

Refocusing Teacher Recruitment Efforts

LEGISLATIVE ANALYST'S OFFICE



REFOCUSING TEACHER RECRUITMENT EFFORTS

Executive Summary

The Supplemental Report of the 2007-08 Budget Act directed our office to reexamine the state's teacher recruitment goals and assess the effectiveness of teacher recruitment programs designed to meet those goals. This report details our findings. Although the state has spent over \$1 billion in teacher recruitment activities, virtually no information exists on the effectiveness of these programs. Research on the teacher workforce, however, suggests that improving teacher support and addressing uncompetitive salaries are the most promising strategies for recruiting and retaining teachers. Thus, we recommend education agencies focus their teacher efforts in these two areas.

Introduction

Over the past ten years, school districts throughout the state have struggled to fill all available teaching positions with credentialed candidates. In 2006-07, approximately 15,000 teachers, or 5 percent of all teachers, did not have a "full" teaching credential. (See nearby box for a description of various types of teacher licenses and their corresponding requirements.) When districts are unable to find fully credentialed teachers who have required pedagogical and subject-matter training, they hire uncredentialed teachers who have provisional permits or they place credentialed teachers in classrooms for which they do not have applicable subject-matter expertise.

School districts have had particular trouble finding fully credentialed and appropriately assigned teachers for specific subjects, including special education, high school mathematics, and high school science. In 2006-07, 11 percent of special education teachers, 11 percent of high school mathematics teachers, and 9 percent of high school science teachers lacked full credentials. In California high schools during the same year, 19 percent of physical science teachers, and 11 percent of mathematics teachers had some credential but were teaching outside of their field of expertise.

School districts also have had difficulty recruiting credentialed teachers to work in low-performing schools. In 2006-07, 8 percent of teachers lacked full credentials in the lowest performing quartile of schools, compared to 2 percent in the highest performing quartile. Generally, data show that teachers in low-income and low-performing schools have less professional experience, are more likely to have a short-term staff permit, and are more likely to be teaching in an area in which they lack subject matter expertise. Teachers in low-performing and low-income schools also have lower retention rates compared to other teachers.

In response to the challenge of finding credentialed teachers in certain subject areas and schools, the state has created various teacher recruitment programs. In this report, we provide a comprehensive list of the various teacher recruitment programs the state has funded during the past ten years. We identify the goals of these programs and discuss available information related to their effectiveness. We then discuss some of the research related to teacher recruitment and retention, and conclude by providing recommendations for improving the state's efforts in these areas.

What Types of Credentials Are Needed to Teach in California?

There are a variety of credentials and permits that individuals can obtain to teach in California schools. The following are considered "full" credentials, indicating a teacher to be considered a qualified teacher:

- *Single Subject Credential*. This is the standard credential for individuals who are interested in teaching middle or high school students. There are more than 20 different subjects for which teachers can obtain such a credential, including mathematics, social sciences, and biological sciences. To receive a credential, an individual must obtain a bachelor's degree, meet the basic skills requirement, verify subject matter competency, and complete a single subject teacher preparation program in the appropriate subject
- Multiple Subject Credential. This is the standard credential for individuals
 interested in teaching elementary school students. To receive a credential, an
 individual must obtain a bachelor's degree, meet the basic skills requirement,
 pass a subject-matter competency exam, pass a reading instruction exam,
 and complete a multiple subject teacher preparation program.
- Education Specialist Credential. This is the standard credential for individuals who choose to teach special education students. The credential can be for a single subject or for multiple subjects. Individuals can specialize to deal with specific student populations, including students with mild/moderate or moderate/severe disabilities, as well as students who are deaf, hard of hearing, or visually impaired.

There are also a number of permits and credentials that allow individuals to teach but are not considered full credentials. Individuals in these areas meet some but not all of the requirements for receiving a full credential.

• Limited Assignment Permit. This permit allows teachers with an existing full teaching credential to teach in an area for which they have not been specifically credentialed. For example, a teacher with a credential in English would need a Limited Assignment Teaching Permit to teach mathematics. To be issued such a permit, a teacher must already be working in the district and the district must have a shortage of teachers in the specified subject.

- Internship Credential. An internship credential may be obtained by individuals who have received a bachelor's degree and passed subject matter competency and are enrolled in a state-approved internship program. These programs provide classroom experience for individuals while they work towards meeting the requirements for a full credential. The internship credential can be provided for single subject teachers, multiple subject teachers, or education specialists.
- *Provisional Internship Permit.* The provisional internship permit is provided for individuals who have a bachelor's degree but have not yet satisfied the subject matter competency requirements needed to enroll in an internship program. This permit is also available for single subject teachers, multiple subject teachers, or education specialists.
- Short-Term Staff Permit. The short-term staff permit is only available at the request of a school district and exists as a last resort for districts who are unable to fill a teaching position with a credentialed teacher. To receive such a permit, an individual must have a bachelor's degree and satisfy the basic skill requirement, but no specific teacher training is needed.

STATE POLICY GOALS

As shown in Figure 1, during the past ten years the state has funded 22 programs supporting a wide variety of teacher recruitment activities. For example, the state has funded recruitment centers, additional enrollment in teacher preparation programs, alternative pathways to teaching, and loan forgiveness programs for teachers willing to work in hard-to-staff schools and/or teach in subject shortage areas. Despite the wide range of funded activities, these programs generally are intended to achieve the following three teacher recruitment goals:

- Conduct General Recruitment of Qualified Teachers. As shown in Figure 1, over the past ten years, the state has provided \$500 million to support eight programs designed to increase the overall number of individuals who pursue a career in teaching and obtain a teaching credential.
- Recruit Qualified Teachers to Work in Hard-to-Staff Schools. Over the past ten years, the state has spent \$780 million to support ten programs designed to recruit qualified teachers to low-performing and low-income schools.
- Recruit Qualified Teachers to Work in Subject Shortage Areas. Compared to the above categories, programs in this category tend to be small and focused on persuading college students with certain subject-matter

expertise to obtain a teaching credential. Over the past ten years, the state has spent \$21 million to support four programs designed specifically to address shortages of math, science, and bilingual teachers.

Figure 1
Teacher Recruitment Programs

1998-99 Through 2007-08 (Dollars in Millions)

Goal/Program	Years in Operation	Total Ten-Year Funding ^a	2007-08 Funding	Administering Agency
General Recruitment				
Alternative Certification Program	24	\$249	\$32	Commission on Teacher Credentialing (CTC)
Special Funding for CSU Teacher Preparation	10	93	9	California State University (CSU)
Paraprofessional Teacher Training Program	17	82	8	CTC
Pre-internship Teaching	7	73	_	CTC
Center for Teaching Careers (CalTeach)	5	20	_	CSU
Pre-intern Teacher Academies	7	5	_	University of California (UC)
Distance Learner Teacher Education Program	1	5	_	CSU
CalState TEACH	1	2		CSU
Subtotals		(\$497)	(\$49)	
Hard-to-Staff Schools				
APLE program ^b	21	\$275	\$41	Student Aid Commission (SAC)
Teaching as a Priority Block Grant	2	207	_	California Department of Education (CDE)
Teacher Recruitment and Retention Block Grant	2	97	_	CDE
National Board Certification Incentives Program	8	71	6	CDE
Cal Grant T	6	48	_	SAC
Teacher Recruitment Incentive Program	3	28	_	CDE
Governor's Teaching Fellowships	2	25	_	CSU
Certificated Staff Mentoring	2	23	12	CDE
COE Recruitment of Highly Qualified Teachers	1	3	_	CDE
Personnel Management Assistance Teams	1	3		CDE
Subtotals		(\$779)	(\$58)	
Subject Shortage Areas				
Bilingual Teacher Recruitment Program	6	\$12	_	CSU
CSU Science and Math Teacher Initiative	3	4	\$3	CSU
UC Science and Math Teacher Initiative	3	3	1	UC
Mathematics Teacher Partnership Pilot	1	2		CDE
Subtotals		(\$21)	(\$4)	
Totals		\$1,329	\$111	
a Reflects total funding provided from 1998-99 through 2007-08.				

b Intended both to attract teachers to work in low-performing schools and teach in subject-shortage areas.

STATE INVESTMENT

As shown in Figure 1, the state has provided \$1.3 billion over the past ten years to fund these 22 teacher recruitment programs. These programs are administered by various state agencies—the California Department of Education, Commission on Teacher Credentialing, Student Aid Commission (SAC), University of California, and California State University.

Bulk of Dollars Spent on Three Programs. More than one-half of the funding for teacher recruitment has been dedicated to these three programs: the Assumption Program of Loans for Education (APLE), Alternative Certification, and the Teaching as a Priority Block Grant. In addition, the state has funded 11 midsize programs (each receiving between \$10 million and \$100 million over the ten-year period) and 8 small programs (each receiving less than \$10 million over the period).

System Constantly in Flux. The state has continually changed the structure and funding of teacher recruitment programs. Only once during the last ten years were the state's teacher recruitment programs identical in consecutive years. In addition, 13 of the 22 programs were created and defunded within the ten-year period. Only eight programs continue to receive funding, totaling \$111 million in 2007-08.

FINDINGS

State Knows Very Little About Program Effectiveness

Despite spending over \$1 billion on teacher recruitment programs, little information is available to assess the effectiveness of these programs. Over the ten-year period, the state undertook only one independent evaluation. Unfortunately, this evaluation (of the Alternative Certification program) focused primarily on the quality of training rather than its effectiveness as a recruitment tool.

Information Available But Not Evaluative. Several teacher recruitment programs submit annual reports that provide basic information on program participants. However, those data do not allow one to determine whether the programs have led to the recruitment of individuals who otherwise would not have been teachers. For example, the APLE program provides loan forgiveness to individuals who obtain a teaching credential and choose to teach in shortage areas or low-performing schools. The SAC submits an annual report about the program that provides data on the number of awards made annually. Although this information helps for compliance purposes (ensuring dollars are spent on intended activities), it does not allow one to determine how many participants would otherwise have taught in the designated areas. Without this type of data, the added value of these recruitment programs is virtually impossible to determine.

Research Finds Teacher Support and Competitive Salaries Increase the Number of Qualified Teachers

One of the major reasons teacher recruitment has been a perennial policy issue is because of very high teacher turnover. Data from the 1990s show that 22 percent of new

teachers in California leave the field within four years. Another 25 percent transfer to different school districts during that time period. While not affecting overall teacher supply, such a high transfer rate means certain districts face extremely high turnover rates. This creates a major ongoing teacher recruitment challenge for a subset of districts. (Compared to leaving the teaching field entirely or transferring to a different district, relatively few teacher vacancies are a result of retirement.) Below, we review research that examines the relative effectiveness of various strategies designed to improve teacher recruitment and retention.

Although data from existing teacher recruitment programs do not allow one to identify the most effective programs for increasing the number of qualified teachers, empirical research provides some insight. This research suggests that better support programs and more competitive salaries are effective at attracting and retaining teachers.

Structured Support Found to be Cost-Effective Way of Attracting and Retaining Teachers. Many studies have examined the underlying factors that affect retention. One of the most significant factors found to affect teacher turnover is teacher support. Specifically, research shows that additional induction, mentoring, and administrative support are associated with lower turnover rates. Successful induction and mentoring activities include having a mentor in the same field, using common planning time with other teachers in the same subject, and regularly collaborating with other teachers. Teachers who participate in a larger number of these activities have the lowest turnover rates. Teacher surveys also support the research findings. These surveys commonly show that a lack of administrative support is a primary reason why teachers leave their jobs.

Competitive Pay Also Linked to Teacher Recruitment and Retention. The other major factor found to affect turnover is teacher pay. Several studies have shown that higher teacher salaries correspond to lower turnover rates. Research also shows that turnover rates are lower when teacher pay relative to pay in other local industries is high. This relationship largely explains the difficulty retaining math and science teachers. Given teachers with math and science degrees generally have higher-paying career options relative to other teachers, research suggests they are more likely to leave the field of teaching to pursue other careers. California-specific research also finds that teachers in school districts with higher starting salaries and greater scheduled salary growth are less likely to leave the field and less likely to transfer.

RECOMMENDATIONS

These findings suggest that education agencies should focus their efforts on providing high-quality teacher support and more competitive salaries for teachers working in hard-to-staff schools and/or teaching in a subject shortage area.

Focus on Teacher Support. Given the research findings, one of schools' top priorities should be providing quality support for existing teachers. Both state and local agencies could work on improving existing systems of support to ensure that teachers are receiving the help they need—help which, in turn, could prevent them from leaving the teaching profession. Of all the teacher recruitment programs the state currently funds, only

the alternative certification/intern program falls in this category.

Address Uncompetitive Salaries. Education agencies also should look for ways to provide more competitive salaries for hard-to-staff teaching positions—including math, science, and special education positions as well as positions in certain types of schools. Providing higher salaries for these harder-to-staff positions would ensure that the teachers most likely to leave the profession receive additional financial incentive to remain. More competitive salaries also could motivate otherwise uninterested individuals to pursue a teaching credential in these areas. Although current law allows school districts to provide differential pay for different types of teachers, most districts choose not to do so—instead providing salaries solely based a teacher's years of experience and level of education. Nonetheless, school districts could take fuller advantage of existing flexibility to implement targeted pay incentives. Of all the teacher recruitment programs the state currently funds, only the APLE program falls in this category.

CONCLUSION

In the past decade, the state has funded a variety of teacher recruitment programs intended to increase the number of credentialed teachers in California schools. Unfortunately, there are no evaluations of these programs. Thus, it is impossible to determine which of them, if any, have been effective in increasing the number of high-quality teachers in California. Available empirical research on the teacher workforce, however, suggests that education agencies should focus on two areas that have been shown to have the greatest effect on teacher retention rates—improving teacher support and providing targeted pay increases. Only two of the eight state teacher recruitment programs fall into these categories, although they account for two-thirds of total state spending in this area.



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