

Doing What Matters Most: Investing in Quality Teaching

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The California Education Policy Seminar

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The California State University Institute for Education Reform

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Introduction

The Effect of Teacher Quality on Student Learning

If the agreed-upon destination is high student achievement, the road there surely appears to be a difficult one – full of twists and turns, bumpy detours and construction-in-progress signs. The opportunities for reform are numerous and can take a variety of forms: stringent standards and testing, new teaching methods, richer curriculum options and new school organizational approaches.

But what really works? If we want students to demonstrate increased learning through higher test scores, what does the research tell us about how to achieve that goal?

One thing that research shows is that a key factor in what comes out at the end of schooling is what goes on in the classroom every day. And no person is more influential in the day-to-day life of students than the teacher in the classroom. Yet when the winds of education reform sweep through a state or a district, teacher qualifications are not often the focus of change. The questions that need to be asked are not often raised: How do we attract the best people into teaching? How do we provide quality training? How do we encourage and reward good teaching?

The answers to these questions may tell us much about how to make the journey to increased student achievement. If we know that teacher quality affects student achievement, and if we know how to improve teacher quality, then we have a road map for investing our energy and resources in reforms that will make a difference.

March 12, 1998 Seminar

On March 12, 1998, the California Education Policy Seminar and the California State University Institute for Education Reform sponsored a forum on “Doing What Matters Most: Investing in Quality Teaching.” A group of 48 California policy makers, administrators, educators and policy advocates gathered to hear Dr. Linda Darling-Hammond, Executive Director of the National Commission on Teaching and America’s Future. Before answering extensive questions from the audience, Darling-Hammond focused her comments on three areas:

- The findings of the National Commission on Teaching and America’s Future on what affects student learning.
- Specific data about teacher quality and preparation in California.
- A Top Ten list of strategies for enhancing quality in California.

Dr. Linda Darling-Hammond is a professor at Teachers College at Columbia University. In addition to being the Executive Director of the National Commission on Teaching and America’s Future, she

is co-director of the National Center for Restructuring Education, Schools and Teaching. Currently, she is a visiting fellow at the Stanford Center for Advanced Study in Behavioral Sciences.

As chair of the Model Standards Committee of the Interstate New Teacher Assessment and Support Consortium, Darling-Hammond has helped developed licensing standards for beginning teachers that reflect current knowledge about what teachers need to know to teach diverse learners. She is the author or editor of seven books and dozens of journal articles and has served on many national education advisory boards.

Presentation of Linda Darling-Hammond

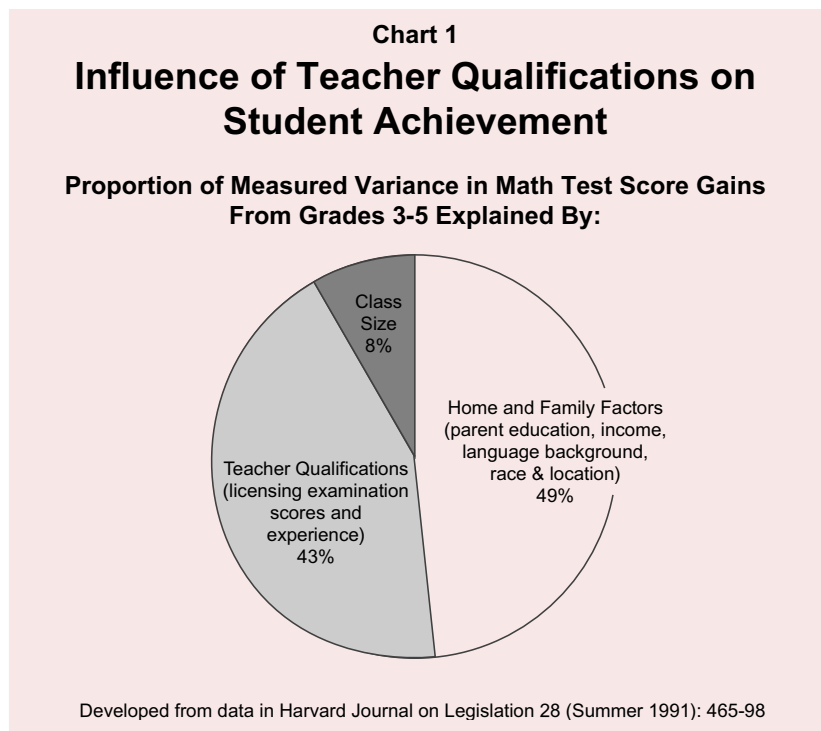
Dr. Linda Darling-Hammond's presentation covered research on the effect of teacher quality on student achievement and recommendations for improving teacher quality. Throughout this report, comments made by individuals are summarized without quotation; all text contained herein should be regarded as paraphrasing and/or synthesizing what was actually said, and not as quotes attributable to either the presenter or any other participant.

Teacher Quality: Why It Matters

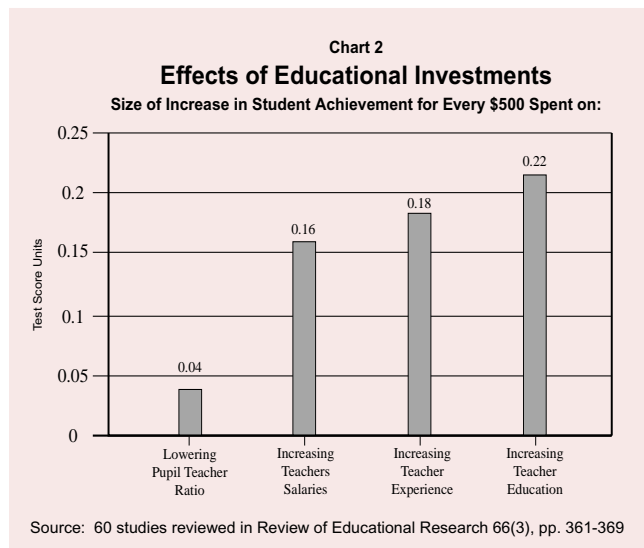
The challenges facing education today are multiple and intense – and nowhere is that more true than in California. California has experienced rapid growth in enrollment for the past 10 to 15 years coupled with substantial increases in immigration and the challenges that brings in terms of language differences. In addition, the state has seen high numbers of teacher retirements. Having a teaching force with the oldest average age in the nation, California is seeing a rapid depletion of its experienced teachers. Finally, teachers are being asked to teach all students much more challenging content and skills.

Faced with those challenges, it makes sense to ask this key question: What would it take to ensure that every California student has the opportunity to learn to the degree outlined in the new education standards that are taking hold across the nation and to the level necessitated by the demands of an increasingly technological society?

When we look for answers, we keep coming back to teacher quality. Research shows that the single most important determinant of what students learn is the expertise of the teacher. As Chart 1 indicates, slightly more than half of the influence on student achievement has to do with school factors. Of those factors, there are two that really matter: teacher qualifications (indicated in this study by licensing examination scores, education and experience) and class size. And teacher qualifications far outstrip class size in impact.

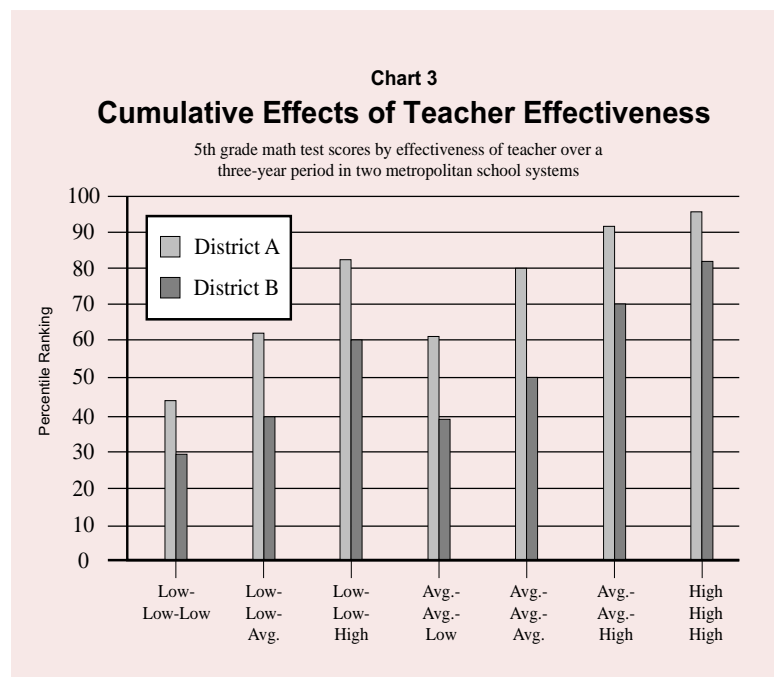


Despite this clear relationship between teachers and learning, well-qualified teachers are the resource that is most unequally distributed across all schools. This study and others show that, after controlling for socio-economic status, virtually all of the difference in the test scores of white and African American students is due to the difference in teacher qualifications. In the most heavily minority schools and inner cities, fewer than 50 percent of the math and science teachers are licensed and have a degree in the field they are teaching. That places children served by these teachers at a significant disadvantage.



The key point is that the strongest predictor of student achievement is the percentage of well-qualified teachers in a school, district or state. An important, but less powerful, predictor is class or school size. You have to get people who know what they are doing and you have to put them where they have an opportunity to know the children well. You can do a lot of other things that will have a small impact on learning here or there. But to paraphrase a colleague, after these two main criteria are met, everything else is like barnacles on the sides of a ship.

You can see the link between increased achievement and investments in class size and teacher qualifications in Chart 2. Based on information from 60 studies, it shows the level of test score increases you can expect for each \$500 invested in different reform strategies. As it indicates, lowering the pupil-teacher ratio has an impact – but the greatest improvement comes when you increase teacher education.



That makes sense if you think about it. Back in the 1950s, there were few special education students (they were largely excluded from schools), non-English-speaking students had to figure out English on their own and those students who learned differently often simply gave up and dropped out. Today, we expect teachers to address the diverse needs of all of these students. Teachers need to know a variety of instructional methods – and that takes education and training.

When you have teachers who know what they are doing and do it well, it makes a difference in student test

scores. Chart 3 shows the cumulative effects of teacher quality over three years in two different schools. Teacher effectiveness was rated as either low, average or high. Student test scores were 50 percentile points lower if a student had three poor-quality teachers in a row than if he had three highly effective teachers.

This kind of information helps explain minority students' test scores. Minority students are half as likely to get highly effective teachers as white students – and twice as likely to get low-rated teachers. Since there is a cumulative impact from year after year of low-quality teachers, you can see why we have poor patterns of achievement in inner cities. We have the lowest-qualified teachers teaching the most needy students, and the best-qualified teachers teaching the least-needy students. All students need well-qualified teachers.

National Hiring Patterns

So if we know that teacher quality has a huge impact on student achievement, are we taking steps to make sure that when people are hired into the teaching profession that they are the best-trained and most-qualified people?

Across the nation, in many cases the answer is no – and the answer is even more emphatic for inner city schools. As Chart 4 indicates, almost a quarter of newly hired teachers nationally in 1993-94 had either a substandard license or no license at all. This year, that number has jumped to 36 percent. Chart 5 shows that the newly hired, unlicensed teachers are going to minority and low-income schools in disproportionate numbers, while the best-prepared new teachers are going to the wealthier schools.

Chart 4
Qualifications of Newly Hired Teachers 1993-94

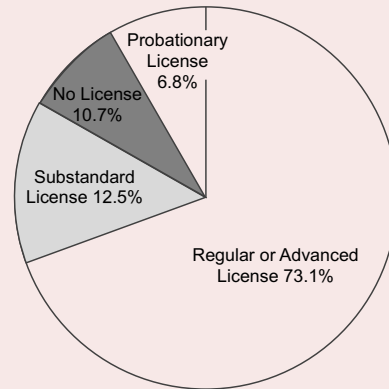


Chart 5
Qualifications of Newly Hired Teachers by School Type, 1994

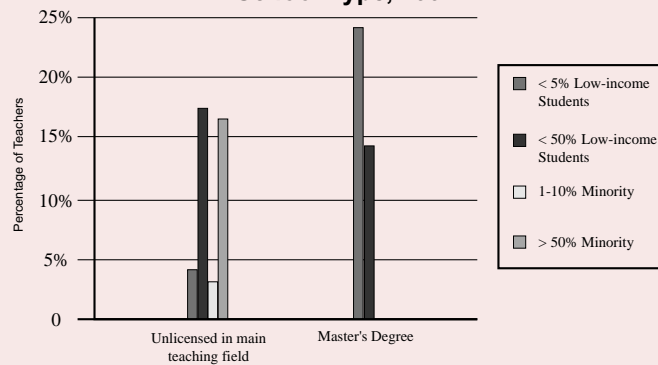
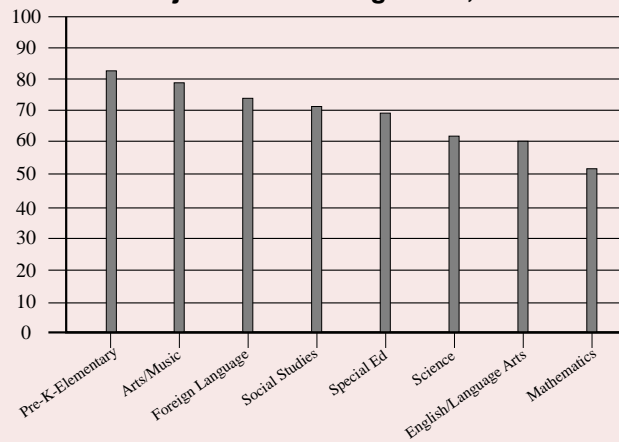


Chart 6
Percentage of Teachers with a State License and Major in Main Assignment, 1990-91

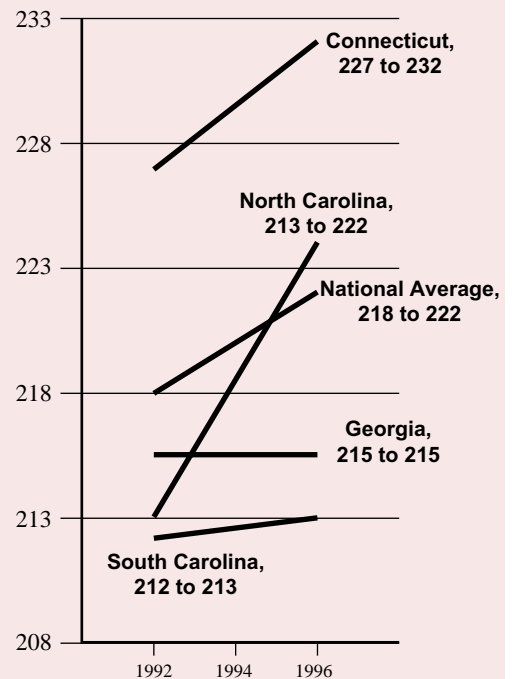


U.S. Department of Education, Schools and Staffing Survey, 1990-91

As Chart 6 shows, teachers in some subject areas are less likely to have special training in their field than teachers in other subject areas. Only slightly more than half of math teachers in 1990-91 and 1993-94 had both a state license and a math major. When we look at numbers like these, we shouldn't be too surprised when our students don't do well on international tests, like the Third International Mathematics and Science Study.

Despite the poor United States showing on international tests, the disappointing results are not uniform. Some states show results that rank with the top-performing countries. As it turns out, these states have the highest proportions of high-quality teachers and almost never hire uncertified teachers.

**Chart 7
State Trends
in Math Scores,
Grade 4
(NAEP
scores
1992-96)**



When we look at improvement in test scores over time, we can identify some key states that have made dramatic improvements. Once again, we note that the states with significant increases in

Salary Raises Work – But Only In Tandem with High Standards

Q *Some studies indicate that raising teacher salaries increases student achievement. But one study has shown that raising salaries can simply encourage older teachers to postpone retirement, limiting the number of openings and discouraging the best students from entering the profession. How effective is raising salaries?*

A You can't just raise salaries – it has to be part of a package that raises standards too. New Jersey has some of the highest teacher salaries in the country, but they have very weak standards for teacher education and licensing and their student test scores are nowhere near the top. Raising salaries needs to be done skillfully to accomplish what you want. You have to make sure you are buying quality, not just keeping the older teachers longer. For example, Connecticut simultaneously raised salaries and licensing standards in 1986. Their achievement scores have risen sharply since. In the 1980s, about 20 states tried merit pay. But by 1995, all of the programs were gone. They had difficulty getting the evaluation procedures right so that they didn't cause tension and competition among teachers. The career ladders that have lasted have involved an objective process with increases in the salary schedule for achievements, rather than annual bonuses. For example, North Carolina has a salary schedule that gives an extra 12 percent for National Board certification and increases for a second license, a master's degree and meeting performance standards.

scores are the ones who have invested the most in teacher quality. For instance, Chart 7 tracks the state trends on the NAEP fourth grade math scores between 1992 and 1996. Connecticut and North Carolina showed the most dramatic gains. Both of these states made major investments in the mid-1980s in teacher quality, taking steps such as raising and equalizing salaries, raising licensure standards, creating teacher development opportunities and teacher induction and mentoring practices.

On this same chart, you can find states with flat results, like Georgia or South Carolina. These were among the first states to institute student tests, with rewards and sanctions for certain levels of results. But there was no investment in teaching and no change in the nature of schooling. The result has been flat test scores, a higher dropout rate and students failing.

What this tells us is that more testing doesn't create more learning. And rewards and sanctions designed to motivate people aren't enough. The real issue isn't motivation; the real problem is a knowledge problem. Teachers need to know more today about how to teach to meet a variety of needs.

How Others Do It

Other countries with whom our students compete on international tests take a different, more intense approach to educating their teachers – and they often invest more heavily in teachers to staff schools.

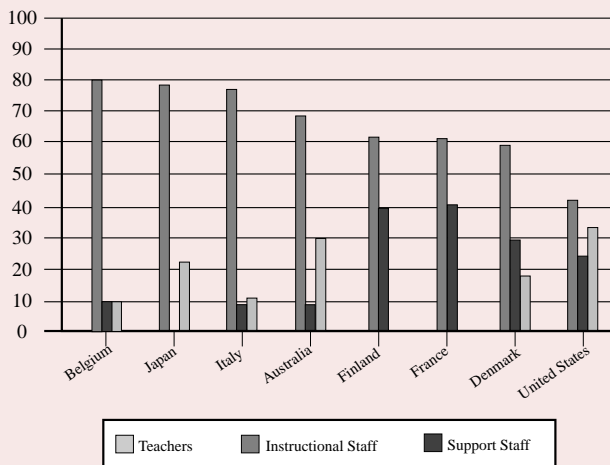
Producing Effective Teachers

Q *What are the specific training and qualities that add up to an effective teacher?*

A We know that teachers need to know their content area. And it matters even more how much they know about student learning. They need to know how to design and develop curriculum and diagnose student needs, so they are scaffolding students' learning in careful steps. Effective programs for giving teachers this base of knowledge share several characteristics. In the past, all of the course work was front-loaded into a program – you would take courses in methods, class management, etc., all without being in a classroom. Then you'd go out for 10 weeks of training in a classroom, with no tie to what was learned in the course work. Today, good programs operate differently, providing:

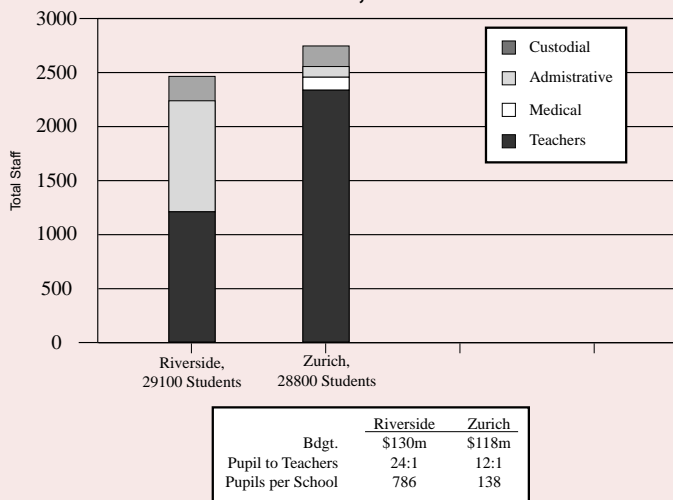
- A coherent curriculum that tightly intertwines theory and practice.
- Fieldwork that is integrated with class work, coupled with support from carefully selected mentors.
- An extended clinical component, with a minimum of 30 weeks of student teaching.
- An emphasis on learning theory and child development, with extensive training in the ability to address the needs of diverse learners.

Chart 8
Comparison of Educational Staff by Function



In Germany, for instance, teachers obtain two subject-area undergraduate degrees and spend three years studying education at the graduate level. They have a full year’s internship, pass a rigorous test and write a thesis. Then when they begin teaching, they get the more-able students, a reduced teaching load, and plenty of mentoring. In Japan, beginning teachers have 60 days of professional development a year and they spend 10 to 20 hours a week collaborating with other teachers, meeting with parents and getting to know the students.

Chart 9
Comparison of Riverside, Ca. and Zurich, Switzerland



In addition, in many countries the number of teachers in each school far outstrips other types of staff. As Chart 8 indicates, in the United States only 43 percent of the educational staff are classroom teachers. In other countries, the rate is more typically 60 to 80 percent. This can be traced to how schools are organized in the United States into very large, highly bureaucratic institutions. In the typical urban high school, at least 40 percent of the staff are non-teaching. When high schools have restructured themselves into smaller units and reduced the number of non-teaching specialists,

Student Scores Just One Factor in Measuring Teacher Effectiveness

Q *How do we measure teacher effectiveness in a fair way? Aren't there problems with relying on student test scores?*

A Some states are making headway on measuring the elements associated with successful teaching. Connecticut has developed a set of standards and methods for assessment of practice. They look at evidence of student learning – but they don't judge a teacher on student test scores alone. They try to make an informed judgment based on student learning and the factors affecting the student. The problem with student test scores is that children are not evenly distributed. If you're not careful, you end up with incentives for good teachers to avoid kids in need. Instead you want to create rewards for dealing with students who need the most help.

pull-out classes and aides, they have boosted teachers to 80 percent of staff, reduced class sizes and increased time for teacher collaboration and learning.

How this standard compares with other countries can be seen on Chart 9 which looks at a school district in Riverside County and a similar district in Zurich, Switzerland – a country that often outscores the United States on international tests. The number of teachers in the Zurich district is almost double, giving a pupil-to-teacher ratio of 12:1 compared to Riverside’s 24:1. Another key difference is school size: Riverside averages almost 800 students per school compared to Zurich’s 138.

California vs. the Nation

By almost every measure, California lags behind the rest of the country on 1993-94 indicators of teacher quality. For instance, the percentage of teachers with a master’s degree or higher is 40.5 percent in California compared to the 47.3 percent average nationwide. The percentage of teachers with no certification or something less than full certification was 12.7 percent in California compared to 8.4 percent nationally. And the situation has only worsened in California with the pressure of the small-class-size program: last year, the state had 21,000 teachers without certification.

In preparation for teaching in specific fields, California also does less well than the national averages. As Chart 10 shows, in math 46.4 percent of teachers have less than a minor in that field compared to 28.1 percent nationally. The state fares worse than national figures in other areas as well, including science, English, foreign languages and art/music.

A mismatch between supply and demand is one factor in California’s willingness to tolerate teachers with less than full credentials. California has worse statistics than other states on filling teacher vacancies, as Chart 11 shows. More than 10 percent of elementary schools have a tough time

Chart 10		
<i>% of Public High School Teachers with Less than a Minor in Field They Teach, 1994</i>	<i>California</i>	<i>U.S. Average</i>
Math	46.4	28.1
Science	22.6	18.2
Social Studies	13.3	17.8
English	24.8	21.5
Foreign Languages	26.9	13.7
Vocational Education	19.1	18.0
Art/Music	37.8	20.4
Physical Education	25.4	14.6
Life Science	30.7	31.2
Physical Science	52.0	54.7
History	46.9	51.8

Chart 11		
<i>Difficulty Filling Teacher Vacancies (% of Schools)</i>	<i>California</i>	<i>U.S. Average</i>
Elementary	10.3	3.0
Math	22.6	16.9
Physical Science	22.4	16.1
Biology	17.0	12.4
English	14.1	9.8
Special Education	22.3	18.3
English as Second Language	18.0	5.8

finding teachers, compared to 3 percent nationwide. In secondary school, more than 22 percent of California schools see shortages of math and physical science teachers compared to about 16 percent nationally.

While the pressure of supply and demand explains some part of the California teacher quality statistics, it should be viewed as an unfortunate factor rather than a reasonable justification. The worst way to address a chronic under-supply of teachers is to hire under-qualified people or develop “quickie” routes for licensure. It is very difficult to bring people up to a high quality level when they haven’t been properly grounded in the basics; California’s approach to alternative certification seems to be to provide a scattering of training here and there, which does not add up to thorough preparation.

In addition, the investment in “quickie” career ladders rarely pays off. People who enter the profession through emergency and alternative certificates as unqualified teachers have an attrition rate of 40 to 60 percent by the third year. Teachers who have the most intense training (five-year education programs) typically enter the profession at a 90 percent rate, and 90 percent of those remain teachers. Usually first-year teachers are not too effective, but those who come out of five-year programs are found to be as effective as the mentor teachers. The national norm of a four-year undergraduate degree – a middle approach to training teachers – typically sees 50 to 60 percent finishing the course of study, 60 percent going into teaching and 70 percent remaining after three years.

<i>% Teachers Receiving 9+ Hours of Professional Development</i>	<i>California</i>	<i>U.S. Average</i>
Induction for new teachers	58	55
Subject matter	24	15
Teaching methods	40	28
Technology	15	15
Student assessment	18	11
Cooperative learning	14	13

Professional Development

While California’s teacher quality indicators are below average, the same is not true of comparative measurements for its ongoing training. California does better than national averages when it comes to professional development, as the table above indicates. Fifty-eight percent of beginning teachers experienced an induction program, compared to 55 percent nationwide. And the percentage of California teachers receiving nine hours or more of professional development is higher than national figures.

But these statistics tell us nothing about the quality of the training. The California Subject Matter Projects does a good job, but many other efforts are one-day, “drive-by” workshops. A better approach is to follow a workshop with an intensive institute in the summer, and have coaches and consultants on site during the year to help teachers integrate what they learned into the classroom.

In New York, they have a professional development lab where a teacher can learn a specific area of practice -- literacy, math, etc. -- by visiting the classroom of a master teacher for three weeks. Afterwards, they participate in a study group once a week. It’s not a flavor-of-the-month approach. For two or three years, they may work on literacy development until every kid in every class is getting effective teaching in the literacy area. Most professional development courses don’t do that.

Top Ten Recommendations

So, if the worst way to address a chronic under-supply of teachers is to let in unqualified people, what is the best solution? I want to offer a Letterman-style Top Ten list for California to consider.

#10. *Recruit teachers from states that have high standards, granting them reciprocal licensure.*

There are at least a dozen other states with standards as high as California's.

Top Ten List To Improve Teacher Quality

10. Recruit teachers from other states that have high standards.
9. Recruit California's licensed teachers into high-need areas.
8. Offer a license to National Board certified teachers.
7. Recruit licensed staff who now work outside of classrooms back into classroom teaching.
6. Expand scholarship programs to target high-need areas.
5. Support paraprofessionals' education training and get them licensed.
4. Start recruiting prospects at the undergraduate level.
3. Link training resources to the need for certain types of teachers.
2. Make sure licensing exams test actual teacher effectiveness.
1. "Just say no" to hiring unqualified teachers.

Putting the Pieces Together to Drive Reform

Q *It's difficult to build consensus around issues like teacher quality. What are the leverage points that have driven change in other states? And how can California win reforms?*

A Strategies for reform have been different in different places. In North Carolina, Governor Jim Hunt really has been the leader on investing in teachers. His mom was a teacher and he himself student taught. In Connecticut, it was the state Commissioner of Education who pushed the Education Enhancement Act in 1986 to overhaul teacher licensing. They documented the effects as they went, so after three years they could show there were no more teacher shortages and students were scoring better. In Kentucky, the Education Reform Act was the result of a lawsuit. So the drive has come from different directions.

The states at the top of the achievement distribution, like Minnesota, Wisconsin, Maine and Iowa, have been low-regulation states with local control. None have had statewide tests or a state-imposed curriculum, but they have set consistently high standards for teachers.

What works is having people who are in it for the long haul get in a position where they can drive change. Often it takes bringing the stakeholders together over and over again. In California, with its breadth, depth, diversity and term limits, getting continuity of leadership is a challenge. But you need continuous conversations, like these seminars sponsored by CEPS, to share information and focus energies.

And many states have more licensed teachers than openings – there are 60,000 teachers a year who can't find jobs in other states. California could pull in those surplus teachers and give them licenses. Give them a provisional license while they take a year of training in teaching new English language learners if they come from a state that doesn't have that type of requirement.

#9. *Recruit California's licensed teachers into high-need areas.* There are a couple of different strategies that can work. Connecticut equalized teacher salaries across districts, but then provided incentives for people to teach where they were most needed. You can also require student teaching to be done in urban areas so that the teachers become familiar with what it is like in inner city settings. But probably most important is improving conditions in high-need areas. Too many communities have large, warehouse-type schools where a lot of energy has to go into policing rather than teaching. In New York City, they've formed several small schools within larger schools, creating conditions that attract teachers. You need schools that are organized so teachers can get to know children and so they can teach well. If you don't do that, no amount of bonuses will make a difference.

#8. *Offer a license to anyone who has earned National Board certification.* These certifications are only granted to very accomplished teachers. There are expected to be 100,000 such teachers by the year 2005. In addition, the state should provide incentives to teachers to become board certified. Los Angeles Unified School District and the United Teachers of Los Angeles recently negotiated salary incentives for all National Board-certified teachers.

#7. *Recruit certified staff who have gone into administration or support positions back into the classroom.* Teachers in the past have wanted to escape the grueling way that classes and schools were set up. But if schools are organized differently, teachers would want to return to the classroom. Instead of facing a class of 30 or more students and only having three hours a week to collaborate with other teachers, teachers would be attracted to classes of 16 students and 10 hours of preparation time, which are possible if we reorganize current staffing in schools.

#6. *Expand scholarship programs to bring students into the teaching profession.* North Carolina pays full college tuition for high-ability students who prepare to teach and do so for four years. In California, there's a modest program now (APLE) but you

Resources to Meet Training Needs

Q *How do we attract more resources to teacher training programs? In state institutions, research is rewarded more than training.*

A Many institutions see teacher training as a cash cow. Medical and other professional schools must be accredited to train students, so institutions know they have to make an investment in those programs. Typically, they have spent less on education programs (which are not always accredited) than on other departments. State funding needs to be responsive to demands for more teachers and for more teachers in certain subject matter areas. And then universities need to spend those funds on the education program. There are policy tools that will work: requiring accreditation for education programs or doing a program approval process to enforce good practices. We have to inspire university presidents to want education schools that are as honored as their medical schools.

could fully fund the fifth year of teacher education for students interested in high-need areas and subject matter fields. You could design it so they would have to pay back the money if they didn't stay for three or four years.

#5. *Support teacher education for paraprofessionals and get them licensed.*

They often know the community and the languages that students speak and they are already involved in the schools. Funding their education and certification would be a good investment. Studies show such programs have very high yields.

#4. *Start recruiting prospects at the undergraduate level.*

Don't let the best and brightest get away into other career choices by blocking the study of education in the four-year undergraduate program. Recruit college students early so their interest is engaged and then continue their preparation through the fifth year.

#3. *Create a link between the need for certain types of teachers and the number of slots in teacher education programs.*

Currently, the funding of teacher education slots is not driven by the need for students in different fields. For example, there are not enough slots to produce adequate numbers of math teachers. You need a formula that covers the expansion of programs. In medicine, the federal government not only provides grants to students who train for high-need fields and high-need areas, but it also rewards medical schools for creating or expanding programs to provide the necessary training.

#2. *Evaluate current licensing exams to make sure that the tested criteria are tightly tied to teacher effectiveness.* Instead of having multiple exams, which at each juncture narrow the number of candidates, aim for a small number of high-quality tests that drive training in the right direction. Don't put up more barriers than necessary – and make sure you are testing for the right things.

#1. *“Just say no” to hiring unqualified teachers.* There are lots of reasons districts hire unqualified people, but many shortages are self-inflicted. Sometimes it is a desire to have cheap hires – people who will come in low on the salary schedule. Sometimes it is a complex hiring process that drives away good candidates in frustration. (One district the National Commission on Teaching and

Why Not the Best?

Q *Why haven't school districts concentrated on hiring the best teachers possible? Every corporate leader knows that the quality of his staff is very important – why haven't districts gotten that message?*

A Teaching historically has been a female-dominated, quasi-professional job. It's been thought of as something that anyone could do – it used to be that if you didn't have any other option open to you, you could always go into teaching. There has been a belief that quality just doesn't matter. In the long run, that has cost us dearly. Compensatory education costs might not be so high if we had concentrated on the quality of teachers.

But all of this is beginning to change. School finance lawsuits are beginning to focus on the inequality of teacher training and experience in different settings. Districts face tough challenges, though: declining resources, tight budgets, high growth. These make it hard to argue for spending money on teacher development – it's a tough sell when districts are making hard choices, but it can be done if you have enlightened leadership.

America's Future studied had 62 steps in its hiring process.) Other times it is a lack of attention to the recruitment process and the personnel function – in tight budget years, these activities may have felt the ax first. Whatever the reasons, they can be reversed.

In New York City, they hired 4,500 unlicensed teachers annually. When they overhauled recruitment and hiring they nearly eliminated that practice within three years. I think California can do the same thing if it adopts targeted policies to do so. Those would include:

- Full one-year scholarships in high-need subject matter areas and for those willing to teach in high-need areas.
- An overhaul of hiring practices to streamline them.
- Reciprocity and outreach to other states to attract high-quality teachers who can't find a job elsewhere.

New York has many of the same problems that Los Angeles has – and if they can stop hiring unlicensed teachers in three years, so can California.

The “Must-Haves”

Accomplishing all of the Top Ten list would take an intense amount of focus and effective use of resources -- perhaps more than one can reasonably expect all at once. If one needed to focus on only a few important issues, the “must haves” would include:

- Investing in attracting quality candidates through full scholarships – scholarships that are targeted precisely at your areas of high need.
- Creating one or two solid pathways for becoming a well-prepared teacher rather than the multiple options California now offers. Getting the front-end preparation of teachers right is absolutely critical.
- Equalizing resources so low-wealth districts can attract the best teachers.

This “wish list” focuses on dealing with the under-supply of qualified teachers in California. The state already has thoughtful teaching standards. California has long led the nation in credentialing standards for assessing teachers, intern and mentoring models, and other important foundations for establishing an effective teaching corps. But because of the many challenges California faces, it's important to round out those sound policies with solid strategies for getting where you want to be: giving every child the opportunity to learn from a well-trained, highly qualified teacher.

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