Professional Development: A Critical Strategy for Improving the Teaching Force

The High School Bulge

When the state reduced class sizes a few years ago, it did so for certain grades in elementary schools. At that time, California was experiencing a significant increase in the numbers of students in the lowest grades. Now those students who benefited from the reduced classes are moving into middle school and high school, where class sizes are increasing. Indeed, the number of teachers in California is declining, while the number of students is increasing. The student growth is occurring in middle schools and high schools, while elementary schools are barely growing or shrinking (see Fact Sheet 1).

And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject (either because they do not have basic teaching credentials or because they do not have a background in what they are teaching). This also is true for about one-third of English teachers and one-fifth of mathematics teachers (see Fact Sheet 4).

The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. As California increased its academic standards, it began expecting students to take algebra in 8th grade rather than in 9th grade. But in the middle grades many teachers hold elementary or multiple-subject credentials and are not prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far more such underprepared teachers in schools where large numbers of students have not passed the math portion of the state exit exam than in schools where higher numbers have passed (see Fact Sheet 3).

Going Forward with Insufficient Dollars

The budget crisis in California appears far from over, and programs that strengthen the state’s teaching force are more likely to get cut this year. Still, the state has set the expectation that all students will meet the California academic standards, and if it has the burden of getting students to succeed on local school districts and schools. With unacceptable consistency, those districts and schools that serve poor communities have the least-prepared teachers. In setting the Williams lawsuit, the state acknowledged its responsibility for ensuring that students have equal learning opportunities. Now, California must find a way to help those schools move beyond a desire to provide such a small window of time, California was experiencing a significant increase in the numbers of students in the lowest grades. Now those increased demands for professional development come at a time when both the state and local school districts are cutting budgets rather than investing more.

Without state intervention, these problems will grow increasingly dire over the next decade. We believe there is a small window of time, California was experiencing a significant increase in the numbers of students in the lowest grades. Now those increased demands for professional development come at a time when both the state and local school districts are cutting budgets rather than investing more. Unfortunately these increased demands for professional development come at a time when both the state and local school districts are cutting budgets rather than increasing. Indeed, the number of teachers in California is declining, while the number of students is increasing. The student growth is occurring in middle schools and high schools, while elementary schools are barely growing or shrinking (see Fact Sheet 1).
The Center for the Future of Teaching and Learning
Raising the Stakes but Cutting the Pipeline
The stakes for California’s schools and students have never been higher. More than 1.6 million California schools are now on a state-ordered “watch list” for failing to meet new federal standards, a number that is expected to rise by as much as two million in the next five years. Many of these schools have federal sanctions or even takeover by the state. This year’s high school juniors — members of the class of 2005 — must pass the state exit exam before receiving a diploma. Only about two-thirds have passed so far.

These stakes are now about to be amplified. The settlement of a far-reaching civil rights case, Williams v. California, requires far more public scrutiny of schools, particularly those that are performing poorly. These are the conditions in which we offer our annual examination of California’s teaching profession. The picture is decidedly mixed.

On the positive side, the state has significantly reduced the number of teachers who are running classrooms without even minimal qualifications — teaching credentials. And the portion of underprepared teachers in poor communities has been reduced considerably.

On the negative side, however, our projections show a significant rise in the number of underprepared teachers in California schools — a disturbing set of projections that underscores the challenges these teachers face in delivering quality education to all California students.

A Changing Landscape for Students and Their Teachers

In the mid-1990s, the state reduced the number of students per teacher in elementary schools, a decision that expanded the number of teaching jobs and suddenly increased the number of underprepared teachers. Despite the best of intentions, there were widespread and unfruitful consequences. Schools with large numbers of poor and minority children and children who speak little or no English — students most in need of skilled teachers — were the most likely to have large numbers of underprepared teachers.

For several years, the state put considerable resources into helping those underprepared teachers either teach the students they have or moving them to other schools or out of the profession. And the portion of underprepared teachers continued to drop. But the California economy took a sudden and protracted downturn, and the state’s investment in the teacher workforce slowed considerably.

Consequently, a new federal law — the No Child Left Behind Act — took effect in 2001, requiring states to make progress in reducing the numbers of underprepared teachers. In 2002, the state settled the Williams case, which essentially made this happen. The state funded a law called the Williams lawsuit in a way that will provide additional money for high-poverty schools and schools along with much closer examinations of the schools and the teachers who work in them.

Since we began reporting on California’s teaching force in 1999, we have defined underprepared teachers as those who have not yet earned full teaching credentials, which usually means completing their coursework and student teaching and passing key tests. The number of underprepared teachers has declined, and it has done so most in schools with considerable poverty, or concentrations of minority students. But this gap between schools that are still unacceptable — schools with large numbers of minority students still have five times the percentage of underprepared teachers as those schools with fewer minority students (see Fact Sheet 1).

And although the number of underprepared teachers has declined, the state still needs nearly 20,000 emergency permits, waivers and “provisional” certifications last year, far more of which were to teach classes of special education students. None of these teachers will be considered highly qualified in the school year that begins in 2006.

A disturbing set of projections lie beneath the reductions in the number of underprepared teachers. It appears that the demand for new teachers will soon go back up and continue to rise over the next decade as record numbers of veteran teachers retire. Nearly a third of the state’s teachers are older than 50, with an increasing portion of veteran teachers from the largest school districts. The number of underprepared teachers is considerably better than the previous year when more than one in every eight California teachers — 37,309 — were underprepared (see Fact Sheet 1). Annual projections show that these numbers are likely to be tens of thousands of underprepared teachers.

The state settled the Williams lawsuit in a way that will provide additional money for high-poverty schools and schools along with much closer examinations of the schools and the teachers who work in them.

State policy, the new federal law and the Williams lawsuit are all predicated on the belief that all students can learn and meet high academic standards. We strongly share that belief, while also recognizing that in California the challenges of meeting this happen are considerable. A quarter of the state’s students are English learners, and 10 percent are special education students. In the course of a career, virtually all California teachers will teach students with substantial learning challenges. Teachers need the knowledge and skills to ensure that all their students succeed.

California’s Teaching Force 2004 – Key Issues and Trends
The Center for the Future of Teaching and Learning

Raising the Stakes but Cutting the Pipeline

The stakes for California’s schools and students have never been higher. More than 1,600 California schools are now on a state-led “watch list” for failing to meet new federal standards, a number that is expected to rise by more than five years. Many of these schools have federal sanctions or even takeover by the state. This year’s high school principal—members of the class of 2005—must pass the state test even before receiving a diploma. Only about half of California’s high schools will pass the test. These stakes are now about to be amplified. The settlement of the teaching civil rights case, Williams v. California, requires far more public scrutiny of schools, particularly those that are performing poorly.

That is the context in which we offer our annual examination of California’s teaching profession. The picture is decidedly mixed.

On the positive side, the state has significantly reduced the number of teachers who are teaching classrooms without even minimal qualifications—teaching credentials. And the portion of underprepared teachers in poor communities has been reduced considerably.

On the negative side, however, our projections show that this improvement may be short lived. California’s poor children are still far more likely than their more advantaged peers to face underprepared teachers. The “pipeline” of recruiting, preparing, placing and supporting teachers has slowed considerably.

Consequently, a new federal law—the No Child Left Behind Act—mandates that by 2006, all teachers in California schools for schools and requiring all teachers to be “highly qualified” by 2006. And, this summer, state policy, the new federal law and the suit are all predicated on the belief that all students can learn and those teachers who work in them.

Fewer Underprepared Teachers

Since we began reporting on California’s teaching force in 1999, we have defined underprepared teachers as those who have not yet earned full teaching credentials, which usually means completing their coursework and student teaching and passing key tests.

During the last school year, 2003–04, slightly more than 28,000 teachers—about one in every 11 California teachers—were underprepared and teaching without benefit of the state’s minimum qualification. That, however, is considerably better than the previous year when more than one in eight California teachers—27,309—were underprepared (see Fact Sheet 1).

The number of underprepared teachers has declined, and it has done so in schools with considerable poverty or concentrations of minority students. But the gap between schools that are still unacceptable—schools with large numbers of minority students still have five times the percentage of underprepared teachers as those schools with few minority students (see Fact Sheet 2).

And although the number of underprepared teachers has declined, the state still issued nearly 20,000 emergency permits, waivers and “pre-intern” certificates last year for too many of which were to teach classes of special education students. None of these teachers will be considered highly qualified in the school year that begins in 2006.

A disturbing set of projections lie beneath the reductions in the number of underprepared teachers. It appears that the demand for new teachers will soon go back up and continue to rise over the next decade as record numbers of minority students still have five times the percentage of underprepared teachers as those schools with few minority students (see Fact Sheet 2).

It seems clear that California will need to recruit many new entrants to teaching. Four years ago, the state was spending nearly $150 million a year on such recruitment. Today, most recruitment programs have been eliminated from the budget.

However, at the same time, the overall number of teachers, the immediate issue is where teachers teach and what skills they have.

The state has significantly reduced the number of teachers who are teaching classrooms without even minimal qualifications. . . . (see Fact Sheet 1). California’s poor children are still far more likely than their more advantaged peers to face underprepared teachers. . . . (see Fact Sheet 2).
The Center for the Future of Teaching and Learning

Raising the Stakes but Cutting the Pipeline

The stakes for California’s schools and students have never been higher. More than 1,600 California schools are now or are slated to “watch list” for failing to meet new federal standards, a number that is expected to rise by two or three years. Many of these schools have federal sanctions or even takeover by the state. This year’s high school seniors — members of the class of 2005 — must pass the state exit exam before receiving a diploma. Only about three in four juniors — members of the class of 2006 — must pass the state exit exam before receiving a diploma. Only about three in four juniors — members of the class of 2006 — must pass the state exit exam before receiving a diploma. Only about three in four juniors — members of the class of 2006 — must pass the state exit exam before receiving a diploma. Only about three in four juniors — members of the class of 2006 — must pass the state exit exam before receiving a diploma.

Leaders understand the progress they have made and the challenges they face in delivering a high-quality education even minimal qualifications — teaching credentials. And the portion of underprepared teachers in poor communities that is considerably better than the previous year when more than one in every eight California teachers — 37,309 — were underprepared (see Fact Sheet 1).

The state has significantly reduced the number of teachers who are running classrooms without even minimal qualifications — teaching credentials. And the portion of underprepared teachers in poor communities is considerably better than the previous year when more than one in every eight California teachers — 37,309 — were underprepared (see Fact Sheet 1).

A Changing Landscape for Students and Their Teachers

In the mid-1990s, the state reduced the number of students per teacher in elementary schools, a decision that expanded the number of teaching jobs and suddenly increased the number of underprepared teachers. Despite the best of intentions, there were unintended and unfortunate consequences. Schools with large numbers of poor and minority children and children who speak little or no English — students most in need of skilled teachers — were the most likely to have large numbers of underprepared teachers.

For several years, the state put considerable resources into helping those underprepared teachers obtain teaching credentials, recertifying new qualified teachers in the profession and providing veteran teachers with additional professional development. Then, the California economy took a sudden and prolonged downturn, and the state’s investment in the teacher workforce slowed considerably.

Consequently, a new federal law — the No Child Left Behind Act — took effect in 2002, ratcheting up the stakes for schools and requiring all teachers to be “highly qualified” by 2006. And, just this summer, the state issued a new certification for teachers of English learners, called the “highly qualified” certitude. The state settled the Williams lawsuit in a way that will provide additional money for textbooks and school buildings, but this additional funding and the“highly qualified” certification will not be enough to make up for the state’s massive cutbacks.

State policy, the new federal law and the California lawsuit are all predicated on the belief that all students can learn and meet high academic standards. We strongly share that belief, while also recognizing that in California the challenges to making this happen are considerable.

A disturbing set of projections lie beneath the reductions in the number of underprepared teachers. It appears that the demand for new teachers will soon go back up and continue to rise over the next decade as record numbers of veteran teachers retire. Nearly a third of the state’s teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers may retire. Nearly a third of the state’s teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers may retire. Nearly a third of the state’s teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers may retire.

The state’s projections show that the number of new teachers who are running classrooms without even minimal qualifications — teaching credentials, recruiting new qualified teachers in the profession and providing veteran teachers with additional professional development. Then, the California economy took a sudden and prolonged downturn, and the state’s investment in the teacher workforce slowed considerably.

Or the negative side, however, our projections show that the impact may be short lived. California’s poor children are still far more likely than their more advantaged peers to face underprepared teachers. The teacher “pipeline” of recruiting, preparing, placing and supporting teachers has been significantly ruptured through repeated budget cuts. And the state does not have a coherent policy or sufficient resources to ensure that veteran teachers have the knowledge and skills they need to help their students, particularly high school students, who are running classrooms without even minimal qualifications — teaching credentials. And the portion of underprepared teachers in poor communities is considerably better than the previous year when more than one in every eight California teachers — 37,309 — were underprepared (see Fact Sheet 1).

Or the negative side, however, our projections show that the impact may be short lived. California’s poor children are still far more likely than their more advantaged peers to face underprepared teachers. The teacher “pipeline” of recruiting, preparing, placing and supporting teachers has been significantly ruptured through repeated budget cuts. And the state does not have a coherent policy or sufficient resources to ensure that veteran teachers have the knowledge and skills they need to help their students, particularly high school students, who are running classrooms without even minimal qualifications — teaching credentials. And the portion of underprepared teachers in poor communities is considerably better than the previous year when more than one in every eight California teachers — 37,309 — were underprepared (see Fact Sheet 1).

Fewer Underprepared Teachers

Since we began reporting on California’s teaching force in 1999, we have defined underprepared teachers as those who have not yet earned full teaching credentials, which usually means completing their coursework and student teaching and passing key tests.

During the last school year, 2003–04, slightly more than 28,000 teachers — about one in every 11 California teachers — were underprepared and teaching without the benefit of the state’s new qualification. That, however, is considerably better than the previous year when more than one in eight California teachers — 37,309 — were underprepared (see Fact Sheet 1). The number of underprepared teachers has declined, and it has done so most in schools with considerable poverty or concentrations of minority students. But the gap between schools that are still unacceptable — schools with large numbers of minority students still have five times the percentage of underprepared teachers as those schools with few minority students (see Fact Sheet 2).

And although the number of underprepared teachers has declined, the state still issued nearly 20,000 emergency permits, waivers and “pre-intern” certificates last year, far too many of which were to teach classes of special education students. None of these teacher’s certification will be considered “highly qualified” in the school year that begins in 2006.

A disturbing set of projections lie beneath the reductions in the number of underprepared teachers. It appears that the demand for new teachers will soon go back up and continue to rise over the next decade as record numbers of veteran teachers retire. Nearly a third of the state’s teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers may retire. Nearly a third of the state’s teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers are older than 50, with an increasing portion of veteran teachers may retire.

It seems clear that California will need to recruit many new entrants to teaching. Four years ago, the state was spending nearly $150 million a year on such recruitment. Today, most recruitment programs have been eliminated from the state’s budget. (see Fact Sheet 2)

However, at the current funding level, the overall number of teachers, the immediate issue is where teachers teach and what skills they have.
When the state reduced class sizes a few years ago, it did so for certain grades in elementary schools. At that time, California was experimenting with significant increases in the numbers of students in the lowest grades. Now those students who benefited from the reduced classes are moving into middle school and high school, where class sizes are increasing. Indeed, the number of teachers in California is declining, while the number of students is increasing.

The student growth is occurring in middle schools and high schools, while elementary schools are barely growing or shrinking. (see Fact Sheet 3). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The High School Bulge

The state exit exam than in schools where higher numbers have passed prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer math teachers prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer mathematics teachers qualified to teach the state’s highest level mathematics courses. (see Fact Sheet 5). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The student growth is occurring in middle schools and high schools, while elementary schools are barely growing or shrinking. (see Fact Sheet 3). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The state exit exam than in schools where higher numbers have passed prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer math teachers prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer mathematics teachers qualified to teach the state’s highest level mathematics courses. (see Fact Sheet 5). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The student growth is occurring in middle schools and high schools, while elementary schools are barely growing or shrinking. (see Fact Sheet 3). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The state exit exam than in schools where higher numbers have passed prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer math teachers prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer mathematics teachers qualified to teach the state’s highest level mathematics courses. (see Fact Sheet 5). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The student growth is occurring in middle schools and high schools, while elementary schools are barely growing or shrinking. (see Fact Sheet 3). The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. And many high school teachers are less than fully prepared. Nearly one-third of physical science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about 15 percent of English teachers and 9 percent of mathematics teachers. (see Fact Sheet 4).

The state exit exam than in schools where higher numbers have passed prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer math teachers prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far fewer mathematics teachers qualified to teach the state’s highest level mathematics courses. (see Fact Sheet 5).
Professional Development: A Critical Strategy for Improving the Teaching Force

The High School Bulge

When the state reduced class sizes a few years ago, it did so for certain grades in elementary schools. At that time, California was experiencing a significant increase in the number of students in the lowest grades. Now those students who benefited from smaller class sizes are moving into middle school and high school, where class sizes are increasing. Indeed, the number of teachers in California is declining, while the number of students is increasing.

The student growth is occurring in middle schools and high schools, while elementary schools are basically growing or shrinking (see Fact Sheet 4).

And many high school teachers are less than fully prepared. Nearly one-fifth of physics science teachers in the state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching. This also is true for about one-fifth of English teachers and one-fifth of mathematics teachers (see Fact Sheet 4).

The problem also is becoming acute within middle schools just as more students are moving into grades 6, 7 and 8. As California increased its academic standards, it began expecting students to take algebra in 8th grade rather than in high school. But in the middle grades many teachers hold elementary or multiple-subject credentials and are not prepared to teach higher level mathematics, including algebra. The result is telling — the data show there are far more such underprepared teachers in schools where large numbers of students have not passed the math portion of the state exit exam than in schools where higher numbers have passed.

The state are not authorized to teach their subject either because they do not have basic teaching credentials or because they do not have a background in what they are teaching.

One-fifth of mathematics teachers they do not have a background in what they are teaching. This also is true for about one-fifth of English teachers and one-fifth of mathematics teachers. The result is telling — the data show there are far more such underprepared teachers in schools where large numbers of students have not passed the math portion of the state exit exam than in schools where higher numbers have passed (see Fact Sheet 3).

Professional Development: A Critical Strategy for Improving the Teaching Force

California has been a national leader in developing support, particularly mentorships, for newly credentialed teachers. To its credit, even during tough budget times, the state has maintained funding for the Beginning Teacher Support and Assessment program, which annually serves about 20,000 first- or second-year teachers. To the degree that California is spending dollars on professional development, the state largely has limited its focus on these areas. Despite an urgent need for many veteran teachers to gain and demonstrate that they have the knowledge and skills to teach a growing and diverse group of more than 6 million students. Without a reversal of course, students are likely to face more underprepared teachers and more disengaged students every day.

The budget crisis in California appears to have come to an end, and programs that strengthen the state’s teaching force are more likely to get their increase. Still, the state has set the expectation that all students will master the California academic standards, and it has put the burden of getting students to succeed on local school districts and schools.

Going Forward with Insufficient Dollars

Through budget cuts and policy changes, California has largely dismantled the system in which the state invested to ensure that new and veteran teachers have the knowledge and skills to teach engineering and diverse group of more than 6 million students. Without a reversal of course, students are likely to face more underprepared teachers and more disengaged students in every class.

The California’s budget crisis has largely dismantled the system in which the state invested to ensure that new and veteran teachers have the knowledge and skills to teach a growing and diverse group of more than 6 million students. Without a reversal of course, students are likely to face more underprepared teachers and more disengaged students in every class.

The state is required if Californians are to have the schools they demand, the schools they need and that students deserve. Clearly, investment is difficult at a time when the state and local governments have fewer dollars. But such investment is required if Californians are to have the schools they demand, the schools they need and that students deserve.

California’s Teaching Force 2004

Key Issues and Trends

Teaching and California’s Future

The Center for the Future of Teaching and Learning

California State University, Office of the Chancellor
Policy Analysis for California Education
University of California, Office of the President
Wezd

Research conducted by: SRI International

Copyright © 2004. All rights reserved.
The Good News — Fewer Underprepared Teachers

Over the past few years, California’s volume of underprepared teachers — those teachers who do not yet have full teaching credentials — has declined. Now, approximately one of every 11 California teachers are underprepared.

- The 28,139 underprepared teachers in 2003–04 included 12,000 working on emergency permits and 8,500 teacher interns. Essentially all of these teachers do not have full teaching credentials or have never done “student teaching” under the supervision of a veteran teacher.

- Under federal requirements, the 20,000 teachers on pre-intern certificates, emergency permits and waivers would not be allowed to teach in the school year that starts in 2006.

- Budget cuts have essentially eliminated $150 million a year that California was spending to recruit new teachers.

Number of Underprepared Teachers in California, 1997–98 to 2003–04

Source: CDE.
The Bad News — More Underprepared Teachers on the Way

The trend line is troubling. California is not producing anywhere near enough new teachers to meet the projected demand. The problem is exacerbated by an aging teaching force that is increasingly eligible for retirement.

- In 2014 — the point at which federal law expects all students to be proficient — it appears as though California will face a shortage of tens of thousands of credentialed teachers. Unlike in the past, the state will no longer be able to issue emergency permits to allow noncredentialed teachers to take classrooms.

- About a third of California’s teachers are over 50. One in five teachers will be eligible for retirement in the next five years and one in three over the next decade. By 2014, the state will have to replace 100,000 teachers due to retirement alone.
Poor and Minority Students Get the Least-Prepared Teachers

The number of underprepared teachers has declined fastest in schools with considerable poverty or concentrations of minority students. But the gap between schools is still unacceptable — schools with large numbers of minority students still have five times the percentage of underprepared teachers as those schools with few minority students.

- The students most in need of the best teachers — poor students, minority students, students in schools with the lowest API rankings or students learning English — are in fact the most likely to face underprepared teachers.
- Those high schools with large portions of students failing the state exit exam also have the largest portions of teachers who are underprepared.

Average Percentage of Underprepared Teachers by School-Level Percentage of Students Passing the Math Portion of the High School Exit Exam, 2003–04

Underprepared Teachers in Schools with the Highest and Lowest Percentages of Minority Students, 1999–2000 to 2003–04

Sources: CDE, SRI Analysis.
High Schools — High Stakes and Huge Teacher Shortages

Starting with the class of 2006, all California students must pass the state exit exam to receive a diploma. Students who expect to go on to college need to meet much higher academic standards. But in key subjects, far too few high school teachers are sufficiently prepared to help their students reach these standards.

In English and mathematics, the two subjects included on the high school exit exam, about one of every five teachers either are underprepared or do not have training in the subject they are teaching.

A growing number of California students are entering middle school and high school, while numbers are relatively flat or even shrinking in the lower grades. This bulge of students is likely to face both more students in their classes and teachers who are underprepared.

Percentage Change in Public School Enrollment by Grade from 2000–01 to 2003–04

Sources: CDE, SRI Analysis.

Percentage of Out-of-Field and Underprepared High School Teachers in Assigned Subject, 2003–04

Sources: CDE, SRI Analysis.
Despite an urgent need for many veteran teachers to gain and demonstrate their knowledge of specific subjects to meet federal requirements, most state-funded professional development programs either have been eliminated altogether or are on life support.

■ State spending on professional development has been cut substantially and largely focused on reading and mathematics in the elementary grades.

■ The focus on the elementary grades leaves middle and high school teachers with much less state-funded professional development specifically targeted toward meeting their needs or those of their students.