system we envision must be

- Nested in and supported by an equitable, adequate, and simplified K–12 school finance system that provides the base funding necessary for effective teaching
- Supported by sound and reliable data and research on student learning and the status of the teacher workforce that points the way toward improvement.

Above all, these changes in California's public education system must prepare students to be full participants in and contributors to strengthening our communities, our democracy, and our economy.

We believe that the current challenging times call for bold and creative action and make four recommendations with far-reaching implications. Our proposals involve the ways that school are funded, how teachers are evaluated and given the professional support they need to ensure their effectiveness, and the reestablishment of a comprehensive data system that can contribute to sound, rational decision making at all levels of the education system. Specifically, the Center for the Future of Teaching and Learning recommends that state policymakers take the following actions:

1. Establish an equitable, adequate, and simplified K–12 school funding formula that provides for the continuous improvement of teaching and learning.

There are many approaches to improving California's public school system. We believe that whatever the approach, emphasis must be placed on strengthening the quality of the teaching profession. Clearly, the current budget crisis is so dire that failure to recognize such an overriding circumstance is impossible. That is why, in the wake of a landmark lawsuit challenging the state's system for school funding, we join other public policy and education support organizations in urging state policymakers to create a simplified, equitable, and transparent K–12 funding formula. Any proposed system should establish stable and adequate funding for public schools while strengthening teaching and learning by providing

- An adequate per-pupil support base,
- Additional support for students with special needs,
- A differential for high-need schools in low-income neighborhoods with large numbers of low-performing students and includes
- Stable, ongoing funding for teacher preparation, induction, evaluation, and development.

2. Stop the erosion of California's teacher development system to ensure every student benefits from quality teaching.

The number of students entering California's schools is projected to increase, yet the number of individuals entering the teaching profession is declining. Many districts already struggle to maintain their capacity to attract, support, and retain fully prepared and effective teachers. Now, because the teacher development system has been so compromised, the gap between the teaching professionals districts need and those produced by the system is likely to grow. As the process to revise the 2010–11 budget continues in light of emerging data on a projected deficit, we urge the policy community to call for a careful and thorough review of the teacher development system. The review should be designed to avoid another teaching crisis by focusing on the condition of the teacher pipeline; adequacy of and funding for teacher preparation and the Teaching Performance Assessment; adequacy of and funding for beginning teacher support, assessment, and induction; and teacher evaluation that informs continuous professional growth and development.

3. Immediately restore the statewide student (CALPADS) and educator (CALTIDES) data systems.

For California, fully functioning data systems capable of guiding continuous improvements in teaching and learning—while providing policymakers with the information necessary to modify, eliminate, or sustain policies and programs as appropriate—is essential. We urge the governor and legislature to take the steps necessary to immediately put California's student and educator data systems back on line. To strengthen these systems and ensure their utility, involve additional relevant public agencies including, but not limited to, California's institutions of higher education, the State Teachers Retirement System, and the Employment Development Department. Further, by adding a strand to CALTIDES to track data on the status of principals, superintendents, and other administrators, trends and conditions affecting the educator workforce can be better used to inform the ways in which the teacher development system can be strengthened. Finally, we urge policymakers to take steps to address any missing elements deemed essential by the Data Quality Campaign, as well as the campaign's Ten State Actions, for ensuring that data collected are used to improve the education system and student performance.

4. Provide a well-prepared, effective, and caring teacher for each and every student.

The topic of teacher effectiveness is at the center of state and national policy agendas. In the past 2 years, as teacher hiring, layoff, seniority, and dismissal policies increasingly have come under scrutiny, relatively little attention has been paid to successful approaches that increase the effectiveness of the vast majority of educators who will remain in the classroom. Still, valuable work has been done and policymakers should build on it; new deliberations can and should begin about ways to strengthen teaching.

Accountability begins with a comprehensive, high-quality teacher development system that is informed by assessments of practitioners' knowledge and skill. We urge the superintendent of public instruction, together with the executive director of the Commission on Teacher Credentialing, to bring together K–12 practitioners, deans of schools of education, researchers, local school board members, and other experts to advise the governor and the legislature on the creation of a framework for teacher evaluation that includes an appropriate balance of student performance and other measures, leads to teacher effectiveness, and emphasizes continuous professional growth. The review should yield state-supported model templates to guide local teacher evaluation, should reflect the California Standards for the Teaching Profession, and frame the implementation of professional development for school principals and others charged with evaluating teachers.

Teacher evaluation and professional development go hand in hand and must be linked in a new framework for educator professional development. The review should determine the extent to which current professional development approaches ensure teachers will have opportunities to improve their practice and are given tools with which to do so and that school systems will have a way of determining whether students learn more as a result.

In conclusion, we are fully aware of the dire conditions facing the state and its public school system and that the landscape of California's education policy leadership is changing. Yet challenging times call for thoughtful, thorough reviews of the efficacy of existing policies and resources, along with bold and creative action. Nothing less than the capacity of our education system to contribute to and maintain our society is at stake.

CHAPTER 8

LOOKING AHEAD: A FOCUS ON PRINCIPAL
LEADERSHIP IN 2010–11

For more than a decade, TCF has focused on strengthening the teacher workforce to ensure that all students have the opportunity to meet ambitious standards. Within this climate of increasing expectations and diminished resources, we are expanding our focus to include school leadership in support of teaching and learning. Many of the trends we describe in this report—including increased school-level responsibility for professional development and a move toward more comprehensive and meaningful teacher evaluations—suggest an expanded role for principals. During the 2010–11 school year, we will focus our primary data collection on examining the role of principals in these trying times. Our data collection may include an analysis of secondary databases, a statewide survey of principals, and in-depth case studies of schools.

Preliminary research questions include the following:

1. What are the characteristics of the state's principal workforce (e.g., tenure in the school, educational background, prior experience) that are of interest to policymakers but cannot be found in existing databases?
2. How do these characteristics vary across principals in schools representing a range of poverty, ethnicity, and achievement levels? How do they vary across school types (e.g., elementary/secondary)?
3. What do teachers and principals perceive as a principal's most important responsibilities? Do principals feel prepared to take on these responsibilities? How do principals balance the competing demands they face?
4. How have recent budget cuts and policy shifts affected the core task of teaching and the role of principals? What role have principals played in managing these implications?
5. What existing statutes, policies, and programs encourage the training of school and district leaders to support teacher development and teacher quality?

We will conduct this research in the winter and spring of 2011. Findings will be released in December 2011.

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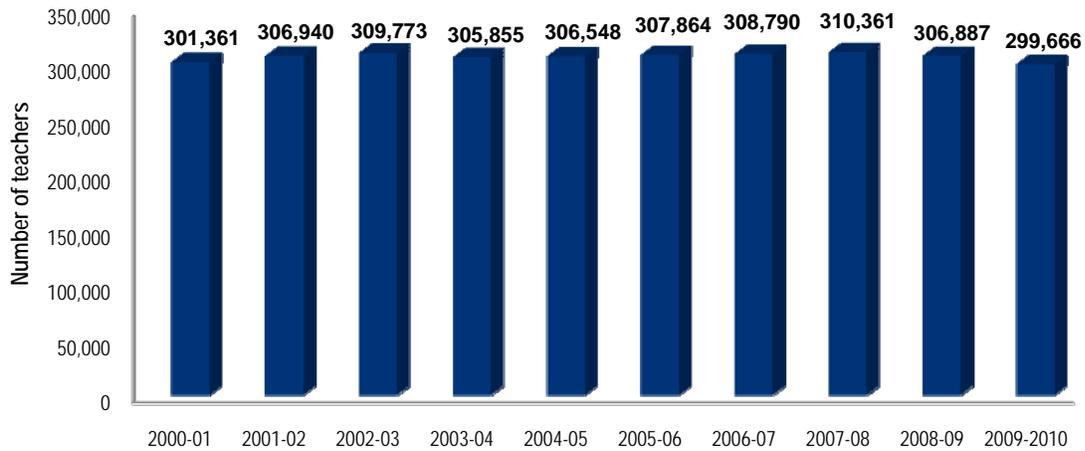
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APPENDIX A

ADDITIONAL EXHIBITS AND TECHNICAL INFORMATION

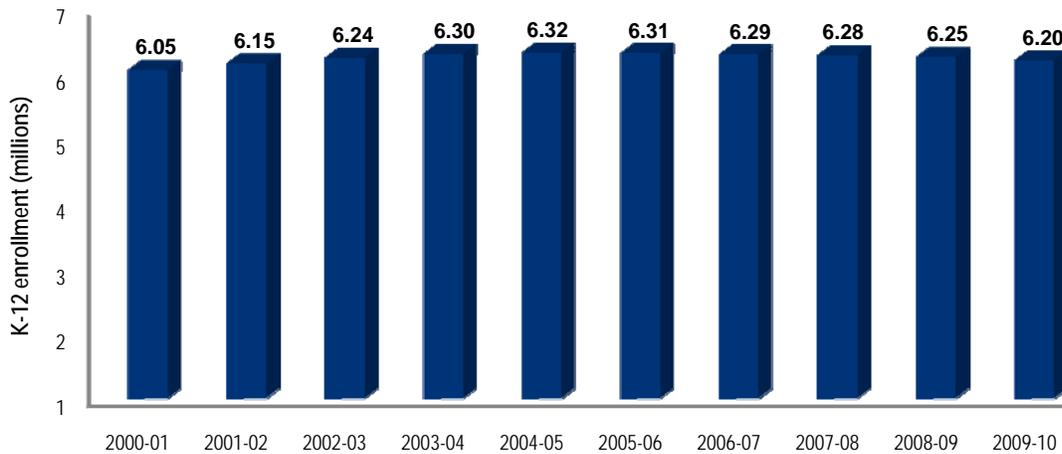
ADDITIONAL EXHIBITS

Exhibit A.1
Number of K-12 Teachers in California, 2000-01 to 2009-10



Source and technical information appears later in Appendix A.

Exhibit A.2
Total K-12 Enrollment, 2000-01 to 2009-10



Source and technical information appears later in Appendix A.

SOURCE AND TECHNICAL INFORMATION FOR EXHIBITS

Exhibit 1.1 – CST Results, by Ethnicity, 2003–2010. Data were obtained from CDE's website, <http://www.cde.ca.gov/nr/ne/yr10/yr10rel90.asp>

Exhibit 1.2 – CST Results vs. NCLB Proficiency Targets, 2003–2014. CST results were obtained from CDE's website at <http://www.cde.ca.gov/nr/ne/yr10/yr10rel90.asp>. CST proficiency targets were obtained from the 2010 AYP Information guide, <http://www.cde.ca.gov/ta/ac/ay/documents/infoguide10.pdf>

Exhibit 2.1 – Number of First- and Second-Year Teachers, 2000–01 to 2009–10. Data for all years were obtained from CDE's DataQuest website, <http://dq.cde.ca.gov/dataquest/>. These data are not directly comparable to the graphs in previous years' reports. We were unable to construct our usual graph because of the limited Professional Assignment Information Form (PAIF) data collection in 2009–10. For previous reports, two data files were merged to conduct this analysis: (1) the List of California Public Schools and Districts and (2) the PAIF. These data files were obtained from CDE's California Basic Educational Data System (CBEDS) website, <http://www.cde.ca.gov/ds/ss/cb/staffdatafiles.asp>

Exhibit 2.2 – Number of Enrollees in Teacher Preparation Programs, 2001–02 to 2007–08. Data for all years were obtained from the California Commission on Teacher Credentialing's (CCTC) *Teacher Supply in California* 2008–09 report at http://www.ctc.ca.gov/reports/TS_2008-2009_AnnualRpt.pdf

Exhibit 2.3 – New Preliminary Teaching Credentials Issued by Universities, 2000–01 to 2008–09. Data for all years were obtained from the CCTC's annual *Teacher Supply in California* reports at <http://www.ctc.ca.gov/reports/all-reports.html>. "New preliminary credentials" include first-time, new-type preliminary or professional clear credentials. Intern credentials are not included in this exhibit.

Exhibit 2.4 – Multiple- and Single-Subject Preliminary and Intern Credentials Issued by University Sector, 2001–02 to 2008–09. Data for all years were obtained from the CCTC's *Teacher Supply in California* reports at <http://www.ctc.ca.gov/reports/all-reports.html>

Exhibit 2.5 – Actual and Projected K–12 Enrollment, 1993–94 to 2018–19. Data were obtained from the California Department of Finance (DOF) 2009 Series *California K–12 Public Enrollment and High School Graduates* at <http://www.dof.ca.gov/research/demographic/reports/projections/k-12/>. The 2009 series was the most recent data available from DOF at the time of this report's publication.

Exhibit 2.6 – California Public Graded K–12 Enrollment Change, 2008–18. Data were obtained from the California Department of Finance 2009 Series *California K–12 Public Enrollment and High School Graduates* at <http://www.dof.ca.gov/research/demographic/reports/projections/k-12/>. The 2009 series was the most recent data available from DOF at the time of this report's publication.

Exhibit 2.7 – Age Distribution of K–12 Public School Teachers, 2009–10. Data were obtained by special request from CDE.

Exhibit 2.8 – Number of California State Teachers' Retirement System (CalSTRS) Membership Retirements, 2000–01 to 2008–09. Data were obtained from the CalSTRS 2009 Comprehensive Annual Financial Report at http://www.calstrs.com/Help/forms_publications/printed/CurrentCAFR/CAFRStat.pdf

Exhibit 4.2 – Average Percentage of First- and Second-Year Teachers, by School API Quartile, 2009–10. Three data files were merged to conduct the analysis: (1) the List of California Public Schools and Districts, (2) the PAIF, and (3) the Academic Performance Index (API) Growth data file. The List of California Public Schools and Districts and the PAIF data files were obtained from CDE’s CBEDS website, <http://www.cde.ca.gov/ds/ss/cb/staffdatafiles.asp>. The API Growth data file was obtained from CDE’s Testing and Accountability website, <http://www.cde.ca.gov/ta/ac/ap/apidatafiles.asp>. All nontraditional schools, such as adult, vocational, or state special schools or other alternative schools, are excluded from this analysis. Only full-time teachers who reported that they had 0, 1, or 2 years of teaching experience are included in this analysis. The number of schools included in these analyses vary each year because (1) the number of active schools changes from year to year as school open and close, and (2) the number of schools with complete data in all three files changes from year to year (see Exhibit A.3 below).

**Exhibit A.3
Number of Schools by API Quartile for API Analysis**

API Quartile	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10
Highest achievement quartile	1,737	1,830	1,878	1,920	1,970	2,027	2,006	2,017	2,020
Second-highest achievement quartile	1,747	1,833	1,887	1,952	2,016	1,991	2,029	2,028	2,000
Second-lowest achievement quartile	1,745	1,855	1,896	1,958	1,965	2,006	2,038	2,003	2,048
Lowest achievement quartile	1,764	1,859	1,892	1,970	2,025	1,986	2,039	2,029	2,055
Total	6,993	7,377	7,553	7,800	7,976	8,010	8,112	8,077	8,123

Exhibit 4.3 – Average Percentage of First- and Second-Year Teachers in Two Focus Districts, by School API Decile, 2009–10. Three data files were merged to conduct the analysis: (1) the List of California Public Schools and Districts, (2) the PAIF, and (3) the API Growth data file. The List of California Public Schools and Districts and the PAIF data files were obtained from CDE’s CBEDS website, <http://www.cde.ca.gov/ds/ss/cb/staffdatafiles.asp>. The API Growth data file was obtained from CDE’s Testing and Accountability website, <http://www.cde.ca.gov/ta/ac/ap/apidatafiles.asp>. All nontraditional schools, such as adult, vocational, or state special schools or other alternative schools, are excluded from this analysis. Only full-time teachers who reported that they had 0, 1, or 2 years of teaching experience are included in this analysis. Schools in this analysis are grouped according to state-level API deciles.

Exhibit A.1 – Number of K–12 Teachers in California, 2000–01 to 2009–10. Data were obtained from CDE’s DataQuest website, <http://dq.cde.ca.gov/dataquest/>

Exhibit A.2 – Total K–12 Enrollment in California, 2000–01 to 2009–10. Data were obtained from CDE’s DataQuest website, <http://dq.cde.ca.gov/dataquest/>

APPENDIX B

EXCERPTS FROM EXTERNAL REPORTS ON CALIFORNIA'S DATA SYSTEM

Over the last decade, the Center for the Future of Teaching and Learning has been one of many organizations and stakeholder groups highlighting the need for a robust statewide data system. In response to the high level of stakeholder interest in this area, various entities have produced several reports documenting the status of California's existing data systems and suggesting what the state should do to ensure the development of a more comprehensive data system that houses the data necessary to evaluate and improve public education in California. For example, the RAND Corporation and McKinsey & Company both released reports in 2008 that advocated for the state to develop a more comprehensive statewide data system that includes education segments beyond K-12, such as preschool and postsecondary education, and that collects data beyond the current scope of CALPADS and CALTIDES. The state legislature also focused on the need for a more comprehensive statewide data system by passing SB 1298 in 2008. SB 1298 established two working groups, one to create a strategic plan for building an education data system spanning preschool through college and the other to make recommendations on the governance of such a system. The recommendations were submitted in December 2009, and the strategic plan was submitted in March 2010.

As policymakers and other key education stakeholders work towards a clearer and more unified vision for what the state's data system should contain, these reports, coupled with an independent auditor's documentation of the challenges of developing the architecture for CALPADS, provide a rich set of resources to consider. This appendix contains the following excerpts from these reports:

- The RAND report's suggestions for the state's next steps in developing an integrated K-20 data system;
- The McKinsey & Company report's recommendations for adding additional core data elements to the planned CALPADS/CALTIDES systems;
- Main strategies and strategic actions, outcomes, and targeted completion dates from the SB 1298 strategic plan submitted by the California Chief Information Officer in March 2010;
- The SB 1298 working group recommendations for the governance of a future state data system spanning preschool through higher education (P-20); and
- The CALPADS independent auditor's assessment of the impact of the governor's veto on CALPADS and CALTIDES.

RAND CORPORATION'S NEXT STEPS FOR DEVELOPING AN INTEGRATED K-20 DATA SYSTEM

In 2008, the RAND Corporation released a report on California's data system. The authors reviewed the existing K-20 data systems in use or in development, explained the major challenges and system design issues, and made five recommendations to resolve the challenges to developing an integrated K-20 data system (Vernez, Krop, Vuollo, & Hansen, 2008). The five recommendations are as follows:

1. Complete the design and implementation of CALPADS.
2. Identify a champion to be an advocate for a K–20 student unit record data system (a data system that collects data at the student level rather than at the school or district level).
3. Obtain legislative authority to develop an integrated K–20 student unit record data system. The authors suggest that the legislature will need to address following questions:
 - a. What purpose would a K–20 student unit record data system primarily serve?
 - b. Who should have decision-making authority over the design of the system?
 - c. Who should operate the system and where should it be located?
 - d. Who should have access to the data it contains?
 - e. What common student identifier should be used?
 - f. What is the minimal content to include in the data file?
 - g. What level of funding should be allocated to develop, maintain, and use the system?
4. Build the K–20 student data incrementally. The authors suggest the following incremental sequence:
 - a. Integrate existing data systems “as is.”
 - b. Add data elements already collected by individual schools and universities but that are not currently housed in a central student database (e.g., individual courses and grades).
 - c. Link K–20 data to other state and federal data systems (e.g., preschool, employment and wage, foster care, private universities).
 - d. Add additional desired data elements not currently collected.
5. Develop an objective analytical capability and expertise to ensure that the K–20 data are used appropriately and to guard against misinterpretation of findings. The authors suggest that up to 20 analysts could be required to provide the required capability and expertise.

MCKINSEY & COMPANY'S FRAMEWORK FOR A COMPREHENSIVE EDUCATION DATA SYSTEM IN CALIFORNIA

In December 2008, McKinsey & Company released a report on California's education data system and offered a framework for building a more comprehensive system (McKinsey & Company, 2008). In that report, the authors recommended collecting additional core data elements to answer the following questions that will not be answerable even when California's new education data system, as currently envisioned, is fully functional:

Student Characteristics

- Why do students drop out, and what happens to them afterward? What are some early indicators of dropping out?
- What is the level of college readiness of our students? Do they need admission into remedial courses?

Educator/Administrator Characteristics

- What are teacher and administrator attendance rates? Why do they leave? Where do they join?
- What are the characteristics of highly qualified teachers? What instructional materials do teachers use?

Pre-K Student and Educator Characteristics

- Who are our pre-K students, and where are they receiving pre-K services?
- What are the characteristics of pre-K teachers?

Program Characteristics (opt-in for fed/private funded programs)

- What are the various ongoing programs? What are the funding sources for different programs?
- How effective are these programs in meeting their objectives?
- What is the extent of funding for programs? What are the additional sources of funds besides state?

Facilities

- In what condition are the educational facilities used by students?
- How does the physical capacity of the site compare to its occupancy?
- What is the extent of funding for programs? What are the additional sources of funds besides state?

The McKinsey report authors noted that additional data elements would have to be collected to respond to these questions, including:

Student Characteristics

- Number of days of attendance or tardy/absent
- SAT/ACT scores

Educator/Administrator Characteristics

- Number of days absent
- Attrition reason
- National Board Certification for inservice
- Teaching Performance Assessment/Performance Assessment for California Teachers, for beginning teachers
- Supplemental instructional materials

Pre-K Student and Educator Characteristics

- Student ID
- Student race
- Student ethnicity
- Student gender
- Teacher SEID (Statewide Educator Identifier)
- Teacher ethnicity
- Teacher credentials
- Teacher number of years of experience

Program Characteristics (opt-in for federally/privately funded programs)

- Program ID
- Name
- Content code
- Student achievement
- Attendance
- For pre-K programs, parent survey rating on quality of programs
- Funds received by site
- Funds received by student
- Funding source

Facilities

- Age of buildings
- Last date of modernization
- Maximum student population
- Acreage of school site
- Ratio of permanent to portable classrooms
- Presence of media center/library
- Presence of pre-K facilities
- Presence of career technical facilities

CALIFORNIA COMPREHENSIVE EDUCATION DATA SYSTEM STRATEGIC PLAN

Charged with developing a strategic plan to link the state's education data systems as part of SB 1298 (Simitian 2008), the State Chief Information Officer convened a working group and submitted a strategic plan in March 2010. The strategic plan identifies three main strategies for building a comprehensive data system (Office of the State Chief Information Officer, 2010, p. 8-11):

1. Build on and combine the strengths and achievements of the existing data systems to promote and facilitate the linking/sharing of data across institutions, agencies, and states.
2. Integrate education data from preschool through postsecondary and the workforce.
3. Enable the use of and ease of access to data while providing appropriate public access and accountability and dissemination of data to stakeholders and partners of state education, training and employment systems as individuals cross segment lines.

Outcomes, strategic actions, and estimated completion dates were developed for each of the three main strategies to guide the development and implementation of California's future data system:

Strategy 1 – Build On Existing Data Systems

Build on and combine the strengths and achievements of the existing data systems to promote and facilitate the linking/sharing of data across institutions, agencies, and states.

Outcomes	
<ol style="list-style-type: none"> 1. Ability to examine student progress and outcomes over time, including students' preparation for success in postsecondary education and the workforce. 2. Consistency of educational data across all segments. 3. Capacity to share, merge and exchange data from multiple sources. 4. Ability to capture data on students from one grade to the next, measuring whether they are on track to graduate. 	
Strategic Actions	Estimated Completion
1. Examine current K-12, Postsecondary, and workforce systems to determine where to focus improvement efforts.	2009/10
2. Create consistent data definitions to improve system ability to share, merge, and exchange data through adoption of standardization and/or the data definitions and standard of the National Center for Education Statistics.	2010/11
3. Implement CALPADS.	2011/12
4. Review existing standards and adopt where appropriate.	2011/12

<ol style="list-style-type: none"> 5. Document the information architecture of existing systems. <ol style="list-style-type: none"> a. Catalog available data into a metadata registry to document where data resides and in what forms. b. Examine and document the existing privacy protocols. c. Map existing systems, data, and information flows among segments. 	2011/12
<ol style="list-style-type: none"> 6. Establish and assign unique, consistent identifiers to each student and educator for P-20. 	2011/12
<ol style="list-style-type: none"> 7. Expand and improve existing K-12 systems (i.e., Records Transfer, School Accountability Report Card). 	2011/12
<ol style="list-style-type: none"> 8. Modernize and expand the existing Postsecondary systems (i.e., CSU Enterprise System, data architecture, data elements, course equivalencies, Transcript Evaluation Service). 	2012/13
<ol style="list-style-type: none"> 9. Implement CALTIDES. 	2012/13
<ol style="list-style-type: none"> 10. Expand the data elements in the State's longitudinal data system. <ol style="list-style-type: none"> a. Include at a minimum the 12 required elements described in the America COMPETES Act. b. Include the 10 essential elements of a state longitudinal data system identified by the National Data Quality Campaign. c. Determine additional "core data elements." 	2012/13

Strategy 2 – Integrate P-20 Data

Integrate education data from preschool through postsecondary and the workforce.

Outcomes
<ol style="list-style-type: none"> 1. Ability to share and merge data from multiple disparate sources, including appropriate non-education data, while protecting the integrity, security, privacy and confidentiality of personal information.
<ol style="list-style-type: none"> 2. A single access point to the comprehensive education data system.
<ol style="list-style-type: none"> 3. Ability to follow teachers through the workforce after they are credentialed.
<ol style="list-style-type: none"> 4. Ability to track number and percentages of students by school, who graduate high school and go on to complete at least one year worth of college credit.
<ol style="list-style-type: none"> 5. Ability to forecast a student's readiness for key transitions from preschool through high school and into college and careers and take action as needed.
<ol style="list-style-type: none"> 6. Ability for CSUS to obtain feedback mechanisms for teacher preparation.

Strategic Actions	Estimated Completion
1. Determine key systems/data to be shared, merged, and exchanged within P-20 and externally, including the unique identifiers to be used to match across the levels and types of systems/data.	2010/11
2. Architect the system. <ul style="list-style-type: none"> a. Structure and organization of the relevant data, etc. b. Define a comprehensive P-20 data dictionary. c. Define the business requirements by identifying the key questions to be answered by the P-20 data system. d. Define the functional requirements. e. Define the technical requirements. f. Define the technical design and framework (i.e., standard data structures, etc.). g. Define a translation scheme. h. Define the logical and physical data models. 	2010/11
3. Identify costs and required resources associated with linking, sharing, and managing P-20 data.	2010/11
4. Establish the infrastructure and platform.	2010/11
5. Establish proof-of-concepts, using existing data/systems, to pilot sharing and merging of data, including access privileges and data security. <ul style="list-style-type: none"> a. Between K-12, Postsecondary and workforce systems. b. Provide navigation between the systems, applications, data stores. 	2010/11
6. Define and implement a statewide education data sharing strategy, including data sharing agreements to ensure sharing, merging, and exchanging data across and among P-20 to ensure transparency.	2010/11
7. Define and establish the security framework. <ul style="list-style-type: none"> a. Establish identity management and access services. b. Establish a directory to maintain a single, authoritative record for every user of the system and key individuals. c. Provide single sign-on user name/password authentication as a service to all subscribing applications. d. Ensure compliance with Federal and State laws regarding data integrity and confidentiality of pupil data. 	2010/11
8. Determine availability and quality of data required by collecting, validating, and certifying data in the source systems.	2010/11

Strategy 3 – Enable Use and Ease of Access to Data

Enable use of and ease of access to data by making education data transparent; data that is accessible, reliable, varied, and valid.

Outcomes	
<ol style="list-style-type: none"> 1. Data universally available to all stakeholders to use and analyze to promote continuous improvement. 2. A unified view of student achievement from year to year. 3. Reporting tools to inform decision-makers (i.e. ability for policymakers, educators, students, and parents to utilize data as predictors to design effective interventions, reduce remediation, and improve graduation rates). 4. Cross segment reports: paper, tabular, graphical, online, user-defined, dashboards, or ad hoc tailored to specific requests. 5. Information in place so that parents, teachers, and policymakers know where our schools and students stand. 6. Ability to easily generate data for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students. 7. Data available and accessible to researchers. 8. Integrity and confidentiality of pupil data. 	
Strategic Actions	Estimated Completion
1. Launch a proof-of-concept or demonstration project to test the development and use of a transparent, integrated, comprehensive education data system using currently available data.	2010/11
2. Establish a data governance structure.	2010/11
3. Establish procedures and policies to ensure integrity, confidentiality, security, and privacy of pupil data that complies with provisions of Federal and State laws (i.e.. Individual Practices Act, Family Educational Rights and Privacy Act, etc.). <ol style="list-style-type: none"> a. Establish data access and use policies and procedures. b. Establish a review board to review and respond to all requests for pupil data. 	2010/11
4. Create a single data portal for P-20 data to improve access and transparency.	2011/12
5. Implement business intelligence/decision support tools to inform decision-makers and make it easier for stakeholders to access the data relevant to their specific interests.	2011/12

RECOMMENDATIONS FROM THE WORKING GROUP ON THE GOVERNANCE OF CROSS-SEGMENT EDUCATION DATA

SB 1298 (Simitian 2008) required the convening of a working group to develop recommendations on the governance of P-20 education data. The report of the working group, submitted in December 2009, included a review of California's data collection efforts, a review of data privacy and data disclosure laws, and recommendations for data governance. The report included the following five recommendations (*The governance of cross-segment education data*, 2009, p. 7-9):

1. Cross-segment governance should balance expertise and objectivity with a priority on state goals. The working group recommends that cross-segment data be governed by a single entity.
2. Maintain segment-specific data efforts. The working group recommends individual education segments continue to be responsible for data collection, maintenance, security, and distribution of segment-specific data.
3. Make separate entity responsible for cross-segment data management. The group recommends that the entity maintaining the cross-segment data warehouse be responsible for data collection, maintenance, security, and distribution of cross-segment data.
4. Use IRB [Internal Review Board] to review requests for individually identifiable data. The working group agreed that an IRB modeled after the CPHS [California Health and Human Services Agency's Committee for the Protection of Human Subjects] IRB would be a good approach for reviewing research requests for identifiable data.
5. Maximize benefit of data warehouse by allowing access to qualified researchers. The working group recommends that staff of the cross-segment entity conduct research internally but also make data available to qualified external researchers.

FINDINGS FROM THE CALPADS BUDGET VETO RISK AND ISSUE ASSESSMENT FOR THE CALIFORNIA DEPARTMENT OF EDUCATION

On November 3, 2010, Sabot Technologies released an assessment of the impact of the governor's veto on CALPADS, which included the following findings and conclusions (Sabot Technologies, 2010b, p. 5-9):

Findings

1. The development, testing, and implementation of planned functionality are unlikely to be completed.
2. The veto's cuts to CDE resources and contractors are very likely to impact the thoroughness of the rectification of the present and future defect log prior to final acceptance of the system.
3. The reduction in support staff as a result of the veto will almost certainly cause severe operational issues with the user community (school districts).
4. The reduction in resources will cause deficiencies in the contract management, project management, and technical oversight of the IBM contract with regard to monitoring IBM's performance, approving deliverables for payment, negotiations, and holding IBM to the terms of the contract.
5. The lack of funding and resources will make it highly unlikely that the State will be properly prepared to accept maintenance and operations responsibility of the system. This will very likely cause instability of the system and failure of the entire CALPADS project, thereby wasting years of work and millions of dollars.
6. The State would be forced to accept the system without proper resources to determine if it has met the acceptance criteria.
7. The possibility of transferring control of the project to another State agency introduces critical risks to the schedule, scope, cost, and quality of the project.
8. There is a risk of potential claim by IBM of the State breaching the contract and demanding a contract modification.
9. Without an immediate reinstatement of the vetoed budget items, there will be delays to the project that go beyond a one-for-one delay of the transition.
10. If it is determined that the language associated with the veto implies that no funds may be expended by CDE on CALPADS after December 6, 2010, the project and system are placed in a fatal position.

Conclusions

1. The vetoed funding places all CALPADS expenditures to date at risk by fundamentally risking the success of the system.
2. A transition of the CALPADS project to another outside agency is highly problematic and will likely be paramount to setting that agency up for failure.
3. All of the progress made since the January 2010 CALPADS Project Architecture and Process Assessment is now at risk of being reversed, putting the project in an even worse position than it was at that time.
4. Sabot's recommendation to CDE is to lobby the legislature to reinstate the funding and allow CDE to continue on as the sponsor of the project and system or secure funding and authority from other sources to the same effect.

5. Short of reinstating the vetoed funding, Sabot recommends cancelling the CALPADS system altogether. Transition costs to another entity would be very high and executing the project under those conditions would be very unlikely to succeed. It would be more economical to stop the program in its entirety than to transition the project to a new agency and absorb the transition costs and accept a severely increased risk of failure under a new sponsorship.



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