Rethinking Teacher Preparation

Empowering Local Schools to Solve California's Teacher Shortage and Better Develop Teachers



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Executive Summary

fter years of cuts to the teaching workforce, California districts are beginning to hire again. This positive change is offset, however, by the fact that teacher preparation programs are producing fewer graduates than the state's schools and districts want to hire. As a growing number of districts face teacher shortages, or the prospect of them, California needs new strategies to improve both the supply and the quality of new teachers prepared in the state.

California lacks a coherent strategy to grow the supply of high-quality teachers. A variety of organizations have identified weaknesses in the state's teacher preparation programs and policies, but many of their recommendations would impose new requirements that lack research support and could further reduce the number and diversity of teacher candidates. The Commission on Teacher Credentialing, which oversees teacher preparation, is initiating reforms designed to reduce the focus on inputs in teacher preparation and increase attention to outcomes—but they may not go far enough. And none of these proposals would address the state's most fundamental teacher preparation problems: a highly fragmented approach to preparation and an excessive focus on credential type, rather than on actual classroom effectiveness, as the sole measure of teacher quality.

Improving the quality of teacher preparation in California will require a profound shift in the way that key players in the system—districts and charter schools, preparation programs, state regulators, and candidates themselves—think about their roles in teacher hiring and recruitment. Districts and charter schools need to take on a greater role in cultivating their own teacher supply. Preparation programs need to reframe the focus of their work

around meeting the needs of K-12 schools and candidates—the consumers of teacher preparation. This will require both a wider variety of preparation programs and real, robust local partnerships between districts or charter schools and the programs that prepare their teachers. State policies can encourage and support these partnerships, while also providing greater flexibility for them to customize preparation to candidate and local needs.

A number of California districts and preparation programs already demonstrate what these partnerships can look like in practice; however, overcoming the state's current supply and quality challenges will require more districts, charter schools, and preparation programs to follow their lead. This paper offers a number of recommendations for districts, charter schools, preparation programs, and state policymakers.

Districts, charter schools, and preparation programs should:

- Share and analyze district data on hiring needs and completer outcomes with preparation programs
- Align preparation programs' standards and expectations for program completers with districts' needs and expectations for new teachers
- Co-create new types of programs that address district and candidate needs
- Strengthen clinical fieldwork by providing effective teacher-mentors and treating student teaching as a recruiting tool for districts
- Recruit prospective teachers
- Connect teacher preparation with other human capital strategies

State policymakers should:

- Hold preparation programs accountable for how they partner with and meet the needs of consumers—both districts and candidates
- Hold districts accountable for developing their own preparation pipelines
- Support development of integrated human capital strategies and diverse preparation pathways
- Leverage existing resources, including LCFF funds, federal Title II funds, and Linked Learning Funds, to support preparation pathways
- Publicize and use data on teacher supply and demand to recruit prospective teachers to the profession

Through these actions, California can increase both supply and quality of teachers to meet the needs of its diverse schools and students.

Introduction

After years of cuts to the teaching workforce, California districts are beginning to hire again but preparation programs are producing fewer graduates than the state's schools and districts want to hire.

he recently completed legislative session significantly increased funding for California public schools. Under the Local Control Funding Formula (LCFF), created in a 2011 overhaul of the state's school funding system, California schools will receive \$3,000 more per student in 2015-16 than they did in 2011-12, representing an unprecedented 45 percent increase over just four years. Expanded funding is a positive development in a state that has long underfunded public education, and which severely cut funds during the economic recession.

Yet it's also creating an unexpected problem: After years of cuts to the teaching workforce, California districts are beginning to hire again—but preparation programs are producing fewer graduates than the state's schools and districts want to hire. In the 2013-14 school year, the California Commission on Teacher Credentialing issued new credentials to some 14,810 teachers, a one-third decrease from the number issued five years earlier—and significantly fewer than the 21,000-some teachers the state's schools need.

California must increase both the number of incoming teachers and the quality of teacher preparation. The state's schools are facing new demands: to prepare all students to meet Common Core standards; to meet annual goals for student achievement, engagement, and other outcomes that accompany LCFF funds; and to improve educational outcomes for an increasingly diverse student population. To meet them, California needs a robust pipeline of teachers with the skills to support diverse students in achieving college and career readiness.

Solving this problem requires not just tweaks to existing policies but a fundamental change in how preparation programs, districts, and the state think about their roles in cultivating the supply of high-quality teachers.

Building that supply will require improvements in both teacher preparation programs and the policies that govern them. Current policies too often undermine efforts to build cohesive teacher development strategies that integrate recruitment, pre-service preparation, and ongoing professional development. Instead, California has created a highly fragmented approach to teacher preparation, in which teachers receive content training in an undergraduate bachelor's degree program, followed by pedagogical training in a separate post-baccalaureate traditional or alternative program, and then by completion of a separate induction program once they begin teaching—with little or no integration between these experiences. This is no way to cultivate the next generation of teachers. And in a time of teacher shortages, the gaps in this disjointed pipeline cost the state untold numbers of teachers each year.

Solving this problem requires not just tweaks to existing policies but a fundamental change in how preparation programs, districts, and the state think about their roles in cultivating the supply of high-quality teachers. Teacher preparation programs must come down from the ivory tower and engage with the realities and needs of the districts in which their graduates work. Districts must take increasing responsibility for recruiting and developing their own future teachers, rather than leave it up to teacher preparation programs to provide the teachers they need. And districts and preparation programs must work more closely together as partners.

Though the bulk of this work must take place at the local level, state policies can help create conditions and incentives that facilitate these partnerships—while changing policies that currently create barriers to collaboration around teacher preparation and development. State oversight of preparation programs must shift from regulating inputs to focus on results. This approach would provide districts and preparation programs the flexibility to jointly craft pathways and partnerships that meet the needs of local schools and candidates.

Teacher preparation is often treated in isolation from other efforts to improve the quality of teaching. The reality, however, is that improving the quality of teaching will require thinking strategically about the entire trajectory of teachers' preparation and careers. It must begin with investments in recruitment and pre-service preparation on the front end, continue through teachers' careers, and include induction, evaluation, ongoing support and professional development, retention, and dismissal where necessary, as well as opportunities for to grow and take on additional leadership roles.

Much of the recent debate on teacher quality in California has been shaped by the 2014 Vergara v. California ruling, which affirmed the right of California students to be taught by effective teachers and struck down existing policies related to tenure, teacher dismissal, and "last-in, first-out" teacher layoffs. Whatever one's take on those policies, Judge Rolf Treu's judgment noted that, "All sides to this litigation agree that competent teachers are a critical, if not the most important, component of success of a child's in-school educational experience."1

In others words, if we're serious about ensuring quality teaching for California students, we need to pay at least as much attention to the processes through which teachers come to be in the classroom as those through which they leave it.

Experts testifying in the Vergara case estimated that between 1 percent and 3 percent of California teachers are "grossly ineffective," suggesting that as many as 8,650 California teachers are so weak in their jobs as to deserve dismissal.² In contrast, the California Department of Education (CDE) estimates that California schools and districts will need to hire more than 21,000 teachers for the coming school year.

In others words, if we're serious about ensuring quality teaching for California students, we need to pay at least as much attention to the processes through which teachers come to be in the classroom as those through which they leave it. It would be a mistake to look at either in isolation.

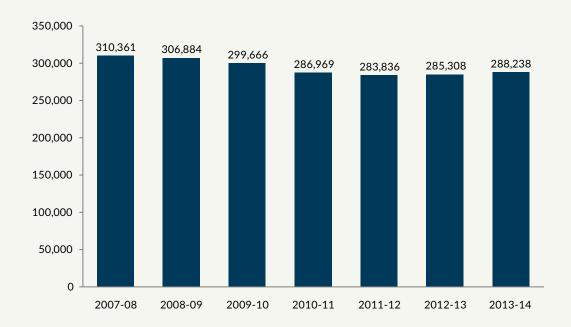
This paper seeks to help California educators, policymakers, and other stakeholders improve the quality of teacher preparation. To do so, it draws on existing data about teacher demand and preparation in California; a thorough review of both the state's existing policies and the academic literature on teacher quality; interviews with numerous California district, charter school, and teacher preparation leaders, as well as with policymakers and analysts; and two convenings of key stakeholders. The report begins by describing the current state of teacher supply, demand, and preparation in California. It then reviews the weaknesses that stakeholders and external experts have identified in the state's current approach to teacher preparation, as well as efforts underway to address these challenges. Finally, it offers a vision and recommendations to improve the quality of teacher preparation in California going forward.

The Current State of Preparation in California

his is not California's first teaching crisis. In the late 1990s, a history of underfunding education combined with years of rising enrollments and a new class-size mandate created a major shortage of teachers in the state's schools. To staff classrooms, districts resorted to hiring teachers on "emergency permits"; many had no prior training as teachers. By 1999, more than one in 10 California teachers—over 30,000—were working on such permits.³ Today, some in California fear the state is headed for a similar crisis.

From 2007 to 2010, California's teaching workforce shrank by 9 percent, or over 22,000 teachers (see Figure 1). The number of teachers in California fell to its lowest point in more than 15 years, and the number of students per teacher rose from 20.9 to 23.3, well above the national average of 16.0.4 Starting in the 2011-12 school year, however, as the economy recovered and the state enacted the LCFF, districts received funding increases and began hiring again. Between 2011 and 2014, California's teaching workforce grew by about 4,400 teachers, while the number of students per teacher fell slightly (to 21.6 in 2013-14).5

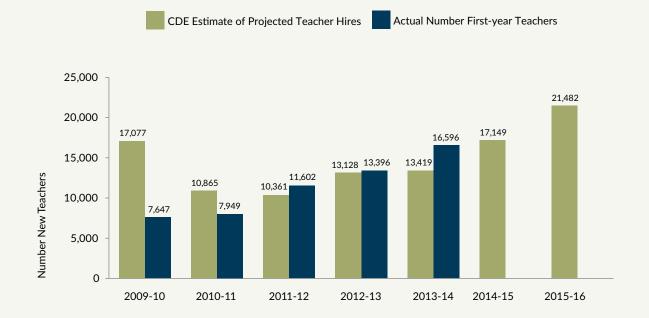
Total Number of Teachers in California, 2007–2014 Figure 1



Source: DataQuest, California Department of Education, http://dq.cde.ca.gov/dataquest/.

The hiring trend is likely to continue. CDE projects that California schools will need to hire more than 21,000 teachers for the 2015-16 school year. Although the number of students in the state is projected to remain constant, and not to increase as it did in the 1990s,6 the state will still need to replace teachers who leave the profession, retire, or move to other states. If California's teachers follow national trends on teacher attrition—roughly 7.7 percent of U.S. teachers leave the classroom annually—the state will continue to need roughly 22,000 a year for the near future.⁷ The LCCF also creates financial incentives for schools to lower class sizes in the early grades, which will further spur demand for elementary school teachers in the coming years.

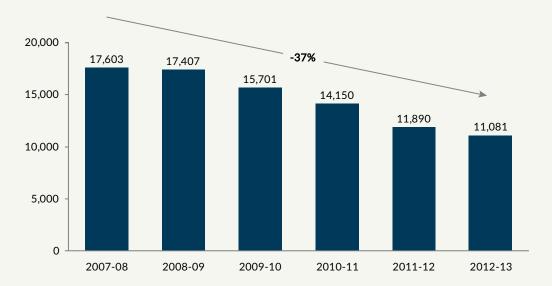




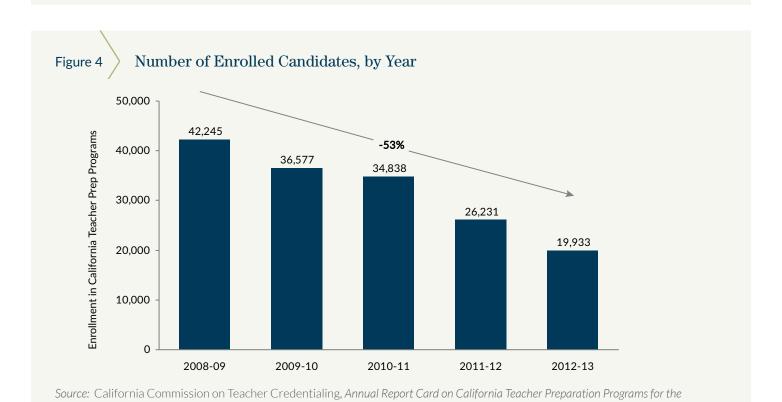
Note: Actual number of first-year teachers for the 2014–15 school year is not yet available. Source: DataQuest, California Department of Education, http://dq.cde.ca.gov/dataquest/.

> Even as demand for teachers is increasing, the number of candidates completing teacher preparation programs (both traditional and alternative, or intern, programs) has declined significantly over the past several years-from 17,603 in 2007-08 to 11,081 in 2012-13 (see Figure 3). The declines result from a decrease in the number of candidates enrolled in preparation programs: from 42,245 candidates in 2008-09 to 19,993 in 2012-13 (see Figure 4).

Number of Program Completers, by Year Figure 3



Source: California Commission on Teacher Credentialing, Program Completers by Program Type: AY 2007-08 to 2011-12, October 2013, http://www.ctc.ca.gov/educator-prep/statistics/2013-10-stat.pdf; California Commission on Teacher Credentialing, Annual Report Card on California Teacher Preparation Programs for the Academic Year 2012–2013, October 2014, http://www.ctc.ca.gov/ reports/TitleII_2012-2013_AnnualRpt.pdf.

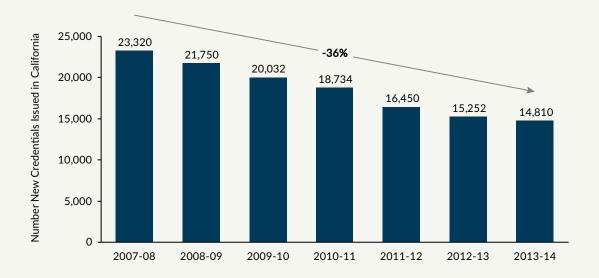


Academic Year 2012-2013, October 2014, http://www.ctc.ca.gov/reports/TitleII_2012-2013_AnnualRpt.pdf.

In-state preparation programs aren't the only source of new teachers for California schools; one-quarter of new California teachers come from other states.⁸ But out-of-state candidates aren't making up the gap caused by falling in-state enrollment. In the 2007-08 school year, the California Commission on Teacher Credentialing issued 23,320 certificates. (These numbers include certificates awarded to new graduates of preparation programs, credentials awarded to teachers from other states, and new certification areas earned by alreadycredentialed teachers.) By 2013-14, that number had fallen to 14,810 (see Figure 5)—well below the state's estimated need for teachers.

This decline is likely driven in part by the cuts to the teaching workforce from 2007 to 2011: Prospective teachers who perceived little chance of being hired may have chosen to pursue other careers. Even though districts have increased hiring recently, a perception that teaching is not a secure profession may continue to turn off potential teachers. The 2012 MetLife Survey of American Teachers found that one-third of respondents do not feel their job is secure, compared to only 8 percent in 2006.9

Number of New Credentials Issued in California, 2007–2014 Figure 5



Note: New teaching credentials issued are for first-time teachers and teachers receiving a new type of credential. Data include new credentials for teachers prepared out of state.

Sources: California Commission on Teacher Credentialing, Teacher Supply in California: A Report to the Legislature Annual Report 2011-2012, April 2013, http://www.ctc.ca.gov/reports/TS-2011-2012-AnnualRpt.pdf; California Commission on Teacher Credentialing, Teacher Supply in California: A Report to the Legislature Annual Report 2013-2014, April 2015, http://www.ctc.ca.gov/reports/TS-2013-2014-AnnualRpt.pdf.

California is not the only state with declining teacher preparation enrollments. Other states, including Texas and New York, have experienced similar declines, 10 and national data suggests that interest in teaching as a profession is waning. A recent Third Way poll of high-performing undergraduates found that millennials do not view teaching as an ambitious or fulfilling career and believe that the teaching profession has become less prestigious. 11

Part of the decline in preparation enrollments could be "right-sizing": In 2008, California did not need more than 40,000 teachers in training.¹² But the pendulum appears to have swung too far in the other direction; with fewer than 20,000 candidates currently enrolled in preparation programs, California is not producing enough graduates to fill its need for new teachers.

This has already led to significant teacher shortages in some districts. Sacramento and San Joaquin Valley counties had teaching positions that remained open throughout the 2014–15 school year. Stockton had over 60 vacant teaching positions. 13 "We needed more teachers, and yet fewer teachers were available...I think it's worrisome for all of us," notes Angie Sagastume, who heads up staffing at the San Francisco Unified School District (SFUSD).¹⁴ Oakland is experiencing similar challenges. "We are working in a context of a very profound teacher shortage, and we're really feeling the impact of the decline," says Chief Talent Officer Brigitte Marshall. 15

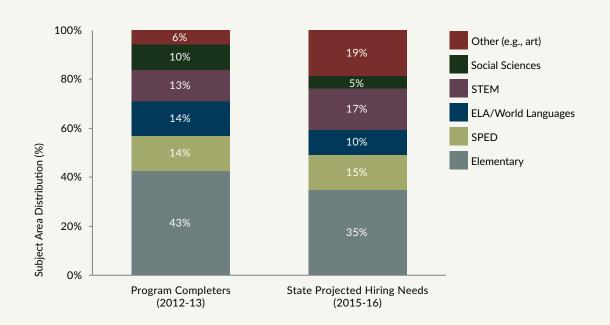
Another indication of shortage is the increase in the number of teachers working on "provisional intern" and "short-term staff" permits. Unlike regular intern permits, which have set requirements for both pre-service and on-the-job training, provisional intern permits are essentially emergency credentials that require no specialized training. In 2013-14, the number of teachers working on these emergency permits statewide rose to 1,166, a 37 percent increase from the previous year.¹⁶ Although these emergency credentialed teachers represent a miniscule share of California's teachers, the growth in their numbers is a clear warning sign.

California currently lacks a clear state strategy for responding to mounting teacher shortages. Without such a strategy, the state risks a return to the conditions of the late 1990s. Moreover, some of the strategies the state did put in place in the early 2000s to address shortages, such as dedicated funding for intern programs and fellowships to attracted talented students to teaching, have been eliminated or defunded.¹⁷ Another crisis of late-1990s proportions is unlikely, as this time around California's student enrollment is stable rather than growing, 18 thus eliminating one factor that contributed to the crunch. But without a similarly clear strategy to respond to today's challenges, the state could find itself unable to fill its teacher needs.

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California is also experiencing teacher shortages in particular subject areas. The state has classified math, special education, and certain science subjects as shortage areas for the last several years.¹⁹ According to CDE's latest hiring projections, school districts will need to hire roughly 3,600 teachers in STEM fields next year (or 17 percent of open positions) and 3,124 special education teachers (or 15 percent)²⁰—but preparation programs are producing a lower number and share of new teachers in these subject areas (13 percent in STEM and 14 percent in math) than districts require (see Figure 6). The plurality of preparation program completers—43 percent—are elementary teachers.

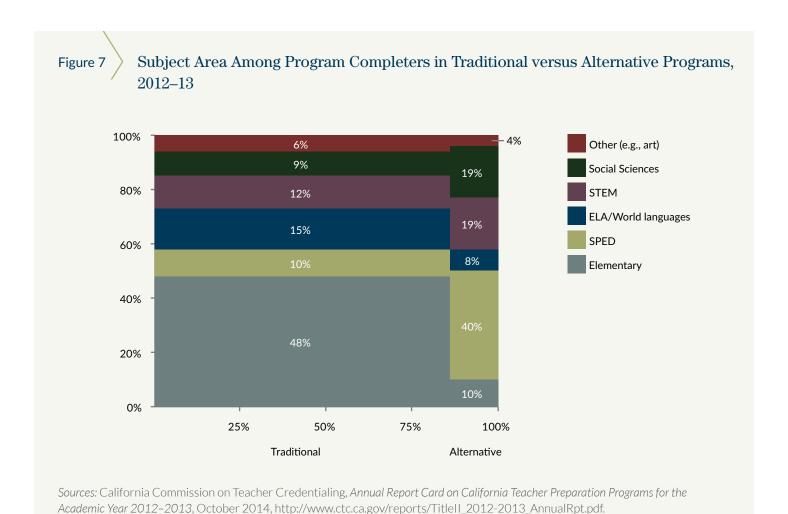
Subject Area Distribution of Program Completers versus State's Hiring Needs



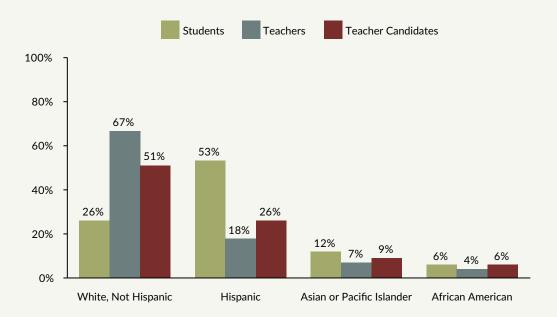
Sources: DataQuest, California Department of Education, http://dq.cde.ca.gov/dataquest/; California Commission on Teacher Credentialing, Annual Report Card on California Teacher Preparation Programs for the Academic Year 2012–2013, October 2014, http:// www.ctc.ca.gov/reports/TitleII_2012-2013_AnnualRpt.pdf; US Department of Education, California 2014 Title II Report (Washington, DC, 2014), https://title2.ed.gov/Public/Home.aspx.

Intern, or alternative route, programs produce higher percentages of candidates in shortage areas-particularly STEM and special education-than traditional programs, and lower rates of elementary teachers (see Figure 7). These differences suggest that intern programs play a crucial role in meeting the state's hiring needs and may attract candidates with skills and backgrounds—such as STEM training and experience—that traditional programs do not.

California teachers are also far less diverse than the students they serve. In the 2012-13 school year, individuals from Latino or Hispanic backgrounds made up more than half of California students but less than 20 percent of teachers. Roughly a quarter of students but two-thirds of teachers were white. Candidates enrolled in teacher programs are more diverse than existing teachers, but not as diverse as their future students. Fifty-one percent are white, 26 percent are Hispanic/Latino, 9 percent are Asian or Pacific Islander, and 6 percent are African American (see Figure 8). In other words, the makeup of the teaching workforce is likely to become increasingly diverse in the coming years—but not enough to match the state's student population.



Race/Ethnicity of Students, Teachers, and Teacher Candidates in SY 2012-13 Figure 8



Note: Totals do not equal 100 percent because respondents who identified as another ethnicity or who chose not to respond are not included in the figure.

Sources: California Commission on Teacher Credentialing, Annual Report Card on California Teacher Preparation Programs for the Academic Year 2012-2013, October 2014, http://www.ctc.ca.gov/reports/TitleII_2012-2013_AnnualRpt.pdf; DataQuest, California Department of Education, http://dq.cde.ca.gov/dataquest/.

Quality of Teacher Preparation in California

Teacher shortages draw attention because they are visible and quantifiable, but the quality of teacher preparation is also important. Research suggests that preparation programs have meaningful and measurable impacts on teacher quality and student learning.²¹ Where a teacher was prepared explains more of the variation in student learning than do other teacher characteristics, such as race, gender, or the type of degrees held. The benefit to students of having a teacher from the best teacher preparation programs is comparable to that of lowering class size by five to 10 students.²¹

Evaluating the quality of teacher preparation in the Golden State is difficult, however. California does not have a common statewide measure of teacher quality, and it lacks the type of data regarding teachers' impact on student learning that other states use to study the outcomes of their preparation programs. Without such information, it is difficult to evaluate how preparation graduates perform once they enter California schools, or whether some programs produce better teachers than others.

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The Commission on Teacher Credentialing (CTC), the state agency responsible for overseeing preparation programs, reviews programs every seven years. However, it focuses primarily on ensuring that programs address the state's standards for beginning teachers—and not necessarily on the quality of the graduates they produce. (As discussed below, CTC is exploring some steps to change this.)

The limited information that does exist on preparation quality raises some concerns. The National Council on Teacher Quality (NCTQ), an national organization, rates teacher preparation programs annually based on their selection criteria, academic rigor, curriculum, student teaching experiences, and use of data to inform continuous improvement. Although NCTQ's methodology is far from perfect, in the absence of other measures it offers one perspective on teacher preparation quality in California. In NCTQ's 2014 review, only three of 60 California institutions reviewed received the highest rankings, and no elementary or special education programs did so.²³ Interviews and surveys of district employers also suggest a relatively low level of satisfaction with teacher preparation graduates: only half of districts indicated that they were "satisfied" or "very satisfied" with the preparedness of new teachers.²⁴

The bigger problem, however, is the lack of consistent measures of quality. Neither candidates applying to teacher preparation programs, nor school leaders considering hiring their graduates, have reliable information about the quality of different preparation programs or the performance of their graduates in the classroom. State policymakers are without the information they need to evaluate the overall quality of teacher preparation in California or make decisions about how to improve it.

Measuring Quality the Wrong Way

California doesn't have better information about the quality of teacher preparation because it lacks a clear metric of teachers' effectiveness once they are in the classroom. Existing law bars the state from collecting data on learning outcomes for individual teachers' students. While the 1971 Stull Act requires districts to evaluate teachers, and to include student achievement in these evaluations, the majority of districts appear to be ignoring those requirements.²⁵

In the absence of more robust measures of teacher quality, or of preparation program quality, state policies and stakeholders often treat credential type as a proxy for quality differentiating those teachers who have completed a preparation program and are "fully qualified" or "fully prepared" from candidates who are in intern programs or teaching under emergency or provisional credentials. The 2004 Williams settlement memorialized this approach,²⁶ which is also reflected in the Local Control Funding Formula regulations. Although teachers are the most important in-school factor influencing student learning, quality teaching is not one of the eight state priority areas that districts must address in their plans for LCFF funds; instead, it is a subset of the "basic services" priority area. Districts must address the "degree to which teachers are appropriately assigned pursuant to Education

Code section 44258.9, and fully credentialed in the subject areas and for the pupils they are teaching," but are not required to address other measures of teacher effectiveness, such as quality of instruction or student learning outcomes. Nor are they required to develop comprehensive strategies for improving the quality of teaching across the continuum of preparation, hiring, and professional development.²⁷

Using credentials as a proxy for quality prevents the state from differentiating quality for the vast majority of teachers who have completed preparation programs. By definition, it also provides no information about the quality of teacher preparation programs—since all "fully qualified" candidates have completed some form of preparation program.

Moreover, the idea of "fully qualified" teachers further exacerbates the fragmentation of the teacher development pipeline, encouraging districts to view teacher development as something that happens before teachers get to them. California's law and policies treat "fully qualified" as though it means "fully developed"—when in fact completing a preparation program is just the beginning of teachers' development as professionals.²⁸ At worst, this mindset can lead districts to adopt the "widget" approach to human capital: ensuring that teachers have the appropriate credentials for their roles, but treating them as indistinguishable widgets beyond that.²⁹

In effect, these policies treat teachers on intern credentials as substandard—comparable to teachers on emergency permits and waivers, rather than to other first-year teachers who have completed a traditional preparation program. There is little evidence to support this approach, however. Numerous rigorous studies of the student-learning impact of teachers prepared through alternative routes find no evidence that they are any less effective than those who completed traditional preparation programs.³⁰ Crucially, these studies focused on teachers in their first year of teaching—meaning that they compared alternate-route teachers who were still completing their certification programs to other new teachers who had already completed traditional programs. In states with data on effectiveness of teachers prepared through different routes, both alternative-route and traditional programs are included among the top-ranked programs.31

Research does show that teachers with emergency credentials are less effective than those prepared through both traditional and alternative routes.³² This is not surprising, given that teachers on emergency credentials are typically not required to have any training before they begin teaching, or to be given the on-the-job training and support that intern candidates receive. As a result, policies that equate these emergency credentials with the intern credential are unsupported by evidence—and potentially harmful.

If California is going to ensure that its schools and students have the quality of teachers they need, it must establish better and more nuanced measures of quality than just credential status. Such measures are crucial to supporting continuous improvement for both teachers and the programs that prepare them.

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California's Fragmented Teacher-Preparation Pathway

As noted above, a major weakness of California's approach to teacher preparation is its fragmentation. Teachers receive content training in an undergraduate bachelor's degree program, followed by pedagogical training in a separate post-baccalaureate traditional or alternative program, and then by completion of a separate induction program once they begin teaching.

Consequently, there is little alignment between content training, pedagogical preparation, and on-the-job learning experiences. Fragmenting preparation in this way may also make it more expensive and time-consuming, dissuading some potential candidates.³³ To address these issues, California has promoted the creation of "blended" undergraduate programs that combine academic and teacher preparation coursework, leading to a preliminary credential or master's degree in four to five years. But these programs are relatively uncommon, due in part to the extensive requirements that CTC imposes on blended programs, and do not address broader fragmentation issues.34

Even greater than the disconnect between pedagogical and content training, however, is the one between teacher preparation and the schools where candidates work following graduation. Too often, preparation programs see their role as cultivating candidates' professional identity and understanding of educational theory, and not as training them to meet the needs of the state's students and schools.³⁵ "There is a real misalignment between what we need new teachers to know and what they get from their prep programs," said one district leader interviewed for this project. "For example, we have a lot of new teachers who have no training in classroom management." At the same time, many districts see teacher preparation as someone else's responsibility, and fail to recognize the crucial role they can play in cultivating teacher supply.

Exacerbating the problem is that teacher preparation policy is often treated as distinct from the broader continuum of state policies—related to evaluation, compensation, professional development, dismissal, and promotion—that affect the quality of teaching. This is due, in part, to institutional and systematic dynamics: Most teacher preparation takes place in higher-education institutions that operate with different norms, cultures, and incentives than those of the K-12 system. In California, an independent state agency— CTC—oversees teacher preparation, rather than the state department of education. As a result, decisions related to teacher preparation programs and policies are dominated by the institutions of higher education that prepare teachers, and not by the K-12 schools that employ their graduates.

Recent Efforts to Improve Teacher Preparation

umerous organizations—both in California and nationally—have raised concerns about the quality of teacher preparation in California and offered recommendations to improve it.

- Increase selectivity. National organizations have criticized California's lack of statewide admissions requirements for teacher preparation. They have recommended that the state require candidates to be in the top half of all college students for grade point average or college/graduate school admissions test scores.³⁶
- Assess subject-matter knowledge. California is one of the few states that do not require all high school teachers to pass a licensure exam of content knowledge; rather, it allows candidates who completed a CTC-approved undergraduate major to skip the licensure exam required of other candidates. Some national organizations have recommended requiring all secondary teacher candidates to take a content test for each subject area they will teach.37
- Strengthen student-teaching requirements. California's existing preparation program standards require candidates to complete clinical fieldwork but do not set a minimum duration for student teaching or for the qualifications of mentor teachers who oversee student teachers. Numerous national and California organizations have called for minimum requirements for the quantity and quality of student-teaching experiences. The CTC has proposed a minimum of 600 hours of clinical practice, including five hours per week of support from the cooperating or master teacher, and increased restrictions on where student teachers may be placed.³⁸

More clearly differentiate requirements for some types of credentials. California currently awards three types of teacher credentials: multiple subject (for elementary teachers), single subject (secondary teachers), and education specialist (special educators). This approach is unique among states, and numerous observers—both in the state and nationally—have raised concerns that it fails to adequately prepare teachers working in the early elementary and middle grades or with special education students. Although the vast majority of special education teachers work in inclusionary settings—where students with disabilities are served alongside their non-disabled peers—the state's approach does not ensure that special education teachers receive training in skills and techniques for general education.³⁹

Most of these recommendations call for additional requirements on teacher candidates or preparation programs. Imposing additional requirements on candidates or programs can seem like an easy way to address concerns about teacher preparation and quality, but there is little proof that more requirements translate to better-prepared teachers.⁴⁰ While research shows that some programs produce teachers who are more effective than those produced by other programs, there is not much to suggest that specific elements of teacher preparation—such as increased coursework, specific courses, or more time spent in student teaching—are correlated with more effective teaching. There is some evidence that teachers who score higher on the SAT, ACT, and other college or graduate admissions exams are more effective, but these measures account for only a small percentage of variation in teacher effectiveness, and mandating a minimum score on these assessments would likely screen out a significant number of people who have the potential to be effective teachers.⁴¹

Moreover, there are real costs to these requirements. Adding more requirements for candidates makes teacher preparation more expensive and time-consuming, and could discourage otherwise promising individuals from entering the profession. Raising barriers to entry could, perversely, lower teacher quality by exacerbating shortages and forcing districts to hire more emergency-credentialed teachers who lack any prior preparation. Such policies could also disproportionately affect candidates from racial and ethnic minority or low-income backgrounds, reducing the diversity of the state's teacher workforce.⁴² In the context of teacher preparation, time is a precious commodity and requiring programs to add new content may reduce attention to other important knowledge or skills.

Given the lack of evidence for specific requirements, policymakers would be wise to err on the side of flexibility and focus on measuring program outcomes rather than candidate or program inputs. They should resist the temptation to include everything that is good for teachers to know or programs to do, and instead limit their focus to the core skills, knowledge, and dispositions that new teachers need on day one. In fact, policymakers should look for opportunities to reduce requirements on teacher candidates or preparation programs. Teacher preparation in California is highly regulated: CTC currently has 19

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distinct standards for preliminary multi- and single-subject preparation programs, not including nine additional "common standards" that apply across all preparation programs offered by a given institution. As a result, programs must cover a wide variety of topics, driving preparation that one provider described as "a mile wide and an inch deep." Reducing the number of input and process requirements could enable programs to spend more time focusing on the skills and knowledge that local districts and schools consider most essential for graduates' ability to succeed in their classrooms.

CTC's Efforts to Improve Teacher Preparation

The Commission on Teacher Credentialing has heard concerns about the state of teacher preparation in California and is making changes in response.⁴³ Historically, CTC's approach has been to define standards for teacher preparation programs, require programs to document their compliance with standards, review those documents, and visit programs every seven years to validate reports and address issues of concern. This approach imposes significant burdens on programs to document their compliance with standards, but with 144 different institutions offering teacher preparation in California,⁴⁴ it is impossible for CTC to independently verify that programs are doing everything they claim—let alone how well they do it. An emphasis on compliance with standards, rather than on quality or outcomes, also means that the program approval process does little to differentiate strong programs from weak ones.

To address these issues, CTC is working to streamline its standards and increase focus on outcomes. It has developed new preparation standards that hone in on the most crucial elements of teacher preparation, including teacher knowledge and performance, program scope and sequence, and clinical fieldwork. It is taking steps to improve the consistency and reliability of the teaching performance assessments through which candidates must demonstrate mastery of the state's teaching standards before earning a license. And it is building data dashboards that will include information on program outcomes, including completion rates, time to completion, and employment rates for program graduates.⁴⁵ This approach will allow CTC to reduce the documentation it requires, collect more information on program outcomes, differentiate strong programs from weak ones, and make information on program performance more transparent to consumers and the public. While CTC is moving in the right direction, however, it may not go far enough.

Given the length and complexity of CTC's existing program standards, CTC could significantly pare down the inputs and documentation it requires and still have a burdensome and input-focused process. Moreover, some of the changes that CTC is proposing—such as requiring 600 hours of clinical practice—actually impose new inputfocused requirements. It's one thing to talk about streamlining and simplifying; the real test lies in what CTC is actually willing to let go of to give providers greater flexibility to innovate and customize their programs in response to candidate and local districts' needs. The biggest limitation of relying on surveys to measure program outcomes is that they represent only one measure of quality and single measures are inherently weaker than measures that take into account data from multiple sources.

CTC's approach to measuring outcomes is also problematic. To date, these efforts have focused primarily on surveys of program completers and employers. In 2014 CTC administered a pilot survey of program completers that focused on pedagogy and perceptions of their programs and field experience,⁴⁶ and it has considered how to implement employer surveys.⁴⁷ Surveys can provide insight into the quality of educator preparation, but they have real limitations as outcome measures. One issue is timing: Under CTC's current plans, completers who receive a credential between January 1 and August 30 will complete surveys by mid-September of the same year—when most will have spent little, if any, time in a classroom as teachers of record. With such limited experience, completers have little ability to gauge how well their training prepared them. Response rates are another challenge; only 24 percent of multi-subject completers and 30 percent of single-subject completers responded to CTC's 2014 pilot survey.⁴⁸ The low response rate raises the potential of self-selection bias: Completers who answer the survey may have different perceptions than non-responders. Low response rates also mean CTC won't have sufficient data on the many small programs operating in the state, given that 54 programs produce fewer than 20 completers a year.⁴⁹ To increase response rates, CTC is reducing the number of survey questions and ramping up outreach to completers, but it's not clear how much those efforts will boost response. Well-designed employer surveys could provide additional information on preparation outcomes, but the logistics of administering these surveys—and getting a high enough response rate to generate useful information are complicated. Without a more fully formed plan, it is difficult to assess their potential usefulness for measuring program outcomes.

The biggest limitation of relying on surveys to measure program outcomes is that they represent only one measure of quality—and single measures are inherently weaker than measures that take into account data from multiple sources. A variety of other data sources could add further depth and nuance to evaluations of program outcomes—for instance, placement and retention rates, the rate at which completers eventually earn clear credentials, employer evaluations, and student learning outcomes or district evaluation ratings of program completers. CTC plans to include data on some of these outcomes in its teacher preparation dashboards, but does not intend to use them to evaluate program performance. On their own, each of these measures is problematic—but so are surveys. The limitations of stand-alone outcome measures are the primary argument for using multiple measures of program performance. Some California institutions have independently developed more robust approaches to evaluating their own performance to support continuous improvement (see sidebar: CSU Systemwide Evaluation of Teacher Preparation Programs), and CTC could learn from these endeavors.

None of CTC's proposed reforms address the fundamental problem of California's fragmented approach to teacher preparation. Nor do they do anything to address the shortage of teachers. Any strategy to improve the quality of preparation in California must be accompanied by a sincere attempt to boost the supply of candidates entering teacher preparation—whether through increased recruitment efforts, creation of pathways that appeal to new populations of potential candidates, or making teaching jobs more attractive to prospective teachers. The absence of these strategies remains a gap in the state's approach.

Sidebar 1

CSU Systemwide Evaluation of Teacher Preparation Programs

In 2001 the California State University (CSU) system launched a formal accountability process for its teacher preparation programs, which produce about one-third of the state's program completers. The CSU Center for Teacher Quality gathers annual data on how graduates perform once they are in the classroom. This ongoing evaluation process allows each CSU program to better understand its strengths and weaknesses, track any significant changes over time, and assess how it compares to other CSU programs—and to use this information to make informed decisions around program improvement.

To carry out its systemwide evaluation, CSU focuses on six outcome measures:

- 1 Exit evaluation survey: At the point of credentialing, teachers graduating from CSU campuses participate in an online survey that asks about the quality of their preparation experience.
- 2 First-year graduate survey: At the end of their first year of teaching, elementary, secondary, and special education teachers receive a survey on how well their program prepared them to meet their classroom responsibilities, teach their specific subject matter, and meet the needs of diverse learners.
- 3 Employer input: Each year, CSU asks school leaders to provide feedback on the teaching performance of any new CSU graduates they supervise. Supervisor input is based on classroom observations as well as personal interactions with the teacher.
- 4 Teaching Performance Assessment: CSU also collects data on candidates' performance on the teaching performance assessment, a statewide requirement for all preliminary credentials, to make additional assessments around program quality.
- 5 Retention and attrition: CSU seeks to understand how the teacher preparation experience influences whether one remains in the teaching profession.
- 6 Student learning gains: CSU is working with several districts to gather value-added data on student academic gains; using this data, it is able to compare the effectiveness of teachers prepared within the CSU system to those prepared in non-CSU programs.

Continued on next page

Sidebar 1 continued

CSU's initiative offers an example of how preparation programs can hold themselves accountable for tracking completers' outcomes—and could act as a model as CTC continues to revamp its approach to evaluating program quality. Most important, CSU's approach highlights the value in using multiple measures. Compared to self-reported data from program completers, data gathered from several stakeholders—including school supervisors—is much more comprehensive.

Using outcome measures at multiple points during a teacher's early experience is also important. Because CSU follows up with teachers at the end of their first year in the classroom, graduates are able to reflect more accurately upon how well their program prepared them to teach.

CSU's more recent push to incorporate a quantitative measure of student performance into its evaluation process is admirable. CTC's current efforts to survey program completers are a step in the right direction—but it must go further by using multiple measures to develop a more holistic picture of program quality.

- CSU traditional and alternative program produced about one-third of all program completers in AY 2010-11, 2011-12, and 2012-13 according to the latest Title II data. US Department of Education, California 2014 Title II Report (Washington, DC, 2014), https://title2.ed.gov/Public/Home.aspx.
- "Specific Outcomes of Teacher Preparation Examined by the CSU Center for Teacher Quality," California State University website, last modified September 25, 2012, http://www.calstate.edu/teacherquality/program_outcomes.shtml.

Placing California's Efforts in National Context

California is not alone in seeking to improve the quality of teacher preparation programs. Federal and state governments, nonprofits and state advocacy groups, and the national teachers' unions have all recently called for changes in the ways states prepare and license teachers. Like CTC's efforts, most of these reforms seek to shift the focus of teacher preparation policies from inputs to outcomes, but their approaches to measuring outcomes of teacher preparation differ markedly from that of CTC.

Louisiana, for example, has linked preparation programs with data on their completers' outcomes for nearly a decade. In the past five years, 16 additional states have followed Louisiana's lead, linking or creating formal plans to link data on preparation programs to their graduates' employment and student learning outcomes. Some states, such as Indiana, North Carolina, and Rhode Island, are collecting data on a wide range of completer outcomes beyond student test scores, including observations of the quality of their teaching, in order to provide a more comprehensive picture of program outcomes.

At the federal level, the Obama administration has proposed new teacher preparation regulations that would require states to evaluate preparation programs' performance based on completer and employer surveys, student growth or teacher evaluation ratings, and measures like placement and employment rates. The leadership of CTC, CDE, and the California Board of Education sent a joint letter to U.S. Secretary of Education Arne Duncan opposing these regulations, noting that the state's existing data systems cannot generate the type of information required and that statutory barriers prevent creating the necessary linkages between data currently collected by CDE and CTC.⁵⁰ If the new regulations are adopted, however, California will be expected to comply.

More crucially, if California is going to reject the strategies that other states and the federal government are pursuing to improve teacher preparation, it must develop a compelling alternative approach that reflects its unique education context and is integrated into a broader vision for improving the quality of teaching in the state.

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The Path Forward

Improving teacher preparation in a large, highly diverse state like California requires local solutions, not a one-sizefits-all approach.

mproving teacher preparation in a large, highly diverse state like California requires local solutions, not a one-size-fits-all approach. With nearly 39 million people spread over 163,000 miles, California communities have different needs, demographics, economic circumstances, and labor markets. Teachers need different preparation and support depending on the contexts in which they will work—whether in divergent communities or within an increasing variety of educational models, from blended learning to Montessori, that exist across the state. Variations in prospective teachers' own prior life experiences and educational background also have implications for the kind of training and support they need. Meeting these needs requires both a variety of preparation pathways and a stronger school and district role in co-constructing those pathways with preparation providers.

Research shows that most teachers take jobs close to where they grew up and close to where they received their training.⁵¹ Schools and districts, then, have a strong interest in both the supply and the quality of candidates prepared by local programs. They also have firsthand knowledge of the skills, experience, and mindsets that prospective teachers need in order to be successful when they enter the classroom. And, under the LCFF, many districts particularly those serving high concentrations of high-need students—are receiving an infusion of new resources, some of which can be used to support improved approaches to recruiting and developing effective teachers.

But to do this work well, they need strong partnerships with preparation providers including higher-education institutions and other organizations that recruit and train teachers—who want to prepare the teachers districts need. Over time, compliance with state requirements and the institutional norms and needs of higher education, rather than the needs of K-12 schools, has played the primary role in shaping the design and execution of preparation programs. But the needs of consumers—including teacher candidates, districts, and K-12 students—should be the driving consideration in decisions about the structure and content of teacher preparation.

Improving preparation ultimately requires changing how the key players in the system—K-12 employers, preparation programs, and candidates themselves—think about teacher hiring and recruitment. The current paradigm treats hiring teachers like shopping for widgets: figure how many and what kinds you need, and place an order. Understanding the model number you need is important, and some widgets might be harder to find than others, but you don't worry about the conditions at the factory that made the widgets or spend time cultivating a relationship with the widget store owner. In the same way, today's systems encourage districts to view teacher hiring as primarily a task of finding people who meet the qualification requirements in state law. Recruiting and producing those people is the role of preparation programs, and districts come in after the fact.

But hiring teachers shouldn't be like buying widgets. It should be more like buying a house. Hiring a teacher is a major, long-term investment (a teacher who earns tenure could stay with a district for 20-30 years, representing a roughly \$2 million investment for a district). When you buy a house, you don't just go to a house store. You contact a real estate agent, explain what you're looking for, and the agent works with you to identify suitable properties in your price range, and guides you through the sale process. If you want a highly customized home, you might engage a contractor to build it for you. If you're especially particular, or talented, or operating on a tight budget, you might even buy a fixer-upper and do some of the work yourself.

Schools and districts should approach hiring teachers the same way. The difference is that, while most of us will never buy more than one home at a time, and no more than a few in our lifetimes, schools and districts are hiring dozens, or even hundreds, of teachers every year. That means they need to work with both multiple agents, and multiple contractors, to identify and build the supply they need. In other words, they need to cultivate relationships with a portfolio of preparation providers—and, in some cases, they need to create new providers to address their needs, or even do the work themselves.

A few California districts and charter schools are starting to question existing paradigms. They are building relationships with a portfolio of different kinds of preparation providers traditional, alternative, residency-to supply teachers for their schools, and creating new preparation pathways, such as intern, residency, and grow-your-own models, to address particularly acute hiring needs. Forward-looking preparation programs have also initiated such relationships with district and charter schools in their communities.

State policymakers recognized the fundamental importance of teacher quality—and the role of districts in developing teachers—when they recently allocated \$500 million to districts to improve teacher effectiveness.⁵² State policies and programs must build on existing district and preparation program efforts, while simultaneously creating conditions that incentivize other districts and preparation programs to use new funds to follow the examples of leading districts.

CSU Long Beach, Long Beach USD, and Long Beach City College

California State University Long Beach, Long Beach Unified School District, and Long Beach City College offer the state's most comprehensive example of district-higher education collaboration around teacher preparation. This partnership, now more than 20 years old, is part of a broader effort to create a seamless P-20 educational pipeline for Long Beach students from public schools through higher education.⁵³ For example, California State University Long Beach (CSULB) and Long Beach City College (LBCC) have agreed to use Long Beach USD (LBUSD) graduates' high school grades to place them in credit-bearing college coursework, rather than requiring an additional placement test. This partnership has built trust between higher-education faculty and district staff—which, in turn, has allowed the three institutions to work together to reform teacher preparation so that teachers who graduate from CSULB are prepared to meet the district's needs. Key elements of the model include:

- Ongoing dialogue about what new teachers need and how to build that into the training experience
- Faculty members and administrators from LBUSD teach courses in Cal State Long Beach's College of Education
- Some CSULB courses are offered on LBUSD school campuses, and co-taught by district and university faculty
- Faculty and administrators from the three institutions frequently collaborate to design and provide professional development for LBUSD faculty, and revise coursework for preparation programs
- Candidates complete highly structured field experiences in diverse, urban classrooms within LBUSD

Under a "New Teacher Warranty" program, CSULB provides additional training and support free of charge to any first-year teacher who completed the program, should the teacher or her employer believe the teacher is insufficiently prepared to meet the demands of the role.

Cal State Long Beach teacher graduates fill approximately 70 percent of LBUSD's vacancies each year and stay in the field of teaching longer than the national average. Because many CSULB completers attended K-12 schools in Long Beach, and completed higher education at LBCC and CSULB through the district's P-20 partnerships with those institutions, they often have deep roots in the community. And because their training is tailored to the needs of the schools where they are likely to work, they are better prepared to succeed when they begin teaching. As a result of the partnership, Long Beach has increased teacher retention and reduced annual attrition rates to 7 percent (13 percentage points lower than the national average for urban school districts).54

These preparation partnerships are one component of LBUSD's integrated approach to cultivating teacher talent, including recruitment and hiring, certification/licensure, induction/retention, professional development, and accountability. The district offers a variety of programs and services to support these objectives, all rooted

CSU Long Beach, Long Beach USD, and Long Beach City College, continued

in research on high-quality professional development. To support teachers' ongoing development, Long Beach has also developed a teacher evaluation system, in collaboration with its teachers union, that assigns teachers one of four teacher ratings—distinguished, effective, developing, or unsatisfactory—on each of the seven California Standards for the Teaching Profession.⁵⁵ These evaluations are part of an iterative, year-long process in which teachers set goals with their supervisors and develop plans to achieve them. Student test scores are a component of the evaluation, as are observations of teachers' practice, information collected from students, and discussions with parents.⁵⁶

LBUSD also has strategically cultivated new teacher preparation pathways to meet specific needs in the district. Through the Career Ladder Program, the district actively recruits and supports paraprofessionals who want to become teachers and offers them scholarships and professional development to complete a bachelor's degree or teaching credential. Program participants must be enrolled in a four-year institution in a program leading to subject-matter competency for teaching or a credential; must be employed by LBUSD; and must participate in monthly workshops designed to increase their pedagogical knowledge and skills. This program is supported by district funds as well as by federal Title II and Title I funds. Long Beach also supports multiple intern programs in partnership with both CSULB and CSU Dominguez Hills, and has also developed its own district bilingual intern program.

Loyola Marymount University

Loyola Marymount University (LMU), a Los Angeles-based institution offering both traditional and alternative preparation programs, has cultivated deep partnerships with a wide variety of individual public and Catholic schools. In 2006, LMU began working to strengthen its relationships with partner schools in order to improve PK-12 student outcomes and promote educational equity—consistent with LMU's mission emphasis, as a Jesuit University, on service and justice.⁵⁷ Today, 13 distinct partner school sites make up the LMU "family of schools," including traditional Los Angeles Unified School District (LAUSD) district schools, newly reconfigured magnet and pilot schools within the LAUSD system, and charter schools, as well as parochial Catholic schools.⁵⁸ In addition to placing candidates in clinical fieldwork experiences at its partner schools, LMU faculty, staff, and students provide outreach, tutoring, and mentoring support for partnership schools. One full-time LMU faculty or staff member is placed on each partner school's campus at all times, and LMU faculty also serve as on-campus practitioners, co-teachers, researchers, and coaches. School leadership teams and university faculty co-design and implement professional development opportunities for teachers and administrators. This approach benefits partner schools while also ensuring high-quality clinical experiences for LMU candidates. It also improves the quality of educator preparation within LMU coursework by rooting LMU faculty members' work in the realities of practice in their partner schools, and by helping them stay abreast of policy, demographic, funding, and other trends affecting teachers' day-to-day work. Dean Shane Martin believes that these partnerships have been successful because LMU seeks to design partnerships in close collaboration with school and district partners, rather than acting on preconceived ideas of what the partnership should look like.⁵⁹

LMU has created an even deeper partnership with Playa Vista Elementary School, a STEM-focused transitional kindergarten through grade 5 school within LAUSD that serves as a STEM teaching demonstration site. LMU places teacher candidates at Playa Vista for clinical fieldwork experience, and works closely with the school to identify and develop mentor teachers as well as to raise grant funds that support expanded time for coaching and supervision of teacher candidates. LMU has created a new Playa Vista-based staff position focused on STEM integration for new and existing teachers, and provides teachers and school leadership with professional development and support to implement research-backed best practices for STEM education.⁶⁰ The university is in the process of developing a similar teaching demonstration site, in partnership with a full-inclusion charter school, to prepare teachers to work with all students, including students with disabilities.⁶¹

Based on the lessons and success of these partnerships, LMU is now working to transform its entire traditional preparation program into a clinical rotation model, in which candidates complete clinical field placements in several different school settings—including traditional district, charter, inclusion, and bilingual settings—during their pre-service program, all while working closely with a high-performing master teacher. Coursework will be taught at school sites, rather than at the university, and school personnel will serve as co-teachers alongside university professors. LMU piloted this clinical rotation model in 2015. LMU will also continue to operate one of the state's largest intern programs, preparing interns across multiple jurisdictions in the state through distance, in-person, and Early Completion Option programs. This approach reflects LMU's belief that having a variety of potential pipelines for prospective teachers adds value to the state's schools.

Fresno Teacher Residency

Fresno USD (FUSD) has historically faced difficulty in recruiting both highly effective teachers and teachers who share the backgrounds of the district's predominantly Hispanic students. Improving student achievement in STEM subjects has also been a longstanding challenge for the district. In 2012, with support from the Bechtel Foundation, FUSD launched a 13-month teacher residency program for grade 4-8 teachers in partnership with CSU Fresno. Through this program, prospective teachers complete a yearlong apprenticeship with a master teacher in an FUSD classroom, and earn both a credential and master's degree in education. Candidates received training free of charge, in exchange for a commitment to teach in Fresno USD schools for at least five years.

In 2014, FUSD received a \$7.8 million federal Teacher Quality Partnership Grant to expand its residency program to prepare teachers in grades K-12, with a specific emphasis on STEM teachers. This grant will support preparation of 300 teacher residents over the next five years, with a target for two-thirds of candidates from underrepresented minority groups. Each resident will co-teach with a mentor teacher from the beginning of preparation through the duration of the program, and will receive induction support during residency and for three years afterward. Residents will receive free training and a stipend of about \$12,000 during the program, and must commit to teach in FUSD schools for a certain number of years.⁶²

Recommendations

he districts and their preparation partners mentioned in the previous section demonstrate what a fundamentally different approach to building the supply of quality teachers in California could look like. They also illustrate the diversity of ways in which K-12 schools and preparation programs can partner to improve preparation outcomes. Any approach to deepening partnership between preparation programs and K-12 schools must be locally driven and customized to the needs of both local schools and the pool of prospective teachers. But districts or preparation programs seeking to pursue similar efforts should consider the following strategies:

1 Share and analyze data.

District data on teacher hiring needs and candidate outcomes can help providers improve their programs and match candidate supply to district need:

> Hiring needs: Districts can share information with local preparation partners about their current and projected hiring needs. Programs can use this information to adjust program enrollment levels in response to local need, to inform candidates about the employment opportunities in different communities and credential areas, and to recruit candidates for high-need areas.

> Completer outcomes: Districts already collect and track a wealth of data that can provide insight on program completer outcomes: hiring, placement, and retention data; supervisor feedback or evaluations of completer performance; surveys of students taught by completers; and student learning outcomes. Preparation programs and local districts can enter into data-sharing agreements; they then can use the data to create feedback loops that enable programs to identify areas in which their completers struggle or excel, see patterns in candidate experiences or characteristics that predict classroom outcomes, and use this information to improve the quality of preparation. LAUSD, for example, has established datasharing agreements with several preparation programs to share information on placements and retention, as well as value-added data on students taught by program graduates.

2 Align standards and expectations for program completers.

Districts and preparation programs can work together to align their expectations for what new teachers know and can do. Preparation programs should work with schools and districts to identify the skills, knowledge, and mindsets most crucial to beginning teachers' success, and tailor training to emphasize them. Since preparation programs can't do everything, creating clear expectations for what teachers must learn on the job, rather than in pre-service preparation, can also inform district supports and ongoing professional development for new teachers. As districts adopt instructional frameworks that articulate their understanding of quality teaching, integrating these frameworks into teacher preparation, along with associated tools and rubrics, can help align expectations and provide candidates with a strong foundation to begin work in the district.

3 Co-create new types of programs that address district and candidate needs.

If existing pathways aren't preparing the supply, diversity, or quality of completers that districts want to hire, preparation programs and districts can work together to create new pathways that address those gaps. California districts already partner with preparation programs in offering intern programs. Residency programs, in which candidates work full-time in a mentor teacher's classroom while completing training before earning a credential, are gaining traction in California, although cost can be a barrier. Districts interested in increasing the diversity of their teaching workforce may want to work with preparation programs to craft "grow your own" pathways, which support paraprofessionals, high school students, or parents in becoming teachers. Districts will likely need to cultivate relationships with a variety of preparation providers and, where existing programs fail to meet particular district or candidate needs, to create new programs themselves.

4 Strengthen clinical fieldwork.

Clinical fieldwork is a particularly promising area for partnerships between K-12 schools and teacher preparation, as candidates' clinical field experience must take place at a K-12 school site. Unfortunately, many preparation programs have not developed rich partnerships with local K-12 schools to ensure high-quality clinical experiences. Any effort to improve teachers' clinical preparation should focus at least as much on the quality of candidates' clinical experience as on the quantity of time candidates spend student teaching. Two areas of collaboration are particularly valuable:

- > Ensure effective mentor teachers: Effective clinical preparation includes strong mentor teachers who are experts in both teaching children and supporting adult learning. But selection and assignment of candidates to mentor teachers is often haphazard, with little quality control. Districts or charter schools can establish mentor-teacher roles as a new leadership opportunity for teachers who have demonstrated both effective teaching and adult-leadership skills, and partner with preparation programs to place candidates with district-approved mentor teachers. This approach would ensure the quality of candidates' placement experiences, while also increasing leadership and compensation opportunities for mentor teachers. San Jose USD's most recent teacher contract includes a "model teacher" role along these lines (see sidebar: Teacher Evaluation Systems).
- > Treat student teaching as a recruiting tool: Student teachers and candidates completing clinical fieldwork represent a valuable pool of talent for K-12 schools, yet districts often fail to approach student teaching as a recruiting opportunity. Explicitly structuring student teaching placements as a potential route to full-time employment would help districts meet their hiring needs and also help recruit prospective teachers who want to ensure that their training leads to career prospects. Districts and preparation programs could jointly redesign clinical fieldwork experiences to prepare student teachers to work in the district and enable districts to assess student teachers as potential job candidates.

5 Recruit prospective teachers.

Districts and teacher preparation partnerships shouldn't just be about what happens after candidates start their preparation; they also create opportunities to encourage K-12 students and paraprofessionals to consider teaching. Paraprofessionals often come from the same communities and demographic backgrounds as their students, and have strong cultural competence and relational skills. But they need support to complete bachelor's degrees and teacher preparation coursework. When they do so and become teachers, research suggests that paraprofessionals are effective in the classroom and stay in their jobs longer than other teachers. 63 California already has a number of paraprofessional pipeline programs, including Long Beach's, but other districts could partner with preparation providers to identify paraprofessionals with the potential to become teachers and provide them with streamlined pathways to degrees. Districts could also identify high school students with the desire and potential to become effective teachers, and work with preparation programs to create clearly articulated and supported pathways for them. These might include blended programs that integrate academic coursework, professional preparation, and field experiences leading to a credential,⁶⁴ as well as early-college programs that offer high school students the opportunity to earn dual credits toward a teaching credential during their junior and senior years of high school.65 Early exposure and structured opportunities to explore the teaching profession may help to recruit young people who would otherwise bypass teaching as a career option.

6 Connect preparation with other human capital strategies.

Preparation partnerships can have the greatest potential when they are integrated with broader talent strategies, including:

- > Teacher evaluation systems that use multiple measures to fairly and meaningfully evaluate the quality of teaching (see sidebar: Teacher Evaluation Systems)
- > Use of evaluation results to inform teacher professional development and support continuous improvement
- > Career pathways that provide opportunities for teachers to take on increasing leadership and grow as professionals while remaining in the classroom

As districts continue efforts in these areas, they should ensure that they are connected to strategies that build and develop the pipeline of pre-service teachers.

Teacher Evaluation Systems

Several forward-thinking districts and charter school networks in California are designing and implementing new educator evaluation systems. The College-Ready Promise coalition and San Jose Unified School District offer two distinct examples of how a school system can develop an evaluation system that promotes teachers' professional growth effectively.

The College-Ready Promise is a coalition of four charter management organizations (CMOs): Alliance College-Ready Public Schools, Aspire Public Schools, Green Dot Public Schools, and Partnerships to Uplift Communities. With support from the Bill & Melinda Gates Foundation, these CMOs came together in 2009 under a shared mission: to prepare students for college by improving teacher effectiveness. To do so, members of the College-Ready Promise have committed to evaluating teachers annually with a framework consisting of multiple classroom observations, student academic growth, and feedback from students, families, and peers.

As part of the design process, the four CMOs developed a common definition of highly effective instruction as well as a shared rubric for teacher observations. But because each CMO operates in a unique context, coalition members also have the flexibility to make specific design choices for their model (e.g., frequency of classroom observations, ratio of formal to informal observations). And while all coalition members use multi-tiered evaluation systems that do a better job of differentiating teachers than do traditional binary systems—under which a teacher is either "satisfactory" or not—each CMO's specific rating system is distinct."

In San Jose Unified School District (SJUSD), district leadership and the teacher's union successfully negotiated and adopted—a new educator evaluation and compensation system in 2013. Similar to College-Ready Promise's framework, the SJUSD model has multiple components: formal and informal classroom observations, principal interaction, peer feedback, student and family surveys, and personal reflections. At the end of the evaluation process, a teacher will receive the rating "Meets Standard" or "Does Not Meet Standard." To ensure that schools have the necessary capacity to implement the new system, SJUSD created a "consulting teacher" position that has responsibility for observing and evaluating teachers. The district also developed a six-member Teacher Quality Panel, composed of teachers and administrators, to review key evaluation decisions every year.^{III}

SJUSD and members of College-Ready Promise are using these evaluation results to provide teachers with targeted professional development, support struggling teachers, and identify and reward high-performers. At Aspire, for instance, teachers develop individual improvement goals and participate in customized professional development activities based on their evaluation results. V At Green Dot schools, administrators debrief classroom observations with teachers by providing targeted support in the form of articles, strategies, videos, and modeling." SJUSD has developed two new positions to reward the highest-performing teachers with a significant salary increase, as well as to provide additional mentoring and/or leadership responsibilities."vi A "model teacher" is available for informal

Continued on next page

Sidebar 2 continued

mentoring support for peer teachers, but continues to hold a full-time classroom position. A "master teacher" goes one step further to take on additional leadership responsibilities outside the classroom (e.g., curriculum design). At the other end of the spectrum, SJUSD teachers with an unsatisfactory rating must go through an improvement plan under the guidance of a mentor teacher, and are not eligible for an automatic salary raise. If they do not improve after one year of support, they are subject to dismissal.

These types of performance-management processes are vital to making evaluation results meaningful—and to ensuring that teacher evaluation is no longer a cursory classroom observation that takes place once a year, but rather a process that provides teachers with the knowledge and concrete support they need to be more effective.

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State Policy Recommendations

The core work of strengthening teacher preparation needs to happen at the local level, but state policies can support—or hinder—such efforts. The role of state policy should be to create the incentives and necessary conditions, collect and share data on outcomes, and then get out of the way.

- 1 Hold preparation programs accountable for how they partner with and meet the needs of consumers, including both districts and teacher candidates.
 - Strong partnerships between teacher preparation and K-12 public schools exist in California. In the absence of concrete policy mechanisms supporting such partnerships, however, they are the exception and not the rule. In overhauling its approach to educator preparation accreditation, CTC should raise expectations for partnerships between preparation programs and local schools, and assess the quality and depth of partnerships as part of its program accreditation process. For the most part, this does not mean asking preparation programs to do more, but rather placing responsiveness to consumer needs at the center of how CTC implements and evaluates programs against its existing standards. This would include:
 - > Solicit input from programs' K-12 partners as part of the program accreditation process
 - > Include on program review teams staff from local schools and districts that are major consumers of the preparation program's graduates
 - Include visits to K-12 partners and clinical field sites as part of the accreditation visit
 - > Require preparation programs to demonstrate how employer needs inform the design and implementation of their programs and the recruitment and selection of high-quality and diverse candidates
 - > Require preparation programs to identify the largest district employers of their graduates and to enter into agreements with these districts in order to share data about performance of program completers, thus creating a feedback loop to improve program performance
 - > Incorporate data collected through such data-sharing agreements in CTC's review of program outcomes
- 2 Hold districts accountable for developing their own preparation pipelines.
 - The need to secure a high-quality workforce should be the biggest incentive for districts to work with preparation programs, but state policies can also encourage districts to take greater responsibility for building their teacher pipelines. Under the LCFF, districts are required to develop a Local Control Accountability Plan (LCAP) that describes how they will use LCFF funds, but, as noted above, LCAP's teacher requirements focus exclusively on ensuring that teachers are "fully qualified" and

"appropriately assigned" to teach in the content areas for which they are prepared. Rather than focusing exclusively on credentials, the state and county offices of education should leverage the LCAP process to encourage districts to develop comprehensive talent strategies—from pre-service partnership with preparation programs, and on through hiring, induction, evaluation, retention, ongoing professional development, and dismissal. This approach would encourage districts to take responsibility for their own teacher talent pipelines and to partner with preparation programs. Shifting focus from credentials to human capital development would also eliminate the undeserved stigma on intern programs.

3 Support development of integrated human capital strategies and diverse preparation pathways.

State policies can help create incentives for preparation programs and K-12 employers to work together. But some existing policies also create barriers to fruitful partnerships, by limiting preparation programs' flexibility to radically change how they prepare teachers or to develop new models and pathways in response to districts' and candidates' needs. To address these barriers, the state should:

- > Eliminate barriers to creation of new types of pathways: California's current policies prevent creation of certain types of teacher preparation programs—most notably undergraduate programs—that could provide more seamless pathways for some candidate populations, particularly high school students and non-collegeeducated adults seeking to become teachers. California should reduce barriers to creation of blended models and gradually eliminate the ban on undergraduate preparation programs, beginning with a limited pilot for a small number of undergraduate programs that provide dual certification in special education and general education.
- > Ensure that revised preparation standards adopted by CTC are truly streamlined: Not all input requirements are bad, and some may be necessary to ensure a basic standard of program quality. But given the limited evidence that a teacher's classroom effectiveness is meaningfully affected by the inputs that typically are the focus of teacher preparation policy, CTC should err on the side of reducing input requirements and increasing flexibility for innovation.
- > Offer waivers from state requirements: CTC or the legislature should also create a process to waive current preparation program requirements. Any waiver that would allow changes developed in partnership with a district, charter school, or charter network should be presumed to merit approval unless it poses a significant risk to the health or safety of candidates or children, or would violate state and federal reporting requirements, requirements mandated by federal law, or state or federal laws that protect civil rights and prevent discrimination.

> Resist efforts to restrict districts' ability to build integrated talent management systems: As noted above, K-12-preparation partnerships have the greatest potential when they are integrated with broader school or district human capital strategies, which a number of California districts have been working to implement. California should ensure that state policies do not create barriers to districts' ability to develop these broader human capital strategies or to share data generated from teacher evaluation systems, student surveys, or other sources to inform continuous improvement.

4 Leverage existing resources to support preparation pathways.

Developing new preparation pathways targeted to specific state needs will require resources, both to design and launch new programs and, in some cases, to sustain them. Major new state investments in teacher preparation pathways are unlikely. Many of those that were created in the 1990s and 2000s have been eliminated or folded into the Local Control Funding Formula, and the state's recent decision to allocate \$500 million in new teacher effectiveness funds to districts, rather than splitting them between districts and preparation programs, suggests than any future investments in teacher quality are likely to flow through districts rather than directly to preparation providers. But the state can support efforts to leverage existing local, federal, and state funds to support improved teacher preparation:

> LCFF Funds: Historically, underfunded California districts have had few resources to invest in developing their teacher pipelines. As districts receive new funds through the Local Control Funding Formula, there is an opportunity to use these funds to cultivate their supply of high-quality teachers—but many districts are unsure whether or how they can use funds for this purpose. The state should provide clear guidance around when and how districts can count teacher recruitment, preparation, or other talent development activities towards spending on increased or improved services for low-income and ELL students. Since these students are most likely to be assigned to emergency-certified, long-term substitute, or lowperforming teachers, state policies should allow districts with shortages to consider investments in building teacher supply as investments in these students. Eligible activities could include creating new pathway programs in partnership with districts, paying stipends or incentives to residents or teacher candidates placed in highpoverty schools, and paying stipends or salary enhancements to qualified mentor teachers working with residents, student teachers, or interns. However, these programs must be designed to retain program completers in high-poverty schools, rather than making these schools a training ground for teachers who will migrate to lower-need schools once they gain experience.

- > ESEA Title II: Title II of the federal Elementary and Secondary Education Act provides funding for states and school districts to improve the quality of teaching. In fiscal year 2014, California received \$248.6 million in funding through this program-95 percent of which flowed directly to districts, and 2.5 percent of which was available for statewide efforts to improve teacher quality.⁶⁶ Although states and districts may use these funds for a variety of activities, including recruiting and training teachers, establishing alternative-route programs, and supporting mentor teachers, ⁶⁷ the vast majority of funds are used for class-size reduction and low-value, single-shot professional development activities. 68 California should encourage districts to shift their use of ESEA Title II funds from low-value professional development activities to higher-value activities such as developing the district's pipeline of teachers. State policymakers could incentivize districts to invest in building the teacher pipeline by providing matching funds for districts that choose to use their Title II funds in this way, and could also use state Title II funds to support the creation of new teacher pathways that address unmet needs statewide.
- > New Teacher Effectiveness Funds: 2015–16 budget legislation allocates \$500 million for California school districts to invest in teacher and administrator effectiveness over the next three years. Allowed uses of these funds include supporting and mentoring new teachers and leaders, professional development, and coaching. State policymakers should establish guidance and procedures that allow and encourage districts to use these funds to support teacher recruitment and preparation pathways, as well as mentoring and support for teachers who have already completed preparation. Districts should use funds to build comprehensive teacher preparation and development systems that integrate preparation, evaluation, support, and professional development and advancement, and should not use funds for low-impact activities like one-shot professional development workshops.
- > Linked Learning: California has invested \$500 million in the Career Pathways Trust to create sustained programs that link K-12 public schools, business, and community colleges to prepare students for the 21st century workplace. Most of these grants seek to prepare students for high-skill technical careers that require postsecondary training and credentials but not a bachelor's degree. Nevertheless, the state could choose to use these funds to create pathways for talented high school students, particularly those from underrepresented backgrounds, to become teachers.

5 Publicize and use data on teacher supply and demand to recruit prospective teachers to the profession.

To respond effectively to teacher shortages, California needs good data on both the demand for teachers from its schools and districts and the supply produced by preparation programs. Demand data would enable the state and its preparation programs to know where California needs more teachers—both geographically and in which content areas—as well as where it does not, and to craft incentives to address gaps in supply. Transparent demand data may also boost teacher supply by showing potential teachers the need that exists and helping them choose courses of study most likely to lead to stable employment opportunities.

The California Department of Education already collects data on districts' projected hiring needs, which provides a rough proxy of the state's overall hiring needs, needs in each district and county, and needs in specific subject areas. Unfortunately, the data is not widely publicized or easily accessible to programs and candidates, nor is it used by CTC or preparation programs to align program offerings to district needs.⁶⁹

California should make data and analysis on district demand for teachers much more transparent and accessible for key stakeholders. Specifically, it should:

- > Incorporate data on local, regional, and statewide demand into CTC's teacher preparation data dashboards; preparation candidates should be able to find information in one place about both preparation programs and the projected demand for teachers in specific regions and geographic areas
- > Use demand data to develop a marketing campaign that shows prospective candidates the need for teachers in the state, and encourages them to consider teaching in high-need content and geographic areas
- > Use data to develop targeted recruitment strategies and incentives focused on specific populations and content areas
- > Conduct outreach to recruit individuals who were laid off or unable to find jobs during the recession, and eliminate barriers that might prevent them from reentering the profession

Conclusion

he challenge posed by teacher shortages also presents an opportunity: to harness the attention they attract to foster a fundamentally different approach to teacher preparation, and thus to build a high-quality and diverse teacher workforce for the state's next generation of students.

Whether California takes advantage of this opportunity will depend on the choices that key stakeholders—state policymakers, preparation programs, school districts, and charter schools-make today. They can ask districts and charter schools to take greater responsibility for cultivating their own teacher pipelines, and give them the flexibility to do so. They can demand that preparation programs put consumer needs at the core of their approach to teacher preparation; support partnerships between districts or charter schools and preparation providers; and integrate teacher preparation with broader human capital strategies. Without such efforts, teacher shortages will continue to beset the state. With them, however, California can increase both the supply and the quality of teachers to meet the needs of its diverse schools and students.

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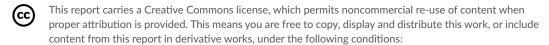
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