

The Status of the Teaching Profession

The Center for the
Future of Teaching
and Learning

Research conducted by
SRI International

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

Teaching and
California's
Future



2009

Where We Must Go

For California to succeed economically and socially, we need a well-educated citizenry. We need people who have the knowledge and skills to thrive in a world that rewards analytical thinking and innovation. And we need people who are good neighbors thoughtfully engaged with us in our turbulent democracy.

The last few years should have convinced us all of the fragile nature of California's economy, its link to the larger world economy and the importance of education to both. There is no shortage of evidence that grave peril lies ahead if California fails to invest significantly in education.

California can take pride in its rigorous academic standards that frame high expectations for every student. State leaders routinely talk about the importance of all students graduating high school with the knowledge and skills to succeed in college and the modern workforce. We talk of the heightened value of education in a flattened world. And we talk about the necessity of every student having a teacher who is both fully prepared and effective.

TOO MANY STUDENTS DROP OUT

Where We Are Now

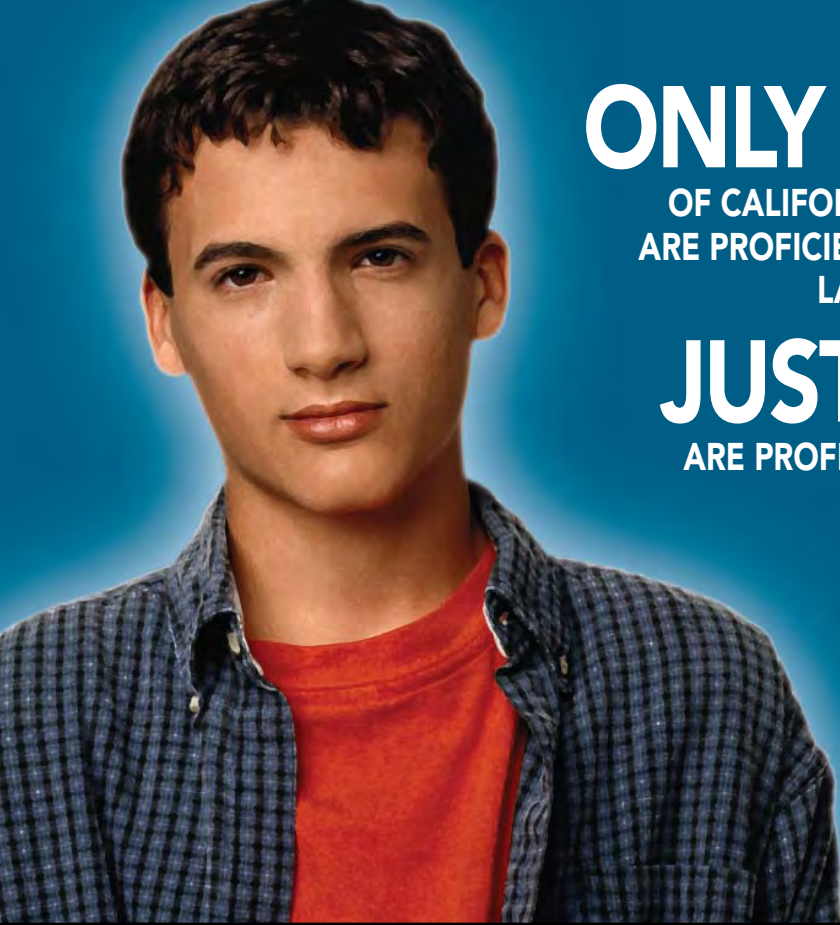
But California has a long way to go to translate talk into action.

We lose nearly one in every five students annually who drop out of school. Of those who do graduate, only about a third are really ready for the world beyond high school. Far too few of our students—only about half—are proficient and can be said to be meeting the state's standards. And the percentage of proficient students is lower still on national measures.

Those students who live in our poorest communities or attend our lowest achieving schools—students who arguably need the most effective teachers—are by far the most likely to face teachers who are the least prepared. And few districts have systems in place to ensure that teachers are thoughtfully evaluated and provided the supports to improve.

For more than a decade, we have produced reports annually about California's teaching force. The reports are based on solid, sophisticated research and what we hope is clear-eyed analysis. What you have in front of you is a summary of this year's research, highlighted by a special examination of the status of teaching in the state's high schools, as well as five fact sheets. The full research report is available free at www.cftl.org.

TOO FEW GRADUATES READY FOR THE WORLD BEYOND HIGH SCHOOL



ONLY HALF

OF CALIFORNIA STUDENTS
ARE PROFICIENT IN ENGLISH
LANGUAGE ARTS

JUST 46%

ARE PROFICIENT IN MATH

Budget Cuts and Red Ink

Dramatic deficits have put unprecedented strain on California's schools. Education leaders and policymakers have had to focus on keeping schools running rather than making them run significantly better.

There are bright spots. The percentage of underprepared teachers has gone steadily down. The state is close to finally having a data system to analyze its teaching force. Policymakers are talking about producing reforms to compete for hundreds of millions of federal dollars.

More immediately, though, the state is cutting back further on education, a number of districts have laid off teachers and students are paying the price.

While proficiency rates have slowly gone up, only 50 percent of California students were proficient or above in English language arts in 2009; 46 percent in mathematics. But these averages mask substantial gaps in achievement by ethnic groups. (See *Fact Sheet 1.*)

Worse, as students get older, proficiency declines. In 2009, two-thirds of 4th graders were proficient or above in mathematics, but only 44 percent of 8th graders who took Algebra I were proficient.

The state is struggling to reduce dropouts at the same time it is pushing to ensure every high school graduate is ready for college or a career. Now, only a third of high school graduates complete the coursework required for state universities. Of those who attend the California State University system, 6 in 10 require non-credit remedial coursework. (See *Fact Sheet 2.*)

This year, we took a special look at high school teachers and their principals. Our findings are on the pages that follow. As in past years, we also looked at the overall teaching force including teachers who are underprepared, those teaching out of their fields of study, novice teachers, the portion of teachers eligible to retire, and prospective teachers in the pipeline to replace them.



STUDENTS WHO DROP OUT FACE A LIFETIME OF DIMINISHED EARNINGS

High Schools: The Heat is On

In many ways, the ultimate proof points of our public schools are successful high school graduates—graduates who have the skills and knowledge they need to be able to go on to college or a career, graduates who have good choices.

Students who drop out face a lifetime of diminished earnings and also cost the state billions of dollars annually in lost economic benefits and higher rates of violent crime. Students who graduate but don't have the requisite knowledge and skills face rude awakenings in college and the workplace. Corporations, universities and policymakers from Sacramento to Washington are applying increased pressure to make sure graduates are better prepared for success after high school.

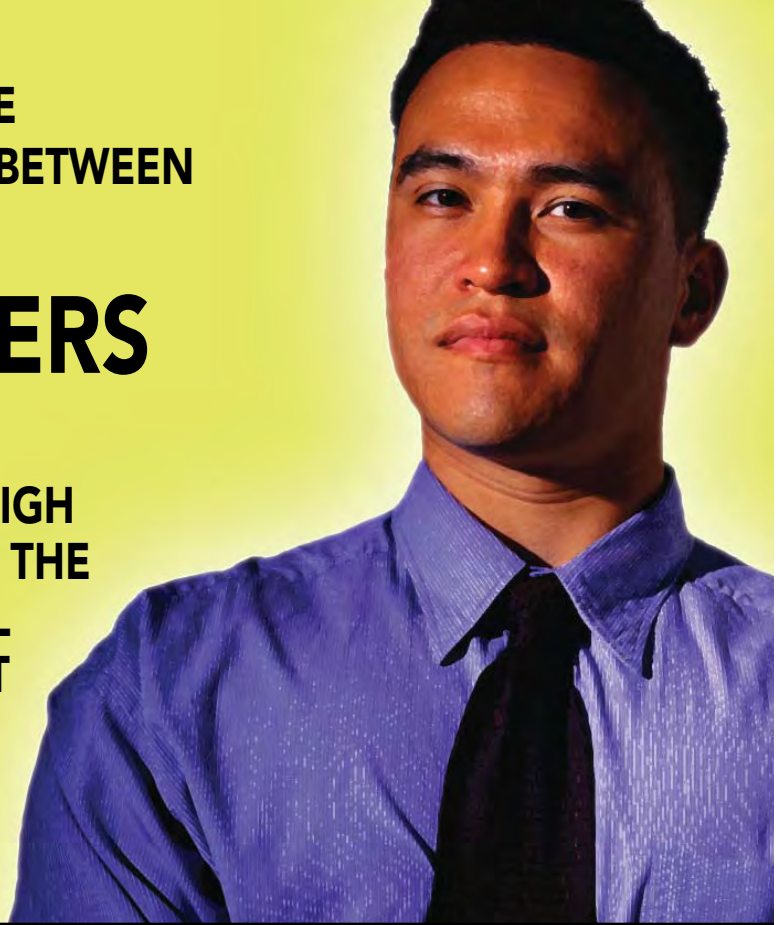
Generally, California high schools are changing as a result, but many of the professionals in these schools don't have the knowledge or skills they need to help their students succeed, nor is there a system to provide them with the necessary preparation or support.

While the state is fairly directive about what gets taught in schools through the 8th grade (and to a degree how), California is less prescriptive of its high schools.

While there is no comprehensive, statewide effort to improve achievement in high schools, many are trying to improve by doing one or more of three things: increasing the rigor of what is taught, personalizing the high school experience for students, and connecting learning more to the technical and career world. While these strategies can make schools more welcoming places to study and learn, researchers have come to a clear conclusion: gains in achievement by students are best realized when schools focus on improving teaching.

In the past year, we looked at the available data on the high school teaching force, surveyed high school principals, conducted case studies across the state—of big high schools and small ones, traditional high schools and charters—and interviewed teachers.

THERE IS LITTLE CONNECTION BETWEEN WHAT TEACHERS NEED TO IMPROVE HIGH SCHOOLS AND THE PROFESSIONAL DEVELOPMENT THEY GET



Ambition vs. Capacity

It is clear that the state's ambitious aspirations for its high schools are not always matched by state and local supports to ensure high school teachers can succeed.

We found there is often a mismatch between the preparation and experience of teachers and the educational needs of their students. Particularly, there is very little state support for professional development for California's 79,000 high school teachers and local district efforts appear to vary considerably. Further, our research finds there is little connection between what teachers *need* to implement various strategies to improve high schools and the professional development they *get*.

Although most high school principals report that their teachers have the subject knowledge needed to deliver rigorous academic content to students, they expressed concern over their teachers' capacity to adjust instruction for students, to integrate real-world examples into lessons or to use data to understand what individual students need. The principals were even less comfortable about the extent to which their teachers could help students plan for life after high school. (See Fact Sheet 3.)

That discomfort with the capacity of their teachers goes up dramatically in those high schools serving California's lowest income students. Principals in high-poverty schools, for example, were eight times more likely than their peers in low-poverty schools to be concerned with teachers' subject knowledge. Beyond the concerns of principals, we found an unfair distribution of underprepared teachers at all levels, including high schools. Across the state, students with the most needs routinely get teachers with the least preparation and experience. (See Fact Sheet 5.)



TEACHING HIGH SCHOOL IS A TOUGH JOB AND GETTING TOUGHER

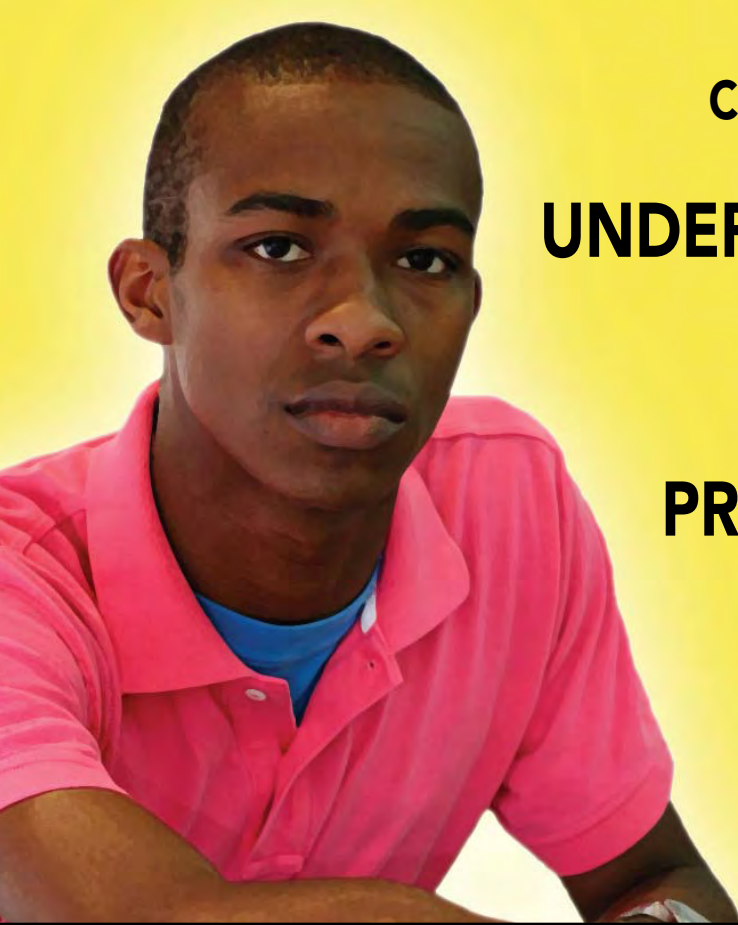
Teaching High School: The Job is Changing

We found substantial variation in how high schools recruit new teachers, how those teachers are oriented to their jobs, and how faculties work together to focus on student learning.

But many high schools that are increasing academic rigor through tougher graduation requirements or advanced courses, supporting students in their postsecondary plans through more regular counseling and advising, or connecting the curriculum to careers and real-world applications are finding their teachers not equally ready or able to make these shifts from traditional teaching. This is not just a problem of veteran teachers; many newly minted teachers were not exposed to this different set of skills in their university programs. And we found that there are increasingly fewer prospective teachers preparing to work in California high schools.

Our case studies also show that these high schools are finding it difficult to reorganize schedules to allow teachers time to collectively focus on student learning, or to ensure that individual teachers get the additional training they need.

Teaching high school is a tough job and getting tougher, with teachers facing multiple, new expectations. While teachers may be expected to make the curriculum more rigorous and relevant to students, we found that they also are focused on increasing the number of students who can pass the state tests and providing them with at least the basic academic skills to complete high school courses and graduate.



CALIFORNIA HAS FEWER UNDERPREPARED TEACHERS BUT ALSO FEWER PROSPECTIVE TEACHERS IN THE PIPELINE

Will We Have Enough New Teachers?

A decade ago, California had nowhere near enough certified teachers. The state had suddenly reduced the number of students per elementary teacher and many schools, particularly in poor communities, had to hire underprepared teachers on emergency permits to staff classrooms.

In 2000-01, there were more than 42,000 underprepared teachers who did not have a full credential. Over the past several years, that has been dramatically reduced. In the school year that ended this spring, the number of underprepared teachers was down to slightly less than 11,000. That is less than four percent of California's teaching force of about 307,000. (See *Fact Sheet 4*.)

The numbers of teachers, particularly high school teachers, who are teaching subjects out of their fields also have generally declined. About 10 percent of math teachers, for example, are teaching out-of-field, down from 12 percent five years ago; 13 percent of English teachers are out-of-field, down from 15 percent,

and 18 percent of physical science teachers, down from 20 percent.

All these indicators are improved, but they come with a set of warning signs.

- There is not a single labor market in California for teachers. In some communities, prepared teachers are being laid off. Other communities are having difficulty finding fully prepared teachers, particularly in critical subjects.
- Nearly 100,000 veteran teachers are older than 50; many are eligible for retirement.
- The number of new teachers in their first or second year has dropped by nearly one quarter in the past couple of years, the number of new credentials being issued is down substantially and the number of prospective teachers in universities also is significantly down.

We also do not yet know how the laying off of thousands of teachers will affect people thinking about becoming teachers.



POOR AND MINORITY STUDENTS

ARE MUCH MORE
LIKELY TO FACE
TEACHERS WHO ARE
INEXPERIENCED,
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ARE TEACHING
OUT-OF-FIELD

Distribution of Fully Prepared Teachers: Still Unfair

While the numbers of underprepared teachers, including high school teachers, has steadily come down, one thing has remained quite constant—students who are poor, of color or who are in low-achieving schools are much more likely to face teachers who are underprepared, inexperienced and teaching out of their subject areas.

Consider:

- The high schools with the highest portion of minority students have five times as many underprepared teachers as those in the schools with the lowest portion of minority students.
- Three quarters of intern teachers, who are still pursuing a preliminary credential, work in the bottom half of schools as measured by achievement.
- The high schools with the lowest achievement rates have two-and-one-half times as many underprepared teachers as the high schools with the highest achievement rates.
- Sixth graders who attend schools in the lowest achieving quarter of schools are 10 times more likely to have had more than one teacher who was underprepared than sixth graders in the highest achieving quarter of schools. (See Fact Sheet 5.)

If we believe good teachers make the biggest positive difference for students—and we do—then the propensity for low income and minority students to face our least prepared and inexperienced teachers is neither fair nor right. Although policymakers, education leaders and teachers unions have paid far more attention to the need to get more accomplished teachers into high-needs schools, these inequities continue.

CALIFORNIA NEEDS A TEACHER DEVELOPMENT SYSTEM — AFTER ALL, NO ONE IS TAKING THE PRESSURE OFF STUDENTS



Conclusion

Few jobs are more difficult, more frustrating, and sometimes more wildly rewarding than teaching high school. Teachers often feel whipsawed among competing priorities that seem quite external to them. The fundamental academic issues (reading comprehension or computation) that students have in elementary school get amplified under the glare of more rigorous high school expectations. And, as we have found in this year's research, teachers need more preparation and support to implement a range of strategies to improve the experiences and outcomes for high school students.

California policymakers are in the midst of an important debate as they consider applying for federal Race to the Top grants. They will have to make a series of decisions about what they expect of students and teachers, how teachers will be evaluated and supported, and how California should deal with its lowest performing schools.

We hope these deliberations lead to a positive focus on how to continue to strengthen the state's teaching force.

Policymakers have been pushing for more than a decade to reduce the number of underprepared teachers and to improve the quality of teaching. We encourage them to continue the progress they have made, and to break the link between a student's zip code and the likelihood they will have fully prepared and effective teachers. Our recommendations are included with the fact sheets in this summary.

Despite the continuing economic crisis, policymakers still need to make wise investments in strengthening California's education system. After all, no one is taking the pressure off of students, who must learn what they need to thrive, or teachers, who must help provide that knowledge.

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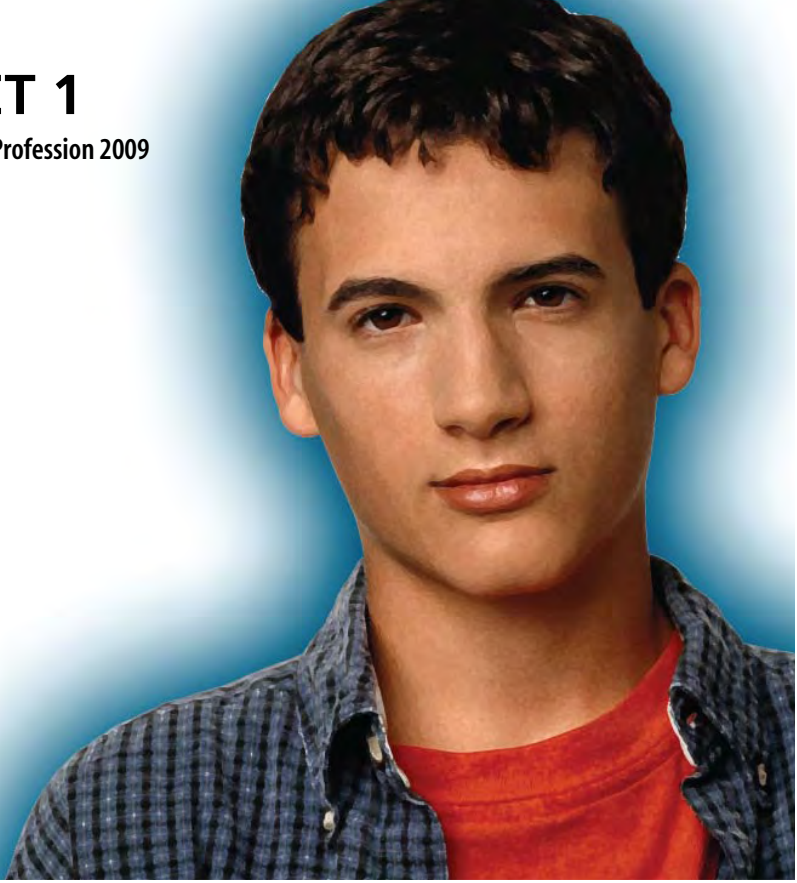
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FACT SHEET 1

The Status of the Teaching Profession 2009

Teaching and
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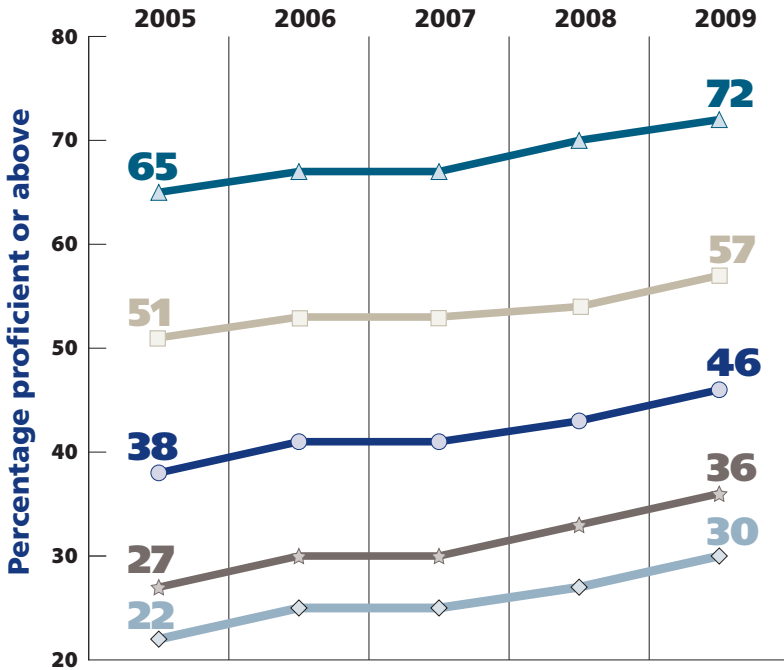
Achievement: Too few students proficient— achievement gaps too wide

California students are doing better on state tests and increased numbers of students are taking more rigorous courses. But only half of students are proficient or above in literacy and fewer than half in mathematics.

Equally troubling—significant achievement gaps remain between Asian and White students and those who are Latino or African American. In mathematics, for example, 46 percent of California students were at least proficient in tests administered in early 2009. But that number masks wide differences—72 percent of Asian students and 57 percent of White students were proficient or above, but only 36 percent of Latino students and 30 percent of African-American students.

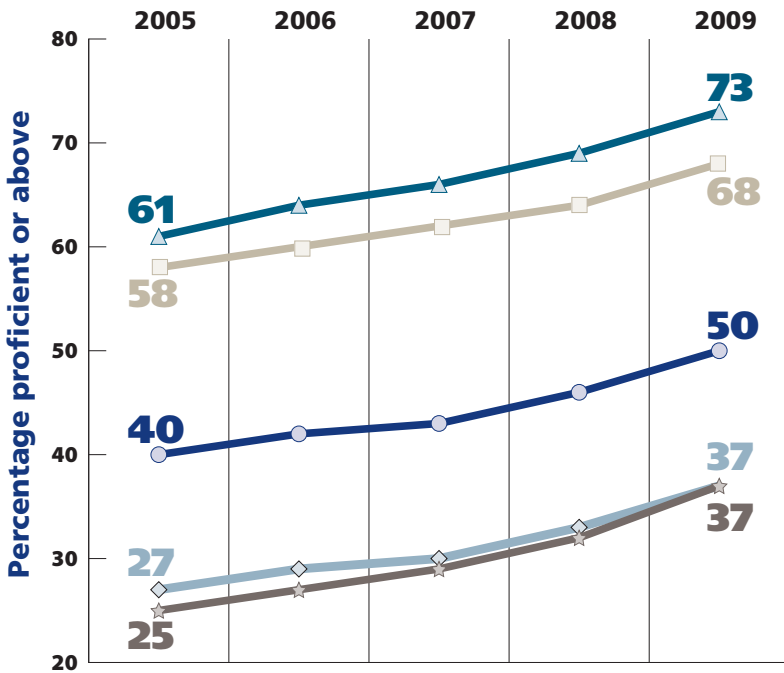
ONLY 36%
OF LATINO STUDENTS AND
JUST 30%
OF AFRICAN-AMERICAN STUDENTS
WERE PROFICIENT OR ABOVE IN MATHEMATICS IN 2009

Mathematics Test Results – 2005-09



Source: California Department of Education

English Test Results – 2005-09



Source: California Department of Education

▲ Asian
 ■ White
 ● All students
 ★ Latino
 ◆ African American



FACT SHEET 2

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High School: Too many dropouts, too few graduating ready for college and work

About 107,000 high school students drop out every year—about one student in every five that start ninth grade. And Latino and African-American students drop out at far higher rates.

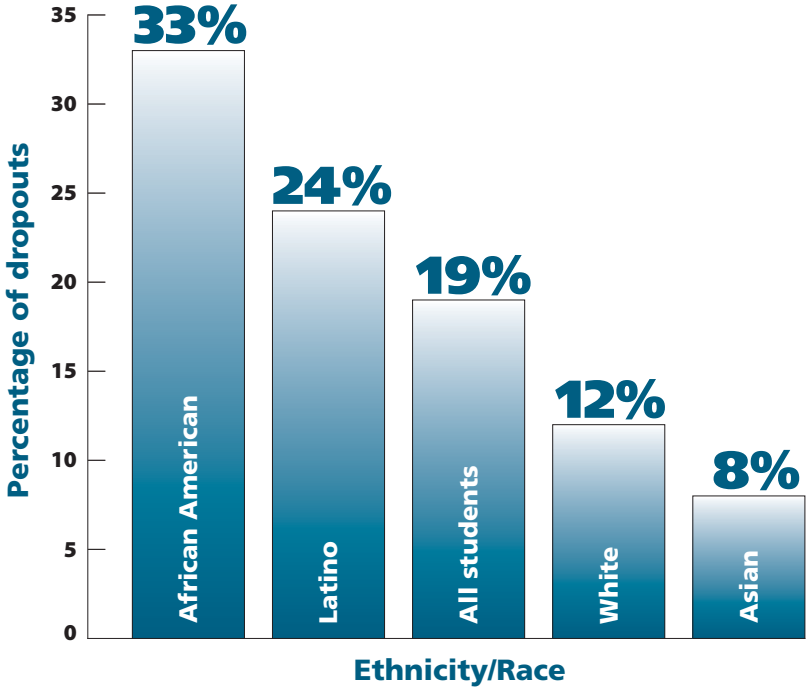
Of those students who do graduate from high school, only about a third have completed the courses required by the University of California and California State University systems, and more than 6 in 10 students who attend CSU must take non-credit, remedial courses.

And employers complain that students increasingly lack skills such as problem solving, critical thinking, communication, and collaboration—all critical in today's workplace.

STUDENTS WHO DROP OUT

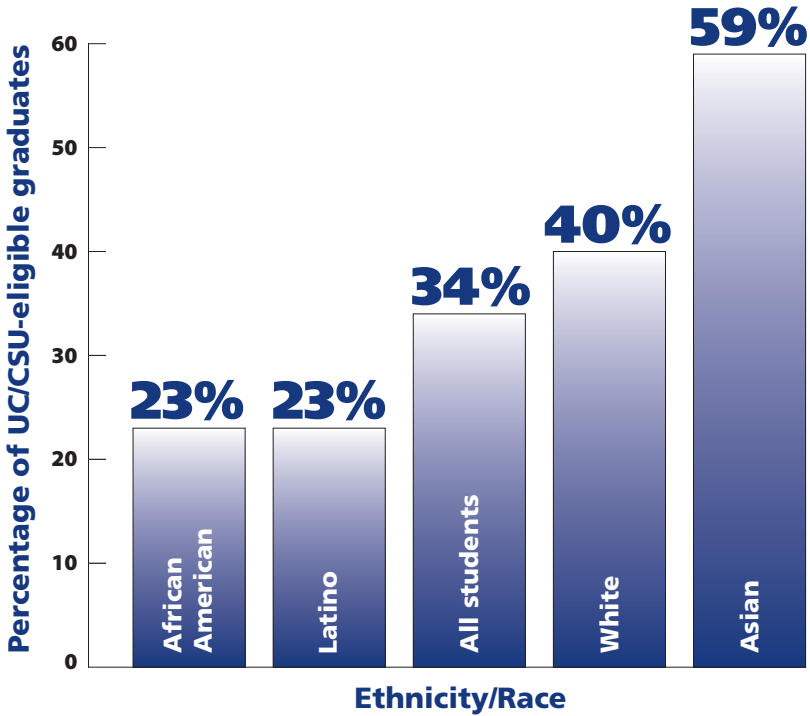
FACE A LIFETIME OF DIMINISHED EARNINGS

Dropping Out – Variation by Ethnicity



Source: California Department of Education

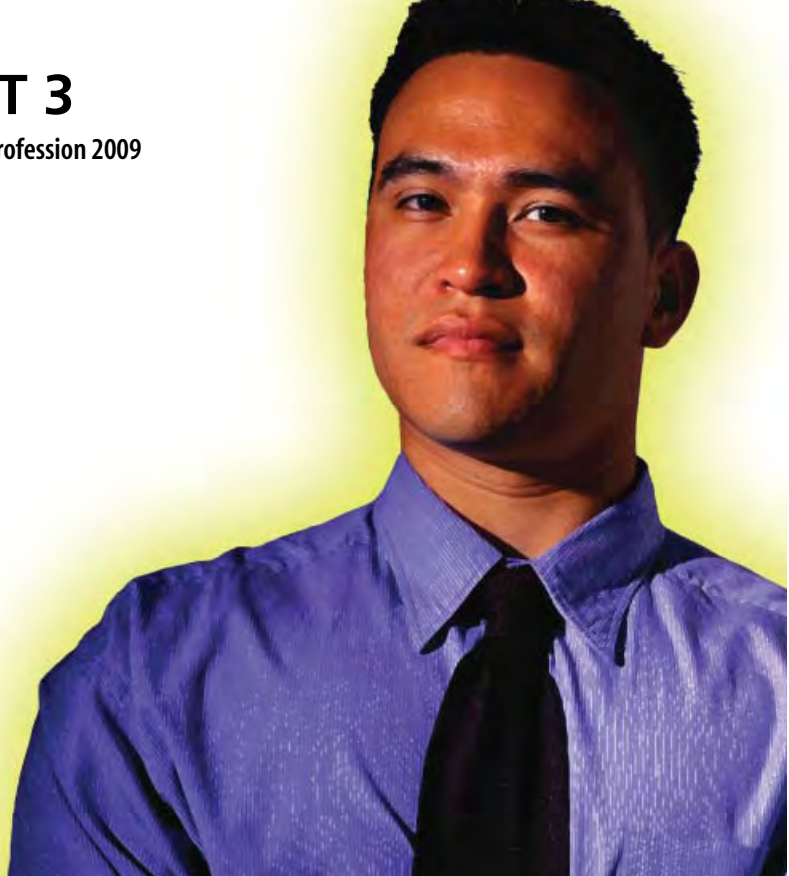
College Readiness – Variation by Ethnicity



Source: California Department of Education

FACT SHEET 3

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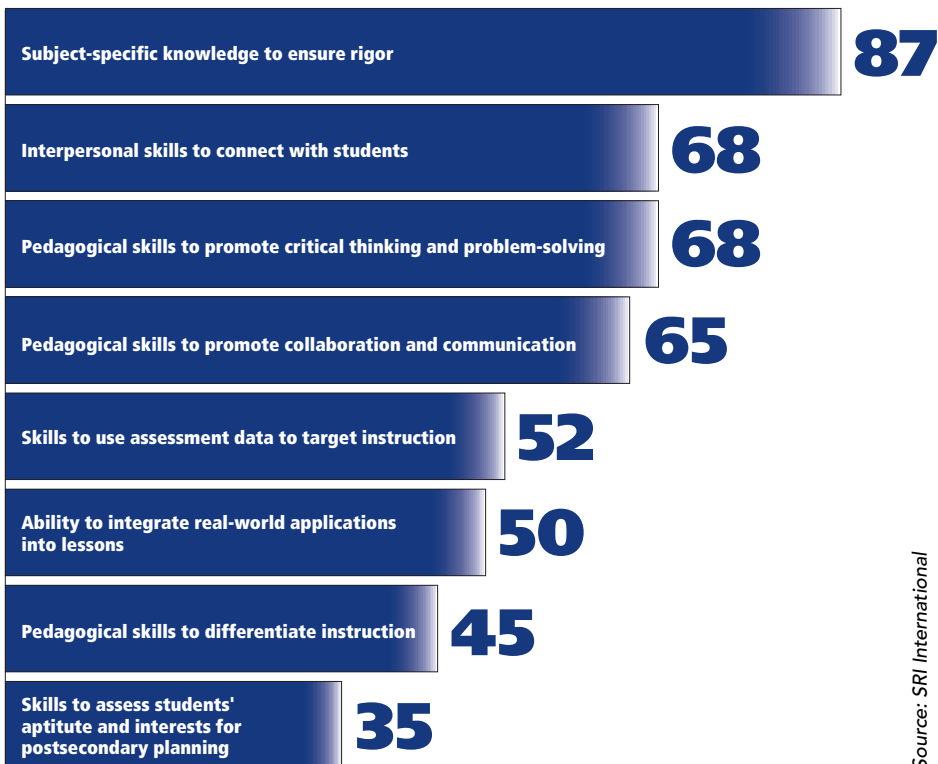
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High School: Teachers need new skills and knowledge

The prominent high school reform strategies of increasing academic rigor, making courses more relevant to life and careers, and personalizing the learning environment all have implications for teaching capacity.

- Teachers need new and different core understandings and beliefs, content knowledge, pedagogical skills, and professional expertise.
- Teachers must understand the rationale for and nature of the reform strategy and believe in its validity.
- Teachers need to develop deep knowledge of academic or technical subjects and be able to communicate related real-world applications in order to make learning more relevant.
- Teachers must know how to develop and make better use of assessments in order to provide instruction that cuts across content areas and supports students in developing their critical thinking, analytical, and communication skills.
- Teachers need additional professional expertise in areas beyond the classroom, including interpersonal communication and the ability to collaborate closely with their colleagues, industry partners, and with families.

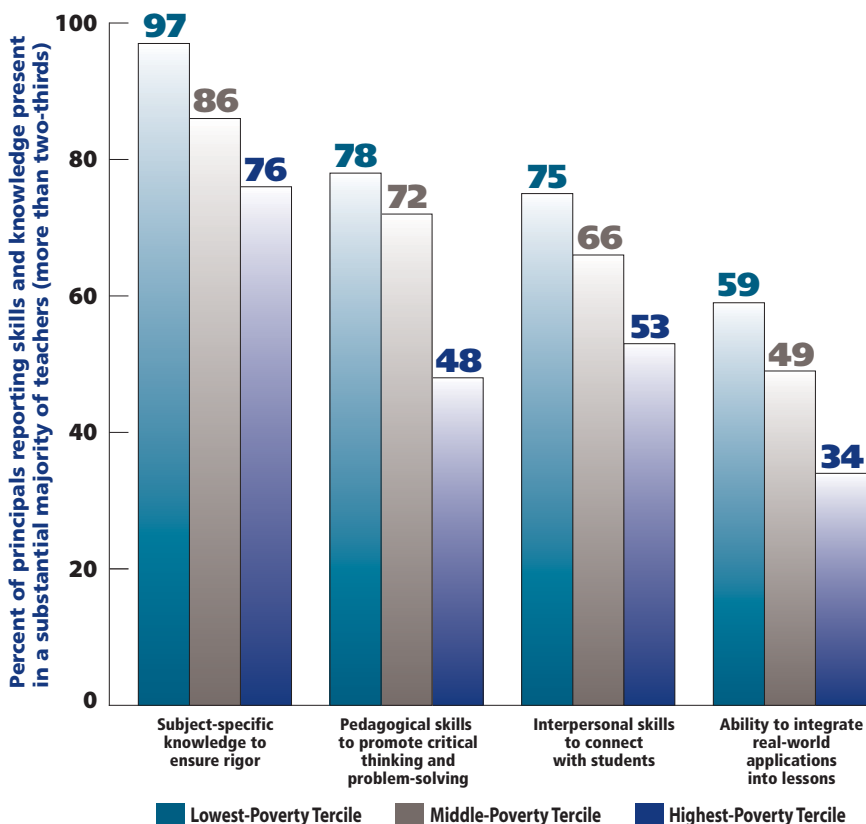
Prevalence of Teaching Skills and Knowledge



Source: SRI International

Percent of principals reporting skills and knowledge present in a substantial majority of teachers (more than two-thirds)

Prevalence of Teaching Skills and Knowledge, by School-level Poverty



Source: SRI International

FACT SHEET 4

The Status of the Teaching Profession 2009



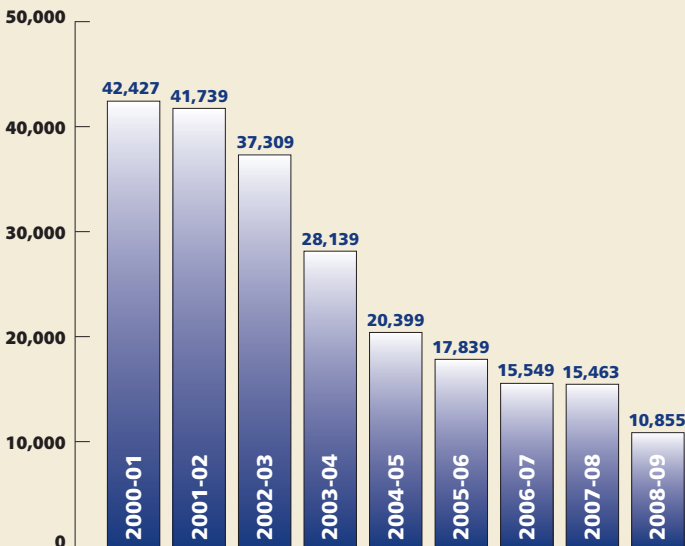
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Supply and Demand: The good, the uncertain

California has considerably fewer underprepared teachers than it did almost a decade ago. In 2001, more than 1 in every 7 teachers (14 percent) were underprepared; today that is down to 1 teacher in every 28 (3.5 percent).

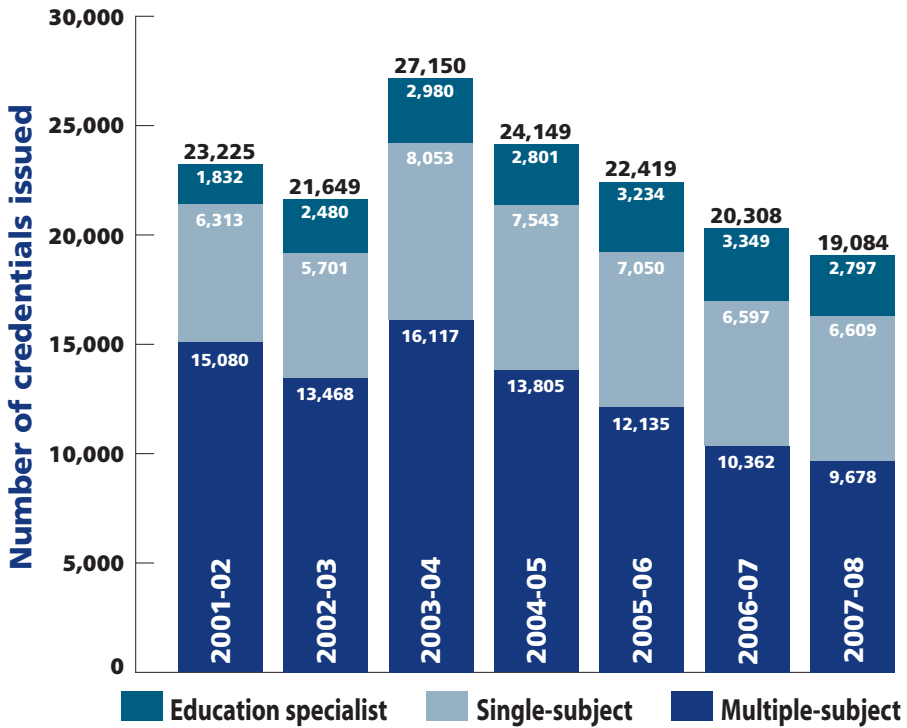
But there remains uncertainty about the future of the teaching force. Nearly 100,000 teachers are above age 50, many of them eligible to retire. The number of new teaching credentials issued by the state has dropped considerably. And the number of prospective teachers enrolled in preparation programs is also down significantly.

California's Underprepared Teachers



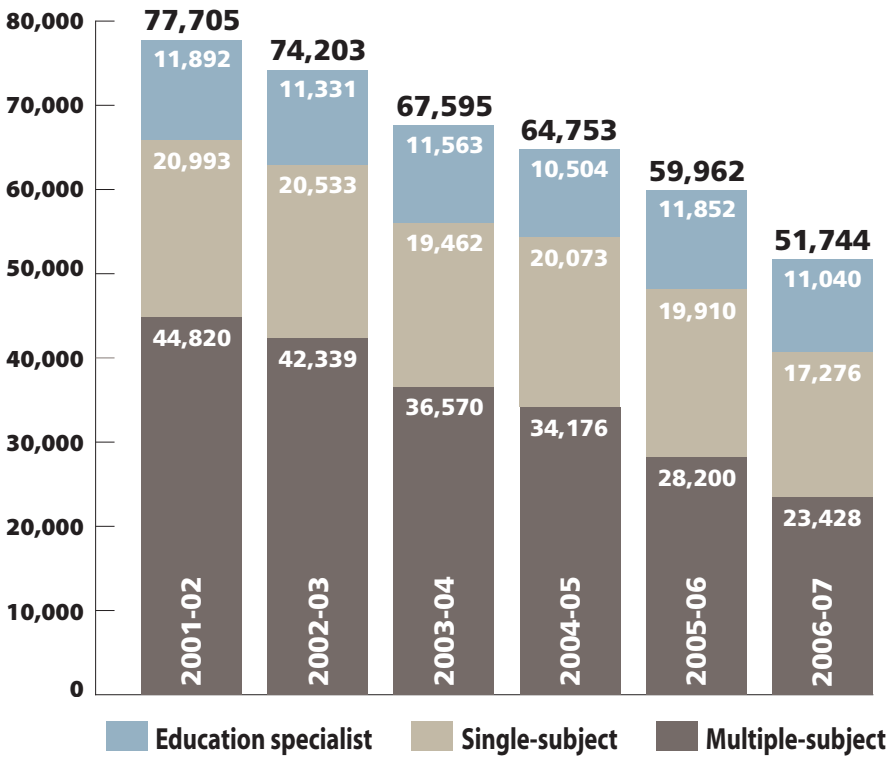
Source: California Department of Education

New Preliminary Credentials Issued



Source: California Commission on Teacher Credentialing

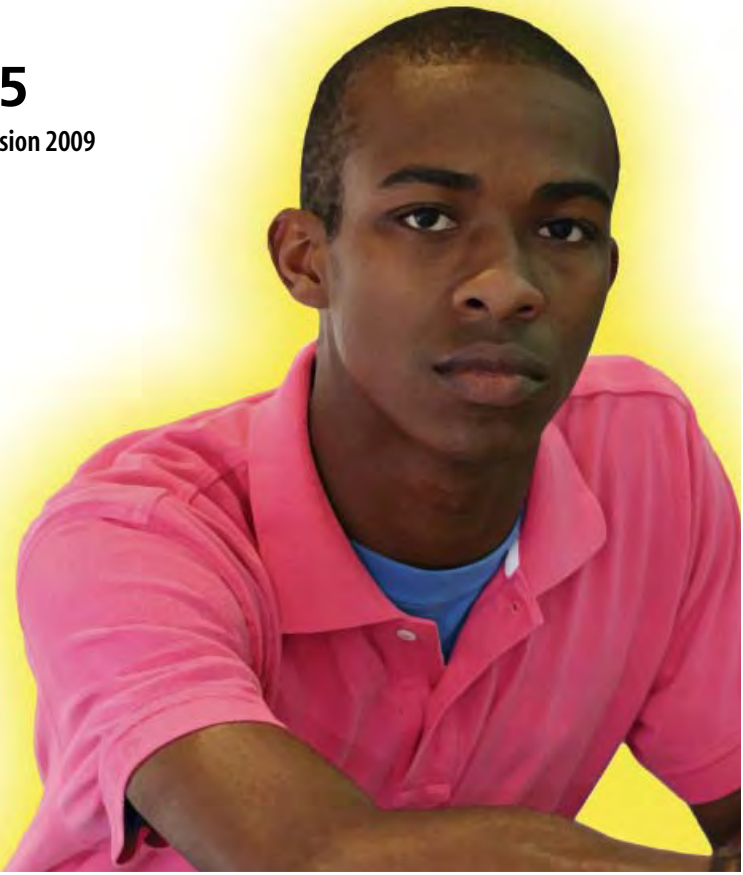
Enrollees in Teacher Preparation Programs



Source: California Commission on Teacher Credentialing

FACT SHEET 5

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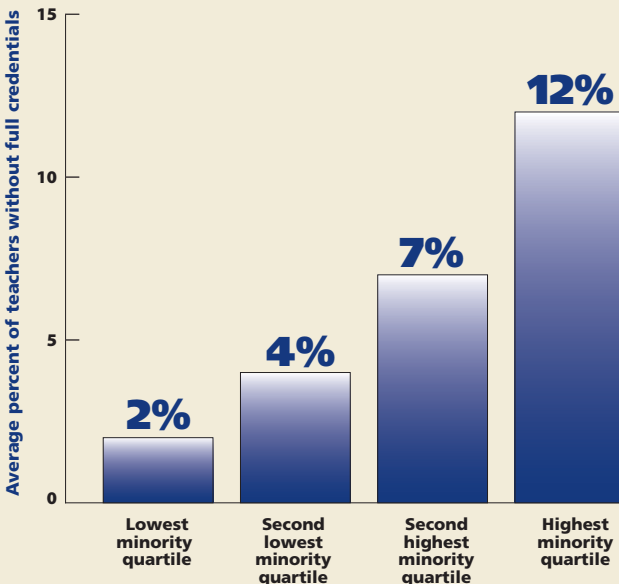


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Fewer Underprepared Teachers: Distribution remains unfair

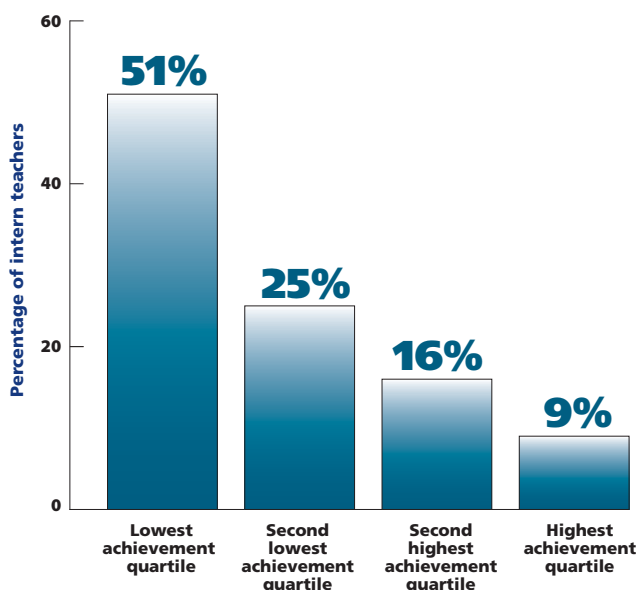
The numbers of underprepared teachers have gone down significantly, but the odds are still much higher that students who are in the lowest achieving schools, who are the poorest, and who are of color will face California's least prepared teachers.

High School Teachers without Full Credentials by Minority Quartile, 2008-2009



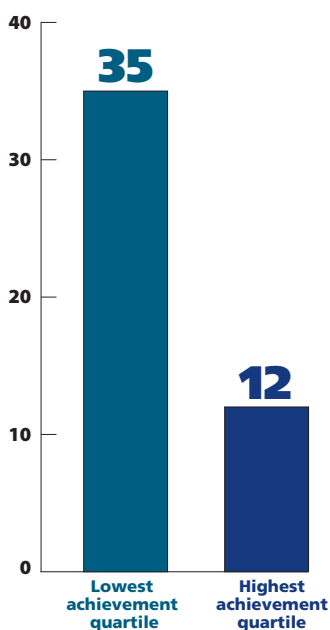
Source: California Department of Education

Distribution of Interns by School-level API, 2008-2009

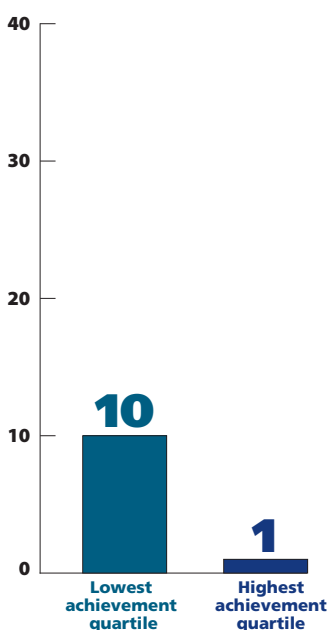


Source: California Department of Education

Maldistribution 2009: Bad Odds for Kids Who Need Better



Odds of having had *one underprepared teacher* during their elementary years



Odds of having had *more than one underprepared teacher* during their elementary years

Source: California Department of Education and SRI International analysis

2009

RECOMMENDATIONS

to Assist High Schools Working to Improve

Our research indicates that many educators throughout California are working to transform high schools to meet 21st century needs yet the state's teacher development system is not keeping pace with these improvements. The system at large does not currently provide adequate preparation or support for teachers or administrators that would enable them to carry out all of their responsibilities in high schools that have adopted innovative strategies.

The set of recommendations below specifies ways that state policymakers can help close the gap between the preparation and support that teachers will need in the future, and what they currently receive. The recommendations recognize California's budget context and are designed to be realistic, drawing upon existing, realigned, or earmarked federal resources. Because high school enrollment is expected to decline by 5% before growing again beginning in 2017-18, the next several years provide an opportunity to strengthen the existing secondary teacher and education leadership workforce. These recommendations, derived from data collected over the past two years, are offered to California's education leaders and support organizations, policymakers, philanthropic organizations, and others interested in ensuring that our students succeed in high school and beyond.

Recommendations to Assist High Schools Working to Improve

1

Build a statewide teacher development system that is better aligned to the needs of high schools that are making a concerted effort to prepare students for success in college, participation in civic life, and the 21st century workforce.

- **Gather the data.** Initiate a second phase of CALTIDES to collect data on both the teacher and administrator workforce. Federal funding dedicated to the construct of comprehensive data systems can be used to secure data from all appropriate agency sources. Information gathered should be of sufficient scope to guide policy development toward building workforce capacity leading to student success in high school and beyond. In addition to teacher data, CALTIDES should include a range of administrator data broad enough to effectively inform policies directed to strengthening education leadership with special attention paid to principalship.
- **Leave no federal funds behind.** State policymakers should apply for all available federal funds dedicated to instructional improvement and reform, ensuring that a portion of the funding be used to improve the ways teachers and administrators address learning conditions in high schools that are working to better prepare students for success in college and the 21st century workforce.
- **Coordinate support for local district and IHE partnerships as they seek federal funds for transforming educator preparation.** State leadership, including the California Department of Education, the Commission on Teacher Credentialing and the Office of the Secretary of Education, in partnership with higher education institutions, should provide coordinated support for local districts to seek available federal funds dedicated to transforming educator preparation in ways that better aligns preparation, induction and professional development programs for teachers and administrators.
- **Revise preparation, induction and accreditation standards to reflect learning conditions in high schools designed to integrate academic and career education.** State leadership, including the Commission on Teacher Credentialing, should work toward revising preparation and induction standards and program accreditation procedures to ensure that principal preparation and teacher preparation, induction and continuing professional development reflect the learning conditions in high schools designed to integrate academic and career education.
- **Systematically identify and remove barriers to integrating academic and career education.** State leadership, including the California Department of Education, the Commission on Teacher Credentialing, and the Office of the Secretary of Education should review all pertinent Education Code, regulatory and administrative requirements to identify any impediments to the integration of academic and career education.

Recommendations to Assist High Schools Working to Improve

- **Use federal funding to generate increases in the supply of high school teachers who can work effectively in 21st century high schools.** State policymakers, including the Governor and the Legislature, should take steps now to ensure a sufficient supply of fully prepared teachers for all students, particularly students in challenging school settings. These steps, specifically, should include: 1) earmarking available federal funding for UC and CSU for teacher preparation to increase FTE in teacher preparation programs; 2) linking this funding to redesigned preparation programs offering the set of skills necessary for teachers and administrators to succeed in schools that are transforming instruction; and 3) linking this funding to projections for teacher demand by county over the next decade.
- **Guide and support teachers who take on advisory roles.** State leadership, especially the Superintendent of Public Instruction, should include as a priority for the California Department of Education's P-16 Council the discussion and design of guidelines for local teacher advocate advisory programs. As part of this effort, discussants should consider the use of 10th grade counseling funding to identify and train a broader base of adult support for students as per the guidelines set forward in the Program Advisory for Counseling 10th Grade Students.

2

Build a structure of support for local school and district efforts to match curriculum and instruction to postsecondary 21st century demands.

- **Guide existing state and federal funding toward professional development opportunities specifically aligned with local school reform strategies.** Policymakers should review resources available to local school districts for professional development to better guide existing state and federal funding toward activities specifically aligned with local school reform strategies, including those that create opportunities for staff to collaborate on the ways in which student pathways through high school can be made more rigorous and relevant to students' college and career choices.
- **Use Title 1 funds to enable out-of-field teachers to master subject matter.** State and local policymakers should consider using federal Title 1 funds to allow local districts to provide intensive test preparation for teachers with out-of-field assignments to enable those teachers to master the subject matter needed to successfully engage students and to become fully certified in compliance with federal statutes.
- **Help high school principals—with targeted professional development, support and data—to improve their own schools.** Through high-quality and targeted professional development,

Recommendations to Assist High Schools Working to Improve

provide principals with the guidance and support they need to build understanding of and personal commitment to improvement efforts that ensure students are prepared for success in college, employment and full participation in civic life. Data that shows evidence of the potential of the improvement effort and guides its implementation should be readily available for use by staff to guide these efforts.

- **Infuse the process of hiring new teachers with staff involvement, clear expectations, and demonstration lessons.** Local school districts should be encouraged and supported in their efforts to transform the process of hiring new teachers, including involving staff at the local school level in hiring decisions based on a clear set of expectations, and to require demonstration lessons to identify those potential hires most likely to support and implement the schools' improvement efforts.
- **Reform personnel evaluations by linking them to data that supports improved practice.** Education leadership and members of the policy community should encourage the reform of personnel evaluations to focus on the efforts of (1) administrators to offer teachers support and assistance keyed to student performance, attendance, retention and course completion data, and (2) teachers to successfully use the data, as well as the support and assistance provided by the principal, to strengthen practice.

3 *Escalate current efforts to provide equitable access to high quality instructional programs in order to address the learning gap and ensure each and every student is fully prepared to succeed beyond high school.*

- **Ensure education equity.** State policymakers should carefully monitor the impact of categorical funding "flexibility" on ongoing efforts to ensure education equity for all students, with special attention to those attending low-performing schools. Policymakers should take all necessary steps to maintain the set of interrelated, research-based initiatives enacted to decrease substantially the number of underprepared teachers, while promoting equity in access to fully prepared teachers and administrators.
- **Align programmatic outcomes with the Legislature's intent.** Outcomes included under the provisions of statewide programs that are not subject to categorical flexibility, including the Quality Education Investment Act (QEIA), should be reviewed and monitored and, if necessary, revised to ensure that the intent of the Legislature is in fact being realized.