The Center for the Future of Teaching and Learning

The California State University Institute for Education Reform
Policy Analysis for California Education
The University of California, Office of the President
WestEd

Research conducted by SRI International
An Update to the Teaching and California’s Future Task Force

Teaching and California’s Future is sponsored by The Center for the Future of Teaching and Learning. The Center is made up of education professionals, scholars and public policy experts who care deeply about improving the schooling of California’s children. The Center was founded in 1995 as a public, nonprofit organization with the purpose of strengthening the capacity of California’s teachers for delivering rigorous, well-rounded curriculum and ensuring the continuing intellectual, ethical and social development of all children. Margaret Gaston and Harvey Hunt, co-directors of The Center for the Future of Teaching and Learning, organized and directed the work.

Co-sponsors include: The California State University Institute for Education Reform; Policy Analysis for California Education; The University of California, Office of the President; and WestEd.

Funding for this initiative was generously provided by The California State University, Office of the Chancellor; The Ford Foundation; Walter and Elise Haas Fund; The William and Flora Hewlett Foundation; The James Irvine Foundation; Walter S. Johnson Foundation; The Stuart Foundation; and Washington Mutual Foundation.

Research for Teaching and California’s Future was conducted by SRI International. SRI International is an independent, nonprofit corporation that performs a broad spectrum of problem-oriented research and consulting to government and industry. The SRI research team included the following people: Patrick M. Shields, director; Katherine Baisden; Camille Esch; Daniel Humphrey; Nancy Kamprath; Andrea Lash; Lori Riehl; Juliet Tiffany-Morales; Lisa Uperesa; Marjorie Wechsler; Eileen Wojdula; Katrina Woodworth; and Viki Young. Inverness Research Associates conducted fieldwork and assisted in the analysis of case study data. Inverness team members included Mark St. John, Samantha Broun, Jo Fyfe, Barbara Heenan, Nina Houghton, Katherine Ramage and Laura Stokes.

Editorial assistance and design were provided by KSA-Plus Communications, Inc., a firm that specializes in helping educators understand and communicate with their communities. The team included Kathy Ames, Mina Habibi, Andy Plattner and Andrea Sussman.
California Teaching — Grappling with a Crisis

In the past several years, California has taken more steps than any other state to improve the quality of its teaching force. The Governor and the Legislature have devoted an unprecedented level of resources and political tenacity in the face of a problem — not enough fully qualified teachers willing to work in schools that serve poor, minority and low-performing students — that will take many years to solve.

The state’s policymakers have applied considerable dollars and created programs to attract, train, retain and support good teachers. They have worked hard to understand the dimensions and scale of the issue. They have grown more sophisticated and thoughtful in their approach, increasing the focus on those schools having the most trouble finding and keeping well-prepared teachers.

While their efforts are paying dividends, the problem is immense and still growing, particularly as changing demographics and economic conditions are making things worse. But had they not acted, we are sure that the crisis within California’s teaching force would be far greater than it is.

The next challenge for policymakers is to rebuild the incentives for every new teacher to earn a credential. At the same time, they must modify the systems of preparation, induction and professional development to meet the needs of the tens of thousands of underprepared teachers already in classroom.

Providing good teachers and good schools for every student in the state has stayed at the top of the policy agenda. It also is at the top of the public’s agenda. Californians care.

Issues of Equity

California’s policymakers are aware that the state’s poorest children are far too likely to be assigned to teachers who are not fully prepared to help them learn what the state now requires.

Of further concern to the policy community is that the disparity between schools serving poor children and those serving wealthier children is growing. The teachers of our poor and urban students are:

- Much more likely not to have met the state’s minimum qualifications for being a teacher.
- Much more likely to be learning to be a teacher while also holding a job as a teacher.
- Much more likely to work in schools with working conditions that make it difficult for teachers to find opportunities to learn new strategies for improving their teaching.
Can California afford to halt or even slow its progress toward improving an education system that routinely offers too little to poor students — the students who are most in need of good teachers, good teaching and good schools? We would argue that it cannot, that we must continue to invest in making sure all our children get an education that allows them to be caring, productive citizens and to succeed in a world where knowledge has never been connected more closely to economic success.

The public understands both the importance of education and its economic connection. There is more public demand than ever for better schools and a vastly increased recognition of the unifying need to provide a high-quality education for all of California’s children, not just some.

Indeed, California has increased significantly the academic standards it expects all students to meet. But the promise of these standards will ring hollow unless we put in place the teaching capacity to help students meet those standards. This is true across the state, particularly for our poorest students.

In the past few years, California’s leaders have devoted significant energy and resources to create programs to recruit, train, retain and support good teachers. The Governor, the Legislature and other education leaders deserve considerable credit. They have put hundreds of millions of dollars into professional development, and they increasingly have begun to focus on those schools most in need.

But adverse economic and demographic conditions continue to swamp the public schools; the crisis of the least-prepared teachers facing the neediest students has not abated, only intensified. We have not yet done enough to ameliorate these conditions, and we have not yet focused enough on the schools and teachers that need the most help.

We believe the state’s policymakers must broaden their resolve to provide solutions to problems facing the neediest students by looking deeply at the ways the institutions that prepare and sustain the teacher workforce can be improved. This will not be easy in difficult economic times. We urge Californians to come together to support them.

None of us would want our own children to be taught by anyone who has not been well prepared for the job or given every opportunity to perfect his or her craft. Every California student deserves a teacher who has the knowledge and skills to help him or her learn.

California will succeed — economically and culturally — only if all of its people succeed, and that will require a high-quality education system that delivers academic performance. Our collective investment in that performance will pay significant dividends, and it is one we must make.

**The Status of the Teaching Profession 2001**


This new research takes a fresh look at the numbers of teachers in the state and their distribution. The research
also includes surveys of teachers, principals and district administrators. And it includes case studies that went deeper, looking at individual teachers and the people and institutions that prepare them to teach.

We issued a similar report in 1999 and an update in 2000. Our goal has been to help policymakers understand — through the best, most reliable data available — the critical issues concerning California's teaching force. In the newest report, we present the latest data on teachers in California. Among the key findings are:

- There is a substantial and growing shortage of teachers who are both qualified and willing to take teaching jobs, particularly in schools serving poor and minority communities.
- Almost half of California’s first- and second-year teachers have not yet qualified for the preliminary teaching credential considered by the state to be a threshold for entry into the profession, and these teachers have limited student teaching experiences — they complete much of their practice teaching in their own classrooms without the full-time supervision of an experienced master teacher.
- The majority of teachers report that they do have opportunities for professional development. However, they continue to report that their professional development makes few contributions to their skills and knowledge.

While some of the problems remain from previous reports, the new report highlights the impact of large numbers of underprepared teachers on the state’s systems of teacher preparation, induction and professional development.

In some districts, potential teachers have little or no incentive to complete a preparation program prior to taking a job. Although the state has expanded programs aimed at speeding preparation and putting more teachers into classrooms faster, this practice may encourage many teacher candidates — especially large numbers of those bound for low-performing schools — to become teachers before they are fully qualified so they can earn salaries while finishing their coursework.

Although California has the nation’s most comprehensive program to help new teachers move into the profession, the large number of underprepared teachers

Maria’s Story — Part One

Maria, 25, had worked for a large manufacturing company but wanted to change careers. She had a bachelor’s degree in finance.

After hearing about teaching openings from a friend, she applied for a teaching job in the large urban district where she lived. She passed the state’s subject matter tests as well as a Spanish fluency exam. After a week of working through the application paperwork in the district’s office, she was offered a job teaching fourth grade to mostly Spanish speakers in an elementary school. Maria was granted an emergency permit to teach.
are neither eligible nor well suited for the program. The result is that a very strong program that is highly valued in one part of the state may be increasingly irrelevant to districts with substantial teacher shortages.

Similarly, the state’s efforts to bring high-quality professional development to all teachers are undermined by the large numbers of underprepared teachers. Underprepared teachers find these professional development opportunities difficult to incorporate into their schedules because they are teaching full time and taking courses to earn a credential.

This year, our summary report focuses on how the systemic inequity among California’s classrooms affects the ways teachers are prepared for the profession and supported throughout their careers. This inequity is becoming so deeply ingrained that teachers bound for low-performing urban schools follow a distinctly different career path than teachers who take jobs in more affluent schools.

**Teachers: Supply and Demand**

Simply put, there are more teaching jobs in California than qualified individuals willing to fill them.

There were 301,361 public school teachers in California last school year, which is almost 50 percent more teachers than there were a decade earlier. The state needed more teachers as the number of students swelled, older teachers retired and the state reduced the number of students in elementary classrooms.

Of those 301,361 teachers, 42,427 had not yet earned a preliminary credential that the state traditionally has said is the minimum required to take charge of a
Distribution of underprepared teachers by school-level API score, 1999–00 vs. 2000–01

The proportion of the workforce not fully prepared to teach has risen over the past few years from one teacher in eight to one teacher in seven — and our projections suggest that it will continue to grow. The number of underprepared teachers is likely to expand to about 65,000 by the end of the decade because:

- The existing teaching force will retire in record numbers — four in 10 California teachers are 50 or older.
- California schools need to hire at least 195,000 new teachers by the end of the decade. There is relatively steady production of new teachers from colleges and universities, but even after some increases in the past few years, those schools produce only about 18,000 teacher candidates each year, including about 2,300 interns who already are teaching.
- Teachers, particularly new teachers, often leave the profession because of what they see as inadequate pay and poor working conditions, including school buildings that are dilapidated and overcrowded.

Many states face shortages of skilled teachers, but none at the scale of California. If California is to alter these projections, there certainly will need to be significant improvements in the working conditions and compensation of teachers.

Distribution: Uneven and Unfair

Although the number of teachers without a preliminary credential increased in the past year, the number of teachers with emergency permits declined slightly. This
is largely because of the growth in the number of pre-interns — teachers who have a college degree but have not passed the state’s subject matter tests or completed the coursework to be a teacher — and interns — teachers who have passed the subject matter tests but have not completed their teacher preparation coursework.

But while we see a slowing in the combined number of underprepared teachers, we are witnessing a worsening of the problem of unequal distribution.

For many schools, especially schools in affluent neighborhoods serving high-performing students, hiring and retaining well-qualified teachers is not a significant problem. Nearly half of California schools have very few teachers (less than 5 percent) who are not fully credentialed. Almost one-third of schools have no underprepared teachers at all — none.

But in a quarter of the public schools in the state — primarily urban schools — more than one in five teachers is not yet fully qualified. That represents more than 1,900 schools serving approximately 1.7 million of the state’s 6 million students.

The single biggest factor in how much a student learns is the quality of his or her teacher. Yet in California, we still are providing poor children — who often have the most significant need for high-quality teaching — with teachers who are the least prepared. And these children attend schools where the percentages of underprepared teachers are so high (above 20 percent) that we would conclude the school has little or no capacity to improve.

In addition, there are growing shortages of teachers in key fields such as mathematics, science and special education. For example, at the high school/middle school

---

**Underprepared teachers in California, 1997–98 to 2000–01**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total teachers without full credentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997–98</td>
<td>34,487</td>
</tr>
<tr>
<td>1998–99</td>
<td>35,440</td>
</tr>
<tr>
<td>1999–00</td>
<td>40,581</td>
</tr>
<tr>
<td>2000–01</td>
<td>42,427</td>
</tr>
</tbody>
</table>

- Emergency permit teachers and teachers on waivers (not in intern or preintern programs)
- Participants in intern programs
- Participants in preintern programs

level, 2,779 math teachers — one in seven — do not have adequate preparation to teach the subject.

When the data are examined by poverty or race or academic achievement, it is starkly apparent that students who are poor, black or Hispanic or who are in low-performing schools have those teachers who are the least prepared by far.

**Building Capacity — Preparation, Induction and Professional Development**

Policymakers have addressed the unequal distribution of qualified teachers with expansive recruitment efforts, new programs for uncertified teachers and expanded induction support for newly credentialed teachers. The investment in new programs clearly has helped; recruitment of new teachers is more aggressive, barriers to becoming a teacher are being lowered and more beginning teachers are receiving needed support.

Still, in many school districts, the magnitude of the teacher quality crisis is overwhelming both the new programs and the institutions charged with preparing and inducting new teachers into the profession. Teacher preparation programs increasingly are charged with preparing teacher candidates who already are working in classrooms. Indeed, an important part of their preparation — student teaching — occurs in their own classrooms without regular supervision or support.

California’s academic standards have been recognized as among the most rigorous in the nation. Soon all students will have to pass tough tests based on those standards to earn a high school diploma. Initial results from these tests show more than half of high school students who took the test failed, with much higher failure rates among poor and minority students.

There is a wide range of teacher preparation programs in California’s public and private institutions of higher education, but only a minority of new teachers consider themselves well prepared to teach. The support available to beginning teachers varies widely and often is most lacking in places where it is most needed — schools with high concentrations of new, underprepared teachers. Teachers also report that their professional development still fails to provide them with the expanded knowledge and skills they need.

**Maria’s Story — Part Two**

Before Maria started her teaching job, she attended her school district’s institute for new teachers, which gave her 40 hours of training in one week. Maria felt the training was helpful because it focused on “real practical stuff like classroom management, record keeping and district policies.”

Maria also enrolled in education classes at a local campus of California State University. She said the classes were “okay” but that she need far more help. “The classes were easy,” she said, “nothing like my finance classes.”
Maria’s Story — Part Three

The school district assigned Maria an experienced teacher as a mentor. But this mentor taught at another school and rarely was available to help Maria.

Maria got some help from other teachers at her school, but not enough. She looked back at her first year teaching with regret. “I feel bad,” she said. “I think that I did that class a real disservice.”

Preparation

Traditionally, new teachers started working in schools only after earning a teaching credential following a university or college program, doing a practicum of student teaching in a veteran teacher’s classroom, and passing state tests. That still is the route for almost half of new teachers in California.

However, the majority of new teachers follow a different route. These teachers already are teaching in classrooms before they have completed their coursework or their student teaching.

So while they face demanding teaching jobs, they also are taking courses from teacher preparation institutions, many of which are out of sequence and rearranged to reflect the fact that these candidates are teaching full time. According to the new research, when these student teachers eventually do their student teaching, they get much less frequent feedback on their performance from veteran teachers.

It is important to note that a teaching credential indicates that the state believes the individual is ready to start teaching. However, completing a certification program
before starting as a classroom teacher is no guarantee of starting a career as an accomplished or expert teacher. In fact, only a minority of teachers report that their teacher preparation program left them well prepared.

**Induction**
The initial entry into most professions rarely is easy, and teaching is no exception. California has invested substantially in programs to help new teachers. For example, the state now is spending more than $100 million annually to serve nearly 30,000 teachers who are in their first few years of service through its Beginning Teacher Support and Assessment program.

But this voluntary program provides assistance only to those teachers who already have a teaching credential — not to those who do not have credentials and who tend to serve poor and minority students.

However, the Beginning Teacher Support and Assessment program faces significant challenges in schools with high proportions of underprepared and inexperienced teachers. In those schools, principals struggle to find accomplished teachers who can serve as mentors for new teachers. In addition, by the time the underprepared teachers earn a credential and are eligible to participate in the program, they do not consider themselves “beginning” teachers.

**Professional Development**
As our expectations for students’ academic achievement have increased dramatically, much more is being asked of California teachers. Like most professionals, they need the kind of ongoing training — professional development — that keeps them up to date and makes them more effective. Research has found that the most effective professional development provides opportunities over time for teachers to focus with colleagues, coaches and experts on the content they teach, how students are performing and how to improve their learning.

But that opportunity and focus are far too rare in California. Instead, many teachers receive only occasional workshops, often on topics unrelated to the needs of their students, the least effective kind of professional development.

---

**Teacher perception of the value of professional development**

- Increased my effectiveness at promoting student learning
- Increased my knowledge beyond basic techniques
- Deepened my subject matter knowledge
- Improved my ability to identify appropriate instructional goals
- Improved my skills in meeting student needs
- Improved my classroom management skills
- Increased my ability to interact with parents

**Source:** SRI Survey of California Teachers (2001)
Maria’s Story — Part Four

Maria is now in her second year of teaching and continues to take classes at California State University.

She feels she is having a more successful year, and she attributes that to the school district’s decision to implement a reading program, which prescribes exactly what and how teachers are to teach. The training for this program, Maria says, “was the most important preparation I have gotten. Now I know exactly what I am supposed to do.”

As part of our research, we surveyed teachers about their professional development. Only about one in five says their professional development has increased their effectiveness at promoting student learning “a lot.” Less than half of elementary teachers say their professional development focuses on the subjects they teach. And only one-quarter of high school teachers say their professional development is subject focused, although we would have expected teachers in high schools to be more focused on content.

Policymakers have focused more attention on professional development in the past few years, and future reports on this area may be more promising. According to teachers now, however, little has changed. Less than one-quarter of teachers, for example, say their professional development is sustained over time with sufficient follow-up and support. Teachers have given high marks, however, to some of the recent efforts to help new teachers get started and to provide subject matter expertise in reading and mathematics.

Recommendations

We approach this work with five clear goals for policymakers.

- Every student will have a fully prepared and effective teacher.
- Every district will be able to attract and retain fully qualified, effective teachers.
- 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.
- Every pathway into teaching will provide high-quality preparation and be based upon California’s standards for what students and teachers should know and be able to do.
- Every teacher will receive high-quality support as he or she begins teaching, as well as the continuing professional development to ensure that he or she stays current in his or her field.
These goals are ambitious but necessary if California is to provide a quality education for its children. There is much to be done. We have focused our recommendations on the most urgent priority — what must be done to help our poorest students in our most difficult-to-staff schools. Those recommendations include:

1. Provide additional assistance and incentives for schools that are in the bottom 20 percent of the state’s Academic Performance Index (API) to attract fully qualified teachers by:
   - continuing to waive state testing and licensing fees for candidates preparing to teach in these hard-to-staff, low-performing schools;
   - increasing funding and expanding eligibility for financial incentives for qualified, veteran teachers who accept assignments in these schools; and
   - requiring annual school district report cards to list the percentage of underprepared teachers in every school, and requiring an analysis of teacher supply and preparedness to be obtained prior to new collective bargaining.

2. Strengthen California’s teacher preparation programs by:
   - eliminating by 2006 the ability of the state to offer emergency teaching permits to persons who are not fully prepared as teachers;
   - expanding eligibility for the Governor’s teaching fellowship program to include persons now teaching with emergency permits in the lowest-performing schools to accelerate their professional preparation as teachers; and
   - increasing the portion of state funding that supports those teacher preparation programs providing high numbers of new teachers to low-performing, hard-to-staff schools.

3. Strengthen professional development for teachers in California by:
   - broadening the scope of professional development in low-performing schools beyond English language arts and mathematics;
   - requiring that all state-supported professional development programs in low-performing schools focus on teacher content knowledge and instructional skill based on the state’s academic standards for students; and
   - providing incentives and funding to allow additional professional development to be built into the annual schedules of low-performing, hard-to-staff schools without reducing any instructional time for students.
Investing in Better Data

California invests billions of dollars annually in its schools and its teachers. But the state’s current method of gathering, analyzing and reporting data to policymakers makes it hard to gauge the quality of that investment. A variety of state agencies, for example, collect data about teachers. But because there is no “common identifier,” their data systems are not linked. It is nearly impossible to answer what should be simple questions such as how many teachers leave the profession each year, if and/or when they return, and how many teachers will need to be hired.

So the problem facing decisionmakers is not a lack of data, but rather the difficulty in how comprehensive information is made accessible and useful to those who need it. While there is a proliferation of data sources, there is no single, cohesive, reliable system of data collection, analysis and timely dissemination. Further, separate data sources cannot be linked because there is no “common identifier” necessary to share information across data systems.

It does not have to be this way. But having a cohesive data system will require thoughtful planning and careful implementation. Care must be taken to protect the privacy of the individual while providing appropriate access to the data for the purpose of informing policy decisions.

We recommend creating an information system to integrate the diverse sources of data into a comprehensive analysis of teacher development in the state.