



California Teachers and COVID-19

How the Pandemic Is Impacting
the Teacher Workforce

Desiree Carver-Thomas, Melanie Leung, Dion Burns

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Executive Summary

California will need a stable, high-quality teacher workforce to weather the COVID-19 crisis and support student learning in the coming years. However, persistent and worsening teacher shortages threaten the state's ability to meet that need. Teacher shortages, which are often most acute in high-need fields and high-need schools, more severely impact students from low-income families and students of color, with significant implications for school stability and student achievement. Early evidence suggests that the effects of the COVID-19 pandemic could further worsen California's already-critical teacher shortages.

Through interviews of a sample of California superintendents and human resources administrators, this study investigates the role COVID-19 has had on key aspects of teacher supply and demand, including resignations, retirements, turnover, vacancies, and new teacher credentials. Leaders from eight of the largest California districts were interviewed, representing districts that serve nearly 1 in 6 California students. In addition, the study included leaders from nine small, rural districts because research shows these types of districts often have additional challenges recruiting and retaining teachers. Five key findings emerged from an analysis of common themes raised in these interviews.

Key Findings

- **Teacher shortages remain a critical problem.** Most districts have found teachers to be in short supply, especially for math, science, special education, and bilingual education. Shortages are especially concerning as a return to in-person instruction will require even more teachers to accommodate physical distancing requirements. Most districts are filling hiring needs with teachers on substandard credentials and permits, reflecting a statewide trend of increasing reliance on underprepared teachers. These teachers, who have not completed preparation for teaching, are likely to be less knowledgeable about how to close growing learning gaps caused by the pandemic crisis. In addition, rising pension costs may contribute to some districts relying on substitute teachers and paraprofessionals to meet increasing staff needs, rather than making additional teacher hires.
- **Teacher pipeline problems are exacerbated by teacher testing policies and inadequate financial aid for completing preparation.** Many districts attributed shortages to having a limited pool of fully credentialed applicants, with more than half reporting that testing requirements and lack of financial support for teacher education pose barriers to entry into teaching.
- **Teacher workload and burnout are major concerns.** The transition to online and hybrid learning models has had a steep learning curve and poses ongoing challenges that have been a primary contributor to some teachers' decisions to retire earlier than previously planned. With district leaders estimating that teacher workloads have at least doubled, many were concerned that the stressors of managing the challenges of the pandemic on top of the challenges of an increased workload could lead to teacher burnout and increased turnover rates.

- **Growing retirements and resignations further reduce supply.** In some districts, retirements and resignations are contributing to shortages, while in others, these retirements and resignations offset the need for anticipated layoffs due to expected budget cuts this school year. District leaders anticipate higher retirement rates next year, which could exacerbate shortages.
- **Teacher residencies and preparation partnerships have proved important to recruitment.** Many districts have expanded these programs in the past several years by leveraging state investments in the teacher workforce. Districts with teacher residency programs especially noted the benefits of having some certainty about the number and quality of teachers they can expect to hire as those teachers complete their yearlong preservice programs.

Policy Considerations

The failure to recruit and retain well-prepared teachers undermines student achievement, as does the high rate of churn in schools that hire disproportionate numbers of inexperienced and unprepared individuals. These schools are typically those that serve concentrations of students of color and students from low-income families.

To address these inequities and ensure a strong and stable teacher workforce, policymakers should both support the continued development of a well-prepared teacher workforce in California and attend to the immediate needs of districts staffing schools through an ongoing crisis. In recent years, the state has begun to fund high-retention pathways into teaching—service scholarships, teacher residencies, and Grow-Your-Own programs—that help prevent shortages by providing fully prepared teachers who tend to stay in the profession longer. Although many of these programs have been supported with one-time funds, some have begun to yield modest results. Continued investment is needed to sustain these gains and prevent future shortages. To that effect, policymakers can consider the following policy recommendations:

1. Sustain and deepen investments in high-retention pathways

California districts need a larger pool of fully certified teachers who will stay in the profession. The state should institutionalize existing investments in high-retention pathways, such as California’s Teacher Residency Program and Classified School Employees Credentialing Program, that produce well-prepared teachers who stay in the profession at higher retention rates. The teacher residency program is making progress in meeting the needs of California districts for teachers in shortage areas and teachers of color. Still, many residents struggle financially, and these programs could potentially recruit even more candidates by providing more robust financial supports that defray living expenses during the residency year.

2. Provide financial support to teacher candidates

California can also build the teacher pipeline by providing financial support to teacher candidates who will teach in high-need subjects and locations. Service scholarships like the Golden State Teacher Grant Program can support both teacher recruitment and retention, which are key to solving teacher shortages.

3. Streamline teacher licensure requirements

District leaders explained that teacher testing requirements reduce the pool of fully credentialed teacher applicants. As California requires prospective teachers to pass three to four separate tests to gain a license, and as testing vendors have not been able to offer most of these tests for an entire year, the costs and frustrations of the testing process could exacerbate shortages by preventing prospective teachers from entering programs and gaining full credentials. The state can streamline teacher licensure requirements by allowing candidates to demonstrate their competency through coursework-based options and the rigorous performance assessment already required.

4. Create sustainable teacher workloads

District leaders consistently described concerns about teacher burnout and the likelihood of increased resignations; however, few districts reported hiring more staff to reduce workloads or ratios during the pandemic. California has long had one of the highest ratios of students to teachers, counselors, nurses, principals, and other school staff. Investments in additional personnel and prevention of layoffs will be critical to supporting teachers, creating a sustainable workload, and reducing burnout.

5. Support teachers with adequate substitute staffing

During the pandemic, substitute teachers have been key to supervising small student cohorts or filling in for teachers who cannot teach in person due to health concerns or a need to quarantine. Lack of substitutes will make teacher working conditions difficult, especially when colleagues are asked to cover for those who are absent. Districts may need to consider increasing their daily rates to attract more qualified substitutes into their pools. In addition, the state could support districts in need of long-term substitutes by funding and providing the 45 hours of training those substitutes must complete to be eligible for the Teaching Permit for Statutory Leave (TPSL).

6. Invest in educator development and support

Districts should be prepared to support staff to effectively meet student needs during the pandemic and beyond while addressing the significant workload burden on teachers. High-quality professional learning can support teachers' skills for teaching online, as well as implementing trauma-informed practices, supporting students' social and emotional learning, and managing their own stress.

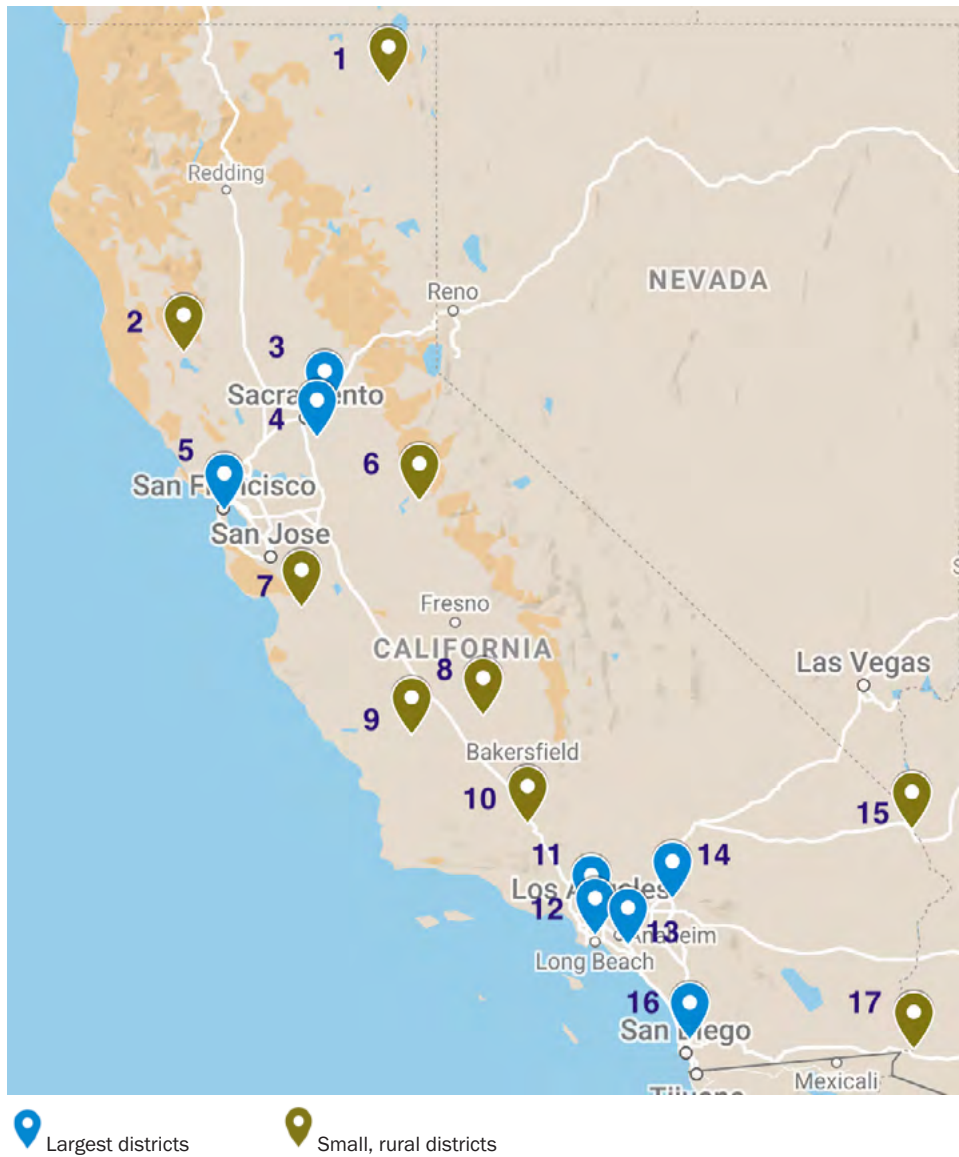
District leaders described going above and beyond to continue to educate California students in the midst of a global pandemic. Still, ongoing teacher shortages make that a challenge. As more districts begin to move to in-person instruction, many expect shortages to worsen even further, and some districts are already experiencing upticks in retirements, resignations, and leaves of absence. Investing in making service scholarships, residencies, and other high-retention pathways more broadly available, including in rural areas, is a critical need, as is streamlining pathways into teaching so that competencies can be demonstrated through coursework as well as tests. Without such strategies, most districts will continue to close gaps by hiring teachers on substandard credentials and permits, which undermines staff preparedness, school stability, and student learning.

Introduction

In the ongoing debates about how California schools can provide high-quality education to the state's students in the face of the unparalleled COVID-19 crisis, it is clear that California needs a stable, high-quality teacher workforce. Unfortunately, years of persistent and worsening teacher shortages threaten the state's ability to meet that need.¹ Teacher shortages, which are often most acute in high-need fields and high-need schools, more severely impact students from low-income families and students of color, with significant implications for student achievement.² Reports from across the country of the pandemic exacerbating long-standing teacher shortages suggest California's already-critical shortages could worsen.³

Through interviews conducted in the fall of 2020 with a sample of California superintendents and human resources administrators, this study investigates the impact district leaders perceive the COVID-19 pandemic has had on key aspects of teacher supply and demand, including resignations, retirements, turnover, vacancies, and new teacher credentials. (See appendix for data and methodology.) We interviewed leaders from 8 of the 11 largest districts in California (see Figure 1). These eight districts educate nearly 1 in 6 California students (916,354 out of 6,163,001).⁴ We also interviewed leaders from nine small, rural districts across the state, as research shows these types of districts often have additional challenges recruiting and retaining teachers.⁵

Figure 1
Map of Interviewed Districts



Source: Google Maps, by Google.

Table 1
Interviewed Districts

| Unified School District | County | Student Enrollment (2019–20) | Students Eligible for Free or Reduced-Price Meals (2019–20) |
|--------------------------|-----------------|------------------------------|---|
| 1 Modoc Joint | Modoc | 857 | 63% |
| 2 Upper Lake | Lake | 844 | 80% |
| 3 San Juan | Sacramento | 39,740 | 54% |
| 4 Elk Grove | Sacramento | 63,660 | 53% |
| 5 San Francisco | San Francisco | 52,811 | 50% |
| 6 Big Oak Flat-Groveland | Tuolumne | 298 | 57% |
| 7 Aromas-San Juan | San Benito | 1,028 | 59% |
| 8 Alpaugh | Tulare | 336 | 78% |
| 9 Shandon Joint | San Luis Obispo | 284 | 74% |
| 10 El Tejon | Kern | 754 | 68% |
| 11 Los Angeles | Los Angeles | 483,234 | 80% |
| 12 Long Beach | Los Angeles | 71,712 | 65% |
| 13 Santa Ana | Orange | 47,780 | 85% |
| 14 San Bernardino City | San Bernardino | 48,755 | 89% |
| 15 Needles | San Bernardino | 998 | 76% |
| 16 San Diego | San Diego | 102,609 | 57% |
| 17 San Pasqual Valley | Imperial | 654 | 94% |

Note: Excludes directly funded charter schools.

Source: LPI analysis of California Department of Education. (2020). California Longitudinal Pupil Achievement Data System Unduplicated Pupil Count [Data file and codebook]. <https://www.cde.ca.gov/ds/sd/sd/filescupc.asp> (accessed 01/06/21); California Department of Education. (2020). Public Schools and Districts [Data file and codebook]. <https://www.cde.ca.gov/ds/si/ds/pubschls.asp> (accessed 01/06/21).

This report describes five findings based on common themes that arose in our interviews:

1. Teacher shortages remain a critical problem.
2. Teacher pipeline problems are exacerbated by teacher testing policies and inadequate financial aid for completing preparation.
3. Teacher workload and burnout are major concerns.
4. Growing retirements and resignations further reduce supply.
5. Teacher residencies and preparation partnerships have proved important to recruitment.

The COVID-19 Context

California districts are making large-scale efforts to create supportive teaching and learning environments during a challenging and unprecedented time. Still, districts continue to face significant difficulties in providing for all student and staff needs. Difficult conditions brought on by the pandemic, and the extent to which the state and districts are able to adequately respond to these conditions, influence the challenges and attractions of teaching as a career during this critical moment and beyond.

Most of the districts sampled (16 out of 17) were operating using distance or hybrid learning models at the time of their interviews. One district reported operating in person. Many districts described moving between hybrid and full distance learning instructional models since the school year began as they responded to state and local regulations and to changes in the needs of their school communities. Notably, the evolving scientific knowledge about COVID-19 has stimulated ongoing changes to state and local health department guidance. For example, in response to growing COVID-19 cases after the 2020 Thanksgiving holiday, several districts transitioned from hybrid learning to distance learning, and districts with plans to return to in-person learning delayed their expected date of return or indefinitely canceled plans to return.

Districts operating with the distance learning model often also host small-group cohorts in person for students who would particularly benefit from in-person support, such as students with special needs, English learners, and students identified as being disengaged from virtual learning, as well as students who lack access to computers and a stable internet connection. The degree of support that these students receive varies greatly. Some districts offer one-on-one support or appointment-based learning with certified teachers to supplement distance learning, while others arrange for students to participate in distance learning modules on campus, supervised by support staff who help with connectivity issues. Only one leader—of a small, rural district—reported that the district had hired additional teachers to accommodate these small-group cohorts. All other districts relied on substitutes, paraprofessionals, or after-school program staff to supplement the efforts of teachers.

Leaders in districts offering hybrid learning described having cohorts of students rotating into in-person classes about twice per week while their counterparts were attending class virtually. The specific logistics for these models vary, but for the most part, teachers are planning instruction for the portion of students learning in person as well as independent work for those at home. In rare cases, teachers are teaching students in person and online simultaneously.

District leaders described multiple efforts to provide teachers and students with the tools, support, and protocols to continue teaching and learning safely throughout the ongoing pandemic. Most districts noted that they received mixed input from their teachers and families about whether to proceed with distance learning or return to in-person learning and about what measures would support teachers to keep teaching. While many teachers told district leaders that it was difficult to adapt to distance learning and that they preferred to teach in person, they were also concerned about their safety. Several districts mentioned that a significant proportion of their teachers are age 50 or older and are either in high-risk categories themselves or have family members who are. District leaders are in the difficult position of attempting to meet the many, often-conflicting needs of students, staff, and families in their communities.

Several districts noted they made large investments in infrastructure, technology, and supplies using federal CARES Act funds. These districts are making efforts to source personal protective equipment and create safer classrooms by, for example, improving their heating, ventilation, and air conditioning systems and creating new cleaning protocols. Some districts are providing teachers professional learning on using new technology to better facilitate distance learning.

Most district leaders also described providing computers and access to the internet through hotspots and access to high-speed internet. Districts continue to provide meals to students and find ways to do that safely and conveniently, including for students who live at a distance from school sites. One small, rural district mentioned having outreach consultants—classified staff, including paraprofessionals—who pay home visits to students to deliver learning packets and meals, as well as to assist with any technical difficulties that students may be facing.

At the same time, most districts indicated that they have encountered challenges with meeting the needs of students and staff. Some rural areas, for example, do not have the technical infrastructure to support the high-speed internet needed for distance learning, even when districts are able to provide computers and hotspots.

One superintendent of a rural district described working with the local internet service provider to provide students with “the largest, fastest bandwidth that was available” in a district where about 85% of students did not have internet access before the pandemic. The superintendent said, “It took weeks to get everybody onboard.”

Superintendent Rauna Fox of San Pasqual Valley Unified School District, a rural district located on the border of Arizona that has about 600 students, said even though she issued over 250 hotspots for families without internet access, connectivity was too slow to support distance learning.

Even our own internet access here at the district office ... will lag. And when we put the hotspots out in the system, now you're overloading the Verizon network, so it slows down too.... And then I have probably another 30 to 40 [families] that, no matter what we do, their internet access doesn't work.

Even large districts that benefit from economies of scale found the transition to distance learning difficult and costly. An administrator in a large urban district explained:

It took a lot of quick effort to effectively transition to a distance learning paradigm. And there [are] a lot of logistics that have to go into that in terms of learning management systems, IT infrastructure, [and] technological access for students and for staff.

The key findings that follow indicate that these and other challenges of teaching and learning in the COVID-19 era impact the California teacher workforce.

Key Findings

Teacher Shortages Remain a Critical Problem

One of the best indicators of a shortage is the prevalence of substandard credentials and permits, as districts are only supposed to be authorized to hire these underprepared teachers when a suitable, fully credentialed teacher is not available.⁶ (See “California’s Growing Reliance on Substandard Credentials and Permits” on p. 8.) Substandard credentials and permits include intern credentials and emergency-style permits and waivers. Interns serve as the teacher of record while enrolled in a teacher preparation program. Teachers on emergency-style permits and waivers typically have not demonstrated subject-matter competence and oftentimes have not entered a teacher preparation program.⁷

Previous research shows that teachers on substandard credentials and permits negatively impact student achievement and are more likely to teach in schools serving more students from low-income families and students of color.⁸ Further, their high turnover rates perpetuate shortages, as schools are often left replacing these teachers year after year.⁹ Teacher shortages pose an additional challenge in the context of the COVID-19 pandemic because in-person learning requires a greater number of teachers to accommodate physical distancing. Having a limited supply of qualified teachers could stall district plans to reopen school sites for in-person learning.

Having a limited supply of qualified teachers could stall district plans to reopen school sites for in-person learning.

Teacher shortages remain and are especially concerning in math, science, special education, and bilingual education. All of the districts were hiring individuals who were not fully credentialed, which indicates a shortage of teachers overall. Many district leaders also expressed concern about particular subject areas. Most districts (9 out of 17 districts) reported having shortages in math and science, and 7 out of 17 reported shortages in special education.

Some districts also noted that teaching positions for the less frequently taught foreign languages, such as Mandarin or Japanese, were difficult to fill. While the small, rural districts interviewed did not have the student enrollment numbers to support dedicated bilingual programs, half of the large districts (4 out of 8) said they had shortages in bilingual education.

Districts often address shortages by increasing class sizes, eliminating courses, and hiring teachers on substandard credentials and permits, which is typically viewed as a necessity to keep the educational program intact. One rural district superintendent described the challenge of assigning a teacher on an emergency-style permit to a math position this year:

She does not have the depth of math knowledge that you have when you have a degree. She’s getting through it. Kids are struggling a little bit, but if I didn’t have her, we wouldn’t be offering it. I don’t know what we’d be doing.

Persistent shortages in small, rural districts are especially severe and compounded by the challenges of the pandemic. This was particularly evident among those serving more students from low-income families. Superintendent Sara Haflich of El Tejon Unified School District in Kern County—a district where nearly 70% of students are eligible for free or reduced-price meals—described the district’s chronic shortages this way:

We are typically a district [where] when we have openings, we have to utilize interns. We’re kind of outside of a city where it is sometimes difficult to fill those positions with fully credentialed teachers. The last, probably, four positions that we filled have been with interns. It’s not necessarily because of COVID. That’s just our past history over the last couple of years.

In Modoc Joint Unified School District, a rural district on the Oregon border, Superintendent Tom O’Malley explained how shortages imperil plans for accommodating in-person learning:

We were still looking for people up until the day school started.... It’s hard to develop a plan when you don’t have the staff to implement that. So even if we had more classrooms and we’re going to hire more staff to make smaller cohorts, we don’t have the bodies. They never showed up. We never stopped hiring.

Leaders of small, rural districts described having distinct circumstances that make it difficult to recruit and retain teachers, with state licensure processes playing a key role. They described having trouble partnering with distant teacher preparation programs and recruiting teachers to rural areas with fewer amenities than suburban or urban locales. Several of the small, rural districts were hours from the nearest college and seldom receive requests to host student teachers. They continue to rely on recruiting teachers from their local communities, often on substandard credentials and permits. For example, in Modoc Joint Unified, which is facing severe teacher shortages, a third of the teachers came through an internship program. O’Malley says, “We live off interns.” The district, in a remote Northern California community, has recruited local parents into teaching through internships and emergency-style permits. Rural districts could benefit from teacher pathways that recruit local community members into teaching through comprehensive preservice preparation pathways.

Many district leaders are worried about future shortages given the considerable uncertainty about the long-term impacts of the pandemic. For example, Paul Oropallo, Assistant Superintendent of Human Resources at San Juan Unified School District near Sacramento, explained that they were able to fill math and science positions for this school year, but this subject area “is one that we barely [squeak] by on.” He expressed concerns for next year, when he expects an increase in hiring due to a spike in retirements:

I expect next year will be a challenging year for us because I don’t think the pool is as deep as it has been in the past few years. And I do believe we’re going to have a large amount of hiring that we’re going to need to do.

According to D’Andre Ball, Director of Certificated Staffing at San Francisco Unified School District, the district was “able to fill 99% of [its] vacancies” this school year. However:

It wasn’t a walk in the park.... Yes, we were able to fill the vast majority of our vacancies, but we still are in the teacher shortage.... It’s always a challenge to get to what we get to.

Every district hired teachers on substandard credentials and permits this year. Most (8 out of 14 districts)¹⁰ hired about the same number of teachers on substandard credentials and permits this year as in recent years. Four districts said they hired more of these underprepared teachers this year compared to recent years, and just two districts said they hired fewer. In addition, 6 out of 17 districts reassigned teachers to subjects for which they were not fully certified. Four of these were small, rural districts. Leaders in these districts indicated this was a common practice in order to be able to provide secondary electives with their small teacher workforces.

Where districts have to rely on individuals with substandard credentials and permits to fill vacant positions, some reported using these hires to meet other recruiting goals, such as hiring from within their local communities.¹¹ Absent sufficient funding for robust preservice preparation programs in rural communities and preservice programs that can recruit more teachers of color, for example, many districts rely on substandard credentials and permits to meet those staffing priorities. A leader in a small, rural district explained, for example, “A lot of the interns that we do hire are students who went to the schools here and grew up in this area.”

Absent sufficient funding for robust preservice preparation programs in rural communities and preservice programs that can recruit more teachers of color, for example, many districts rely on substandard credentials and permits to meet those staffing priorities.

Likewise, a human resources administrator in a large, urban district noted that the district hired individuals on emergency-style permits as part of its strategy to hire more staff members of color, who often encounter barriers to entering the profession through traditional pathways:

We recognize, in particular, if we want to diversify our workforce, [if] we want to hire folks from our communities, ... we have to recruit in a different way.

Additional state investments in affordable and accessible comprehensive teacher preparation pathways would be needed to allow districts to meet their hiring needs and priorities without relying on underprepared teachers who exacerbate shortages.

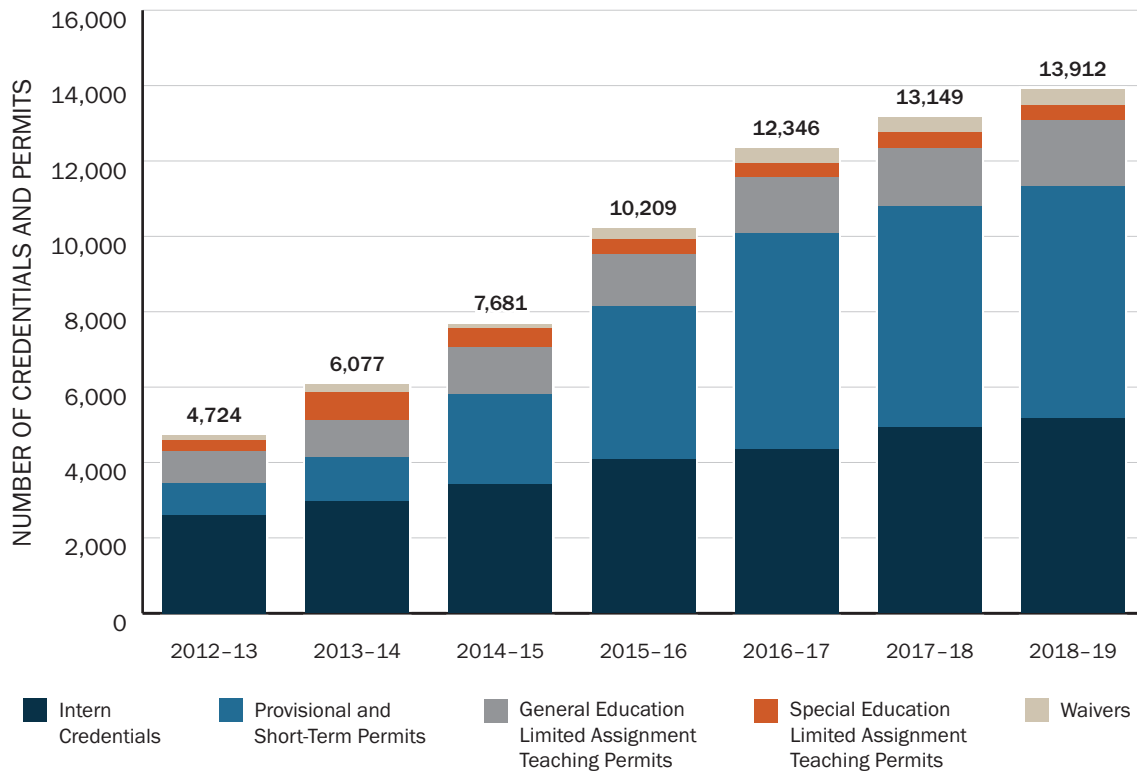
California’s Growing Reliance on Substandard Credentials and Permits

Statewide, hires of underprepared teachers with substandard credentials and permits have continued to rise, with nearly 14,000 issued in 2018–19 (see Figure 2). Recent research in California shows that, controlling for other variables, the more of these underprepared teachers a district employs, the lower its students’ achievement, an effect that is even more pronounced for African American and Latino/a students.¹² These teachers typically have had little or no student teaching, and many have not yet taken any courses in how to teach diverse learners, create curriculum, or evaluate learning. Teachers on substandard credentials and permits are generally concentrated in schools that serve more students of color and students from low-income families.¹³ Although districts often recruit these underprepared teachers to help fill the gaps caused by teacher

shortages, they typically have higher turnover rates that can further exacerbate shortages.¹⁴ The growth of emergency-style provisional and short-term permits has skyrocketed, increasing more than sevenfold since 2012. Intern credentials have nearly doubled.

State credential data indicate that internship pathways are quickly supplanting traditional pathways that require preservice preparation at an institution of higher education. Just 53% of new credentials issued in 2018–19 went to teachers prepared through California’s traditional pathways, compared to two thirds of new credentials in 2012–13.¹⁵ Meanwhile, a quarter of new credentials went to teachers prepared through a California internship, up from 13% in 2012–13.¹⁶ In special education, credentials issued to California interns already surpass those issued to traditional pathway teachers at a rate of 2 to 1.¹⁷ California’s substandard credential and permit pathway, originally intended to be an option of last resort, has increasingly become a fixture in the teacher workforce, creating an increasingly underprepared workforce that has not had the opportunity to learn to teach students from diverse backgrounds.¹⁸

Figure 2
Substandard Credentials and Permits, 2012–13 to 2018–19



Source: California Commission on Teacher Credentialing. (2020). Teacher supply: Interns, permits and waivers [Data dashboard]. <https://www.ctc.ca.gov/commission/reports/data/edu-supl-ipw> (accessed 12/16/20).

Many district administrators described a severe substitute teacher shortage that puts additional strain on the teacher workforce. During the pandemic, substitute teachers have been key to supervising small student cohorts or filling in for teachers who cannot teach in person due to health concerns or a need to quarantine. Notably, a few districts mentioned that the growing need for substitutes could also be related to rising teacher pension costs statewide, which produce considerable strain on district budgets and their staffing decisions. Requirements for districts to contribute a greater share of teacher pension costs¹⁹ might be a factor in the choice some districts have made to rely on substitute teachers and paraprofessionals to meet increasing staff needs, rather than making additional teacher hires.

Many districts rely on retired teachers to substitute teach, and administrators cited both health concerns and technology issues as primary reasons for dwindling substitute pools. El Tejon Unified Superintendent Sara Haflich said, for example, that having to learn the district’s distance learning platforms, like Canvas and Zoom, could be deterring substitutes:

It’s not the same as just leaving a set of lesson plans on your desk and a substitute coming in and running the class.... How do we expect a substitute teacher to work from home? They don’t have their laptop; they don’t have everything set [up].

Like several of the districts interviewed, Long Beach Unified School District has found a significant drop in available substitutes. David Zaid, Assistant Superintendent of Human Resource Services, explained:

We have roughly 1,100 substitutes in our system.... When we sent out the survey to see how many subs would be willing to sub in our schools even with distance learning, we got a response of about 450. When you think about going from 1,100 all the way down to 450, that was a significant amount.

Districts are relying on substitutes to fill in for both day-to-day absences and for teachers on leaves of absence. Several district leaders stated that they have noticed an increase in the number of teachers taking leaves of absence. Assistant Superintendent Zaid estimated leaves this year increased by about 35% in Long Beach Unified. District leaders indicated that the number of teachers taking leaves of absence may further increase as they begin to transition to in-person learning and as teachers with health concerns choose not to return immediately.

A dearth of both day-to-day and long-term substitutes to fill in for teachers on extended leaves of absence means, in some districts, teachers have to cover classes for their absent colleagues. One superintendent noted, “If I have two or three teachers that are out, we have to cover classes, or the [administrator] has to go in and teach.” Having to cover for colleagues could add to the already-considerable workload teachers are currently carrying. This is one of many sources of teacher stress, which are discussed in greater detail below. Further, a lack of substitute teachers on top of considerable teacher shortages could upend efforts to reopen schools for in-person learning.

A lack of substitute teachers on top of considerable teacher shortages could upend efforts to reopen schools for in-person learning.

Teacher Pipeline Problems Are Exacerbated by Teacher Testing Policies and Inadequate Financial Aid for Completing Preparation

While each district encountered a unique set of challenges to fully staffing its schools, nearly all are experiencing a limited pool of fully credentialed applicants. State testing policies for licensing teachers and inadequate financial aid for completing teacher preparation reduce the pipeline of qualified teachers across all types of districts in our sample.

Barriers to entry limit the pool of candidates. Leaders from 11 districts attributed this limited pool of credentialed applicants to significant barriers to entry into teaching, including the prohibitive cost of preparation, the lack of student aid, and the number of licensure exams. A human resources leader in a large, urban district put it this way:

We make it awfully unattractive for folks. We say, “You need to spend loads of money. You’re going to need to spend a whole boatload of time, and then you may still not be successful at the exams. And then, by the way, at the end of the day, you’re going to be entering into a profession where the starting salary is \$50,000 a year, and you may owe \$100,000 in student loans.”

Although some large districts have developed teacher residencies and other pathways that subsidize preparation for their recruits, these programs can be out of reach for smaller districts. On top of the cost to support each candidate, running these types of programs is a challenging task for small districts with lean administrative teams. In some of the districts we interviewed, the superintendent also serves as principal, teacher, human resources administrator, and more. A human resources administrator in a small, rural district noted that not all districts have the resources to develop their own Grow-Your-Own programs to recruit teachers into their ranks:

I wish that there were more growing your own [programs] like tuition reimbursement, loan forgiveness, [and] scholarships. That [is] something not all school districts have the capability of doing, and I think that would help if there was something out there that can entice people to get into the field.

Seven district leaders cited state licensure exams, specifically, as barriers to entry into teaching. One district superintendent, for example, described recruiting potential teaching candidates who had completed their college degrees but struggled with testing anxiety. She says her potential candidates “will go through college, get a degree, be able to qualify, and then I have trouble with them passing a test. The fear of the test part is a huge issue for us.”

California requires teacher candidates to pass a series of exams to become fully credentialed. Due to the high costs of the exams and the multiple hoops they pose, at least 40% of those interested in teaching in California are waylaid by licensure testing.²⁰ One superintendent expressed the opinion that the state’s basic skills exam (CBEST), subject matter exams (CSET), and the reading instruction exam (RICA) are duplicative of the college degree required to become a teacher:

I don’t understand why I get a college degree, and then I have to take a test to see if I can teach.... They could eliminate the CBEST and all the CSET requirements and the RICA.... You either trust your university to do their job or you don’t, and if you don’t, you fix them.

Although these paper-and-pencil tests lead to a considerable drop in potential teacher candidates, studies have not found that these types of multiple-choice exams predict how effective a teacher will be.²¹ Meanwhile, only one of the required exams—the teacher performance assessment (TPA)—has been associated with teacher effectiveness in the classroom.²² About 85% of candidates pass the TPA on the first attempt, and 90% eventually pass.²³

During the pandemic period, testing companies have not offered several of the exams, which has posed barriers for those seeking to exit teacher preparation programs and apply for a license, as well as those seeking to enter programs. While an executive order was issued in May 2020 allowing some waivers and postponements of the exams, the pipeline was affected by the challenges that were posed to candidates—and will continue to be affected by this.²⁴

Leaders in several districts, both urban and rural, also noted that preparation costs and licensure exams inhibited their recruitment of teachers of color. One administrator in a large urban district suggested that in addition to streamlining licensure requirements, districts should more meaningfully engage with communities of color to learn how to build effective pipelines for recruiting teachers of color:

Some of our systems of education have not been equitable for students of color, meaning higher suspension rates, lower graduation rates, [and] feelings of not being supported within our schools.... We have to do a better job of listening and engaging our communities of color around this idea of being needed in the profession of teaching and how we can have a pipeline of them coming into the profession.

Previous research indicates that funding comprehensive preservice preparation for candidates of color and reducing debt is a critical step, as is streamlining redundant licensure requirements. In addition, creating ongoing support and positive teaching and learning conditions can play a role in recruiting and retaining more teachers of color.²⁵

Teacher Workload and Burnout Are Major Concerns

On top of managing the personal challenges of living through a global health crisis, district leaders reported that teachers are navigating a host of workplace stressors. As previously mentioned, in some districts, teachers are covering for absent colleagues due to acute shortages of substitute teachers. In addition, district leaders noted that online learning models have been challenging and that teacher workloads have increased.

District leaders emphasized that the workload has increased for all teachers. In particular, the transition to online learning models has had a steep learning curve, with most district leaders saying this has been a primary contributor to some teachers' decisions to retire earlier. One district leader explained how the shift to distance learning impacted veteran teachers who, typically, rely on a body of lessons and materials designed for in-person learning amassed over their years of experience:

The distance learning platform makes it everyone's first year of teaching all over again.... [Teachers are] working much harder because I think they're having to redo everything that they've done and make it in a digital format ... or make it appropriate for a student to be able to do it on their own [without] a mentor teacher or a paraeducator helping them through.

As this leader suggests, teachers are also adapting their distance learning lessons to meet the needs of students who may not have reliable internet or access to the kinds of adult support they would typically have in a school setting.

For districts using hybrid learning models, teachers often have to prepare two lesson plans—one for the students learning in person and one for students learning remotely. One superintendent explained that the hybrid learning model substantially increases teacher workloads:

They have to provide an in-class lesson, and they have to provide an at-home distance learning lesson. So they would have to write those two lessons differently. I believe that you are asking them to do twice the work.

The challenge is especially acute for subjects that are often taught using a hands-on approach, such as science labs and electives like shop or theater. Only one district mentioned having a dedicated department to assist teachers with planning online lessons and mitigating instructional loss.

In addition to the increased workload to prepare lessons, teachers are managing multiple digital platforms, tracking student attendance and engagement, and troubleshooting technology issues for students. This was especially true for teachers in districts where many students had previously had little to no access to internet or digital devices. One superintendent from a small, rural district said the teacher workload has tripled:

Their biggest complaint is that “I cannot stay on top of it all. I’m trying to juggle constantly.” It’s a constant that I hear, “I’m tired, I’m stressed, [and] I’m overwhelmed,” and I don’t see it ending anytime soon.

In addition, several districts said teachers miss the in-person interaction that they have with students and colleagues. One district leader described how distance learning has made it more difficult for teachers to feel the impact of their work:

They’re having to completely re-shift the in-person learning into a blank screen of students, little voices, or no voices sometimes at all.... I think the whole spirit, the drive, the impact, that they would be able to get every single day is gone for them. You’re not seeing any light bulbs going off. It’s just [a] blank screen in front of you.

Several district leaders noted that they were concerned for the mental health of their teachers, as well as that of their students. In some cases, leaders mentioned that teachers faced increasing demands to support their students’ social and emotional needs. One superintendent said the district had seen more than double the number of serious student mental health issues. Another district leader in a small community that experienced many deaths due to COVID-19 described how teachers were helping large numbers of their students deal with the loss of their loved ones. In addition to being concerned for students coping with grief, the leader also expressed concern for teachers struggling with the challenge of providing emotional support and keeping up with instructional duties. Many districts were concerned that the stressors of managing the challenges of the pandemic on top of the challenges of an increased workload could lead to teacher burnout and increased turnover rates.

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Some districts highlighted efforts to support teachers through the increased workload and stress caused by the pandemic. Long Beach Unified, for instance, has a dedicated curriculum department that has been assisting teachers with planning their curricula to mitigate instructional loss. Los Angeles Unified offered compulsory and optional training to its entire staff of over 30,000 teachers. About half of the district’s teachers attended the optional training, which, according to Director of Human Resources Bryan Johnson, “was a real deep dive into some of the specific tools [teachers] can utilize in distance learning.” Likewise, San Diego Unified teachers started the 2020–21 school year with an entire week of professional learning, which would have been unheard of in previous years. One rural district superintendent purchased a comprehensive online curriculum to reduce the pressure on teachers to develop online lessons.

A few district leaders reported providing supports for teacher mental health. San Diego Unified, for example, built on its established wellness initiative to make resources available to teachers through a virtual platform. San Pasqual Valley Unified expanded the scope of the district’s counseling department to serve adult staff as well.

Growing Retirements and Resignations Further Reduce Supply

The COVID-19 pandemic has caused a range of uncertainties that complicate district hiring decisions: Will an economic recession reduce district budgets? Will teachers nearing retirement age retire earlier than expected or hold on to their jobs in the face of economic uncertainty? Will student enrollment levels rebound from the exodus of students who have disengaged or transitioned to private and home school?²⁶ Having few answers complicates staffing decisions for the next school year.

Retirements and resignations are on the rise. Five districts said that they have noticed more teachers resigning or retiring this year compared to recent years. In some cases, resignations and retirements offset the need for anticipated layoffs due to expected budget cuts. Recent state and federal COVID-19 relief investments, which have occurred since we collected these data, have mitigated concerns about potential layoffs.²⁷ Most districts cited the challenge of distance learning as the primary reason teachers have been retiring or might consider retirement. As noted earlier, districts indicated that the lack of face-to-face interaction with students may also contribute to retirements and resignations. A leader in a rural district described the situation this way:

With distance learning, we lost two teachers. They just decided to retire because they couldn’t keep up with the whole distance learning model and how quick they had to readjust everything. And I will anticipate that that will happen again here this coming year.

In another five districts—all serving concentrations of students in poverty—retirements and resignations were identified as contributing to shortages. According to the superintendent in one of these districts, a small, rural district with chronic shortages:

I did have three teachers retire this year that we expected to retire in a couple of years, and it was related to the extra amount of work due to COVID-19. Doing distance learning almost doubles the amount of work that you have to do.

More retirements are expected next year. District leaders presumed that some teachers eligible for retirement were staying to keep their health benefits and because of the uncertainty presented by the pandemic. However, they expressed concerns that retirement rates could rise depending on the status of the pandemic and district reopening plans in the coming year. In one rural district, teachers are not retiring at higher rates yet, but the superintendent has heard indications that retirements could be on the rise in the coming year:

Teachers are exhausted, and some have said, “If I could retire, I would, and maybe I will consider that next year if this continues as is.”

The sentiment that retirements could spike before the next school year was a common one. For the most part, lower retirement rates at the end of the 2019–20 school year have resulted in fewer vacancies, staving off even deeper shortages this school year in many of the large, urban districts we interviewed. However, given district leaders’ predictions that retirements could increase in the next year, so too could shortages.

Strategies for reopening may affect retirements and resignations. Some districts expressed fear that proceeding with distance learning might push more of their teachers toward retirement and resignation, while others expressed fear that, given health concerns, moving toward hybrid or in-person learning might have that effect. This suggests that how districts reopen and return to in-person learning and how that is communicated to teachers are important factors in managing potential teacher shortages for next year.

Uncertainty regarding district budgets could impact staffing decisions. A number of uncertainties about budgets are likely to affect staffing. At the time of our study, when there was fear about pending state budget cuts, eight districts anticipated that they might need to lay off teachers, and even with new federal and state funds on the way, concerns still linger about budgets in the upcoming year.

Several large districts had used retirement incentives to manage their teacher workforce numbers and reduce the need to lay off teachers. San Diego Unified, for example, offered a retirement incentive that allowed teachers to maintain their health care benefits until they reached Medicare eligibility. In some cases, districts projected that retirements this school year might offset the need to lay off teachers if their budgets are reduced next year.

While districts noted that they might save money during remote and hybrid instruction—for instance, on utilities—they also saw increased expenditures for personal protective equipment and other new needs. A few districts noted that declining enrollment due to COVID-19 could impact their budgets. In rural El Tejon Unified, Superintendent Sara Haflich explained the impact on the budget when families pull their students out of the district’s schools in favor of homeschooling:

If we do not get those kids back, it will drastically hurt us. Drastically. So, I’m hoping, obviously, to get the majority of those kids back.

Teacher Residencies and Preparation Partnerships Have Proved Important to Recruitment

Although many large districts have found it beneficial to participate in virtual recruiting efforts, most districts have continued to recruit teachers through their existing pipelines. Some of these pipelines include teacher residencies and partnerships with teacher preparation programs, which many California districts have expanded in the past several years by leveraging state investments in the teacher workforce.²⁸ Twelve out of 17 districts said they were hosting student or resident teachers this school year, and most of those districts were hosting about the same number as in previous years. Several district leaders noted that these partnerships with universities also help them recruit and retain teachers of color. (See “Building the Pipeline of Teachers of Color.”)

Teacher residency programs are typically partnerships between school districts and teacher preparation programs designed to recruit and prepare a diverse pool of candidates to teach in high-need positions.²⁹ These yearlong apprenticeships, modeled on medical residencies, provide residents extensive clinical practice under the guidance of an expert mentor teacher while residents complete tightly integrated coursework. Residents typically receive financial support, such as a stipend and tuition assistance, in exchange for agreeing to teach in the district for a minimum number of years. Unlike teachers on substandard credentials and permits, residents do not become teachers of record until after they have completed their preparation programs. Residency-prepared teachers tend to have high retention rates, and evidence suggests they positively impact student achievement.³⁰

Districts with teacher residency programs noted the benefit of having some certainty about the number of teachers they can expect to gain as those teachers complete their yearlong preservice programs. Los Angeles Unified was able to start the school year filling 99.6% of vacancies. Bryan Johnson, Director of Human Resources, said state funds, including the Local Solutions to the Shortage of Special Education Teachers grant program, helped the district to do so:

Districts with teacher residency programs noted the benefit of having some certainty about the number of teachers they can expect to gain as those teachers complete their yearlong preservice programs.

Some of those state grant programs have been a real help to us: the residency program [and] the local solutions grant program. Both of those programs have helped us tremendously in terms of being able to create pipelines for fully credentialed teachers to join our workforce.

The district has four residency programs, with a total of about 95 residents in those programs this year. In addition, the district has about 700 student teachers.

Building the Pipeline of Teachers of Color

Almost all district leaders stated that hiring more teachers from culturally and linguistically diverse backgrounds was of interest and, in some cases, was a key aspect of their hiring strategy. Nearly half of districts, primarily large, urban districts, were able to recruit teachers of color this school year. Some, like Los Angeles Unified and San Diego Unified, reported that the percentage of teachers of color among their new hires was above the state average. San Diego Unified leaders reported leveraging partnerships with local universities to recruit teachers of color. Some other district leaders said that they are making only modest or minimal gains in this regard, which most attributed to a limited pool of culturally and linguistically diverse teachers.

David Zaid, Assistant Superintendent of Human Resource Services at Long Beach Unified, said partnerships with teacher preparation programs and targeted financial supports enabled the district to hire more culturally competent and diverse candidates. The district partners with California State University, Long Beach (CSULB) to provide scholarships to recruit students with bachelor's degrees into the teaching profession. Over the next 4 years, CSULB, in partnership with the district, is planning to offer similar scholarships to students with associate degrees and high school students.

Recruiting teachers of color through preservice preparation pathways—rather than through substandard credentials and permits associated with higher turnover rates—can help to build the pipeline of teachers of color who are prepared to teach for the long term.³¹

Policy Considerations

As California policymakers consider how to prioritize future education investments, they might take a lesson from the devastating impacts of the Great Recession on the state's teacher workforce. Between 2008 and 2012, the state slashed school budgets, and the teacher workforce shrank by about 10% due to layoffs and attrition.³² When the state's economy recovered and districts wanted to hire again, the teacher pipeline did not bounce back.³³ Indeed, the failure to invest in the teacher workforce has had far-reaching consequences. California has been scrambling to fill teaching positions for the past several years. This has resulted in many districts hiring underprepared teachers, who tend to leave the profession at high rates, exacerbating shortages.³⁴

The failure to recruit and retain well-prepared teachers undermines student achievement, as does the high rate of churn in schools that hire disproportionate numbers of inexperienced and unprepared individuals.³⁵ These schools are typically those that serve concentrations of students of color and students from low-income families.³⁶ The state's achievement gap is significantly related to its failure to staff schools with a stable workforce of well-prepared teachers in all communities.

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To address these inequities, policymakers should attend to long-term solutions for growing a teacher workforce that is stable, committed, and well-prepared while meeting the immediate needs of a state school system reeling from a year of instability and strife.

Governor Gavin Newsom's 2021–22 budget proposal—with a \$15 billion bump over the 2020 education budget—includes \$225 million to expand the state's recent investment in teacher pipeline programs, with \$100 million going to the Golden State Teacher Grant Program, \$100 million to the Teacher Residency Program, and \$25 million to expand the Classified School Employees Credentialing Program.³⁷ These investments build upon the nearly \$200 million the state invested in the teacher pipeline between 2016 and 2019.³⁸ These types of high-retention pathways into teaching—service scholarships, teacher residencies, and Grow-Your-Own programs—help prevent shortages by providing fully prepared teachers who tend to stay in the profession longer.³⁹

Teacher retention is crucial to addressing teacher shortages. Each year, 9 out of 10 new teachers are hired to replace a teacher who has left teaching in California.⁴⁰ The state's annual attrition rate—8.5%—exceeds the national average and is significantly higher among teachers on substandard credentials and permits.⁴¹ National figures indicate teachers who enter teaching with little preparation have attrition rates 2 to 3 times as high as those who enter with comprehensive preparation.⁴² In addition to negatively impacting student achievement, teacher churn produces significant financial costs to districts, estimated at more than \$20,000 for each teacher who must be replaced in a large district.⁴³ Having a lower attrition rate on par with rates in some northeastern states could substantially reduce the state's demand for teachers and could largely eliminate the need for teachers on substandard credentials and permits.⁴⁴ Reversing course and recruiting more teachers through preservice pathways associated with higher retention could begin to make a difference in statewide attrition rates and shortages.

In addition to the proposed investments from the state, districts expect COVID-19 relief dollars from the federal government. Federal funds will be important for a range of purposes, especially as more districts transition to in-person learning. Districts may dedicate funds to attracting the qualified teachers they will need to reduce student–teacher ratios and enable physical distancing, for example. However, districts have little control over the supply of teachers in the state and largely rely on state-level incentives to encourage more prospective teachers to enroll in and complete teacher preparation programs. Without further investments in the state’s teacher pipeline, districts with the greatest resources will attract well-prepared and experienced teachers from a limited pool of these educators, at the expense of districts in which resources are spread between many more needs. Furthermore, districts cannot expect one-time funds—whether from federal or state sources—to solve long-standing, intractable teacher shortages. Prior state investments in addressing teacher shortages, supported heretofore by largely one-time funds, have begun to yield modest results, but the effects of the COVID-19 pandemic could jeopardize these gains without careful attention. Sustained investments in California’s teacher pipeline could help address current shortages and prevent future ones.

The following policy recommendations can begin to address key issues before the state.

1. Sustain and Deepen Investments in High-Retention Pathways

Our interviews indicate that California districts need a larger pool of fully certified teachers who will stay in the profession. As mentioned, the state’s one-time investments in high-retention pathways into teaching, including teacher residencies and Grow-Your-Own programs, have begun to yield modest results.⁴⁵ In districts like Los Angeles Unified, having high-retention pathways helped the district cultivate a dependable number of new teacher hires, especially for hard-to-staff positions. However, these new pathways are small in comparison to the existing pipeline of teachers entering the California workforce through substandard credentials and permits.

If California is to dramatically increase the pool of fully certified teacher applicants to meet demand, the state would need to institutionalize existing investments in high-retention pathways—including teacher residencies and the classified staff program—and continue them over time so that they can develop a reliable pool of well-prepared recruits. Because these pathways offer preparation with a service requirement, prior research shows that they can be expected to keep candidates in the classroom, as well as to bring them in, and to recruit and retain more candidates of color.

An evaluation of the first year of the California Teacher Residency Grant Program found that the program is making progress in meeting the needs of California districts for teachers in shortage areas and teachers of color.⁴⁶ Nearly 70% of the residents surveyed identified as people of color, more than double the share of California teachers.⁴⁷ About 4 out of 5 residents planned to take a teaching job in their residency district upon completion of the program, despite ongoing concerns about COVID-19 and the logistical hurdles residents have encountered as a result.

Still, many residents struggle financially, even after supplementing their residency stipends with additional grants, loans, and work hours. Residency programs could potentially recruit even more candidates by providing more robust financial supports that defray living expenses during the residency year. These investments are warranted because they provide well-prepared teachers who have high retention rates, thus addressing the long-standing shortages many districts have been

contending with for several years. In designing and allocating these incentives, the state should pay special attention to institutionalizing support for high-retention pathways that are tailored to the needs of rural as well as more urban communities.

2. Provide Financial Support to Teacher Candidates

Our research indicates that many districts, especially in rural areas, have limited access to institutions of higher education and teacher residency programs. California can also build the teacher pipeline by providing financial support to teacher candidates who commit to teach in high-need subjects and locations. Programs like the Golden State Teacher Grant Program can serve as a recruitment tool to boost enrollment in teacher preparation programs and, once candidates graduate, their employment in high-need schools. In particular, this program can be a boon to rural districts that are geographically distant from institutions of higher education and teacher residency programs. This newly funded program has not yet had time to take effect; however, prior research indicates that when service scholarships cover a substantial portion of the cost of preparation, they can be effective at both recruiting and retaining teachers, especially in high-need subjects and schools.⁴⁸ Such tools can help meet California's need to expand the pipeline of teachers who enter the field fully prepared, as these teachers are more likely to continue teaching and are critical to improving student achievement.

Service scholarship programs are typically operated at the state rather than district level because prospective teachers do not generally have a job offer from a local district prior to beginning preparation and may not be certain of the location in which they will be able to teach at the moment they begin their preparation. Many states have instituted these types of programs, which have had a significant impact on boosting states' supply of well-qualified teachers. For example, for over 30 years North Carolina has made sustained investments in the North Carolina Teaching Fellows program, which has recruited nearly 11,000 candidates into teaching in the state.⁴⁹ A study of this program found not only that these fellows had higher rates of retention compared to their peers, but also that they were generally more effective educators as measured by test score gains of their students.⁵⁰ For such programs to function effectively as a recruitment tool, prospective candidates need to be well informed about the opportunity and how to apply for the funds.

3. Streamline Teacher Licensure Requirements

District leaders indicated it would be beneficial for the teacher pipeline if there were fewer testing requirements. Several district leaders argued that providing coursework alternatives to teacher licensure exams would make the profession more attractive and affordable. Of the four tests required for most multiple-subject teaching candidates (the CBEST, CSET, RICA, and TPA), only the TPA has been shown to be related to later teaching effectiveness.⁵¹

There have been a number of proposals in the past several years—both at the California Commission on Teacher Credentialing as well as in the California legislature—to provide candidates with multiple pathways for demonstrating subject-matter and pedagogical competence, including through coursework and course-embedded performance measures.⁵² Due to COVID-19 and the fact that testing companies cannot offer most of the tests, the state has temporarily suspended testing requirements for candidates and is giving candidates more time to pass the required assessments.⁵³ This postpones but does not solve the problem, as it creates an additional stress on candidates who will have to find the time and money to take all of these tests while they are trying to launch

a career in teaching; historical data show that a substantial share of them can be expected to leave as a result of the costs in time and money, as well as requirements to retake the tests for those who do not pass on an initial attempt. Pending legislative proposals would allow teacher candidates to use college courses, or a combination of courses and tests, to demonstrate they are competent to teach a subject, creating multiple pathways to demonstrating competence that ease entry while maintaining standards.⁵⁴

4. Create Sustainable Teacher Workloads

District leaders consistently described concerns about teacher burnout and the likelihood of increased resignations. Teachers, leaders, and other school staff are taking on new and increased responsibilities as a result of the pandemic. District leaders described the demands of learning new technologies and transforming lessons and units for an online setting; the particular challenge, in some cases, of having to teach online and in person simultaneously; serving as tech support to families; providing emotional support to families grappling with trauma, illness, and the loss of loved ones due to COVID-19; supporting engagement and mental health needs; and helping students and families to access needed public health and social support services—all while dealing with their own trauma, juggling children schooling at home, and caring for themselves and family members who may have fallen ill with COVID-19.

Few districts reported hiring more staff to reduce workloads or ratios during the pandemic. Just one leader we interviewed reported hiring additional teachers this school year to provide the student–teacher ratios required to accommodate physical distancing, and one other expected to need more teachers in the aftermath of the pandemic to be able to provide support for students who have experienced significant instructional losses. The inability to address teacher workloads in the COVID-19 era is particularly concerning given that California has long had one of the highest ratios of students to teachers, counselors, nurses, principals, and other school staff.⁵⁵ The lack of adequate staffing has become even more unsustainable during the pandemic and could jeopardize the ability of districts to safely reopen or stay open for in-person instruction. Investments in additional personnel and prevention of layoffs will be critical to supporting teachers, creating a sustainable workload, and reducing burnout. Without them, California’s already high teacher attrition rates—which contribute to about 90% of the demand for new teachers in the state—are likely to grow and further exacerbate teacher shortages.⁵⁶

The lack of adequate staffing has become even more unsustainable during the pandemic and could jeopardize the ability of districts to safely reopen or stay open for in-person instruction.

5. Support Teachers With Adequate Substitute Staffing

Another consistent theme across districts was the concern that they could not find enough substitutes to fill in day-to-day absences or the long-term absences they expect to continue increasing as some teachers take extended leaves rather than return to in-person learning during the pandemic. Lack of substitutes will make teacher working conditions difficult, especially when colleagues are asked to cover for those who are absent, on top of the already-increased workload

they are facing due to COVID-19. In some cases, such as in Poway Unified School District in San Diego County, shortages of qualified substitutes have forced districts to close in-person instruction or delay school reopening.⁵⁷ Given the added pressure that the pandemic has placed on the need for substitute teachers, additional state support may be needed to grow the pool of qualified substitute teachers.

With daily substitute pay in California averaging about \$120 per day in May 2019, districts may need to consider increasing their daily rates to attract more qualified substitutes into their pools.⁵⁸ Some districts are leveraging teacher residents and student teachers to serve as substitute teachers on a limited basis—such as 1 day a week at their residency sites—which can enhance their residency experience while providing additional needed financial supports.⁵⁹ In addition, the state could support districts in need of long-term substitutes by funding and providing the 45 hours of training those substitutes must complete to be eligible for the Teaching Permit for Statutory Leave (TPSL).

6. Invest in Educator Development and Support

In addition to addressing teacher burnout by creating sustainable workloads, many teachers may benefit from professional development related to meeting the needs of students during the pandemic and beyond. Governor Newsom’s 2020–21 budget proposal includes \$320 million to support educator professional development, including \$250 million for an Educator Effectiveness Block Grant and \$50 million for teacher training in social and emotional learning and trauma-informed practices.⁶⁰ These funds for professional learning supports may be helpful for retaining teachers, which is as important to addressing shortages as recruiting teachers who are fully prepared.⁶¹

Districts overwhelmingly reported that distance and hybrid learning presented a significant challenge to retaining teachers. While nearly every district spoke to these challenges, just a handful spoke to making investments to support professional learning related to effectively implementing distance and hybrid learning. Districts may be making plans to move to in-person learning, but some amount of hybrid or distance learning will likely continue to be necessary to meet the needs of students and educators with health concerns. High-quality professional learning can support teachers’ skills with using online technologies that support this distance and hybrid learning and that can also enrich in-person learning to come. Although many teachers may be struggling with these technologies, others may be having greater success and could be a resource to other teachers in their districts. Micro-credentialing may be an avenue for recognizing teacher leaders who have demonstrated proficiency with online technology and compensating them for supporting their colleagues.⁶²

In addition, several district leaders indicated that student mental health concerns were growing due to the impacts of COVID-19. In some cases, leaders were concerned about the toll it took for teachers to play the role of social worker or grief counselor. While districts will need support to offer dedicated mental health services to students, teachers would also benefit from having professional learning in implementing trauma-informed practices and supporting students’ social and emotional learning. In addition, districts can support the mental health and wellness of teachers. Teachers’ social and emotional health is associated with enhanced efficacy and job satisfaction, as well as student academic and behavioral outcomes.⁶³ Helping teachers develop stress management skills can mitigate shortages by helping reduce burnout and teacher turnover, and teachers can teach these skills to their students.

Conclusion

District leaders in this study reported going above and beyond to continue to educate California students in the midst of a global pandemic. In addition to addressing long-standing teacher shortages, especially in the high-need subject areas of math, science, special education, and bilingual education, districts are also planning ahead to mitigate shortages they fear might worsen in the wake of the pandemic. As districts begin to move to in-person instruction, many expect more severe shortages. Some districts are already beginning to feel the pinch as their rates of retirements, resignations, and leaves of absence creep upward.

Although some districts have fortified their recruitment of fully prepared teachers through university partnerships and leveraging state-funded initiatives, many districts—especially in rural locales—found there simply are not enough fully credentialed teacher applicants to meet all of their hiring needs. Investing in service scholarships, residencies, and other high-retention pathways that are more broadly available, including in rural areas, is a critical need, as is streamlining pathways into teaching so that competencies can be demonstrated through coursework as well as tests. Without such strategies, most districts will continue to close hiring gaps by hiring teachers on substandard credentials and permits, which undermines staff preparedness and stability and student learning. If the impact of the pandemic on the teacher workforce is anything like the years-long impact of the fiscal crisis California endured a decade ago during the Great Recession, the state will need both immediate staffing solutions and long-term workforce investments that prioritize equitable access to fully prepared educators.

Technical Appendix

Although there is considerable uncertainty around the potential impact of the COVID-19 pandemic on the California educator workforce, early indicators from across the country suggest that the pandemic may lead to worsening teacher shortages.⁶⁴ In the face of economic uncertainty brought on by the pandemic, state policymakers need timely information on the impact of the pandemic on already-severe teacher shortages to make informed policy decisions that will continue to support the California teacher workforce.

Research Questions

To provide information about the California workforce during COVID-19, this study examined the following questions:

1. Are California urban and rural districts facing ongoing teacher shortages for the 2020–21 school year? If so, in a select sample of such districts:
 - a. What is the source of shortages (e.g., limited supply of fully credentialed teacher applicants, teacher turnover, new teaching positions to be filled, a need for more teachers to support distance learning, and/or a return to in-person learning, etc.)?
 - b. How are shortages distributed (i.e., by subject, by teacher demographics)?
2. Are teachers in the sampled districts more likely to resign or retire this school year compared to recent years due to concerns about COVID-19?
3. Have the sampled districts' distance and in-person learning plans had an effect on teachers' plans to continue teaching in the district?
4. What policies do district leaders in the sampled districts believe state policymakers can enact to solve shortages related to COVID-19?

Data and Methodology

In the fall of 2020, we conducted a series of 30- to 60-minute semi-structured interviews with district leaders on the state of their teacher workforces in light of the COVID-19 pandemic. Study participants included district superintendents and human resources personnel. Our study sample included 11 of the largest districts in California and 13 small, rural districts throughout the state, for a total of 24 districts. Interviews were conducted with 17 of the 24 districts sampled for a response rate of 71%. Figure 1 shows the geographic distribution of participating districts. At least one district from each of the state's 11 California County Superintendent Educational Services Association (CCSESA) regions participated.

Interviews took place from early November to mid-December. A surge in COVID-19 cases after the Thanksgiving holiday and the state's announcement of the regional stay-at-home order on December 3 likely resulted in systematic differences between the responses of district leaders interviewed before and after these dates. Ten interviews were conducted before Thanksgiving, an additional three interviews were conducted before December 3, and four were conducted after December 3. Districts interviewed after Thanksgiving and/or December 3 might have been more

likely to report that they were proceeding with distance learning and that health concerns related to COVID-19 could be influencing teachers' decisions to continue teaching. Interview data were analyzed using a systematic, qualitative approach.⁶⁵

Largest California districts

We interviewed leaders from 8 of the 11 largest districts in the state (by student enrollment).⁶⁶ These 8 districts educate nearly 1 in 6 California students (916,354 out of 6,163,001).⁶⁷

Small, rural districts

In addition, we interviewed 9 out of 13 small, rural districts sampled. We included small, rural districts because research shows these types of districts often have additional challenges recruiting and retaining teachers, which are not present in large- and medium-size districts.⁶⁸ First, we used the following criteria to identify small, rural districts in each of the state's 11 CCSESA regions:

- Unified school districts, which typically serve grades k–12
- Districts with between 200 and 1,000 students
- Districts that were eligible for federal Rural Education Achievement Program (REAP) funding in 2019

Then, from these small, rural districts, we selected the largest district in each CCSESA region meeting all of the above criteria, as an interview would be likely to present less of an administrative burden than it would on even smaller rural districts. In CCSESA regions V and XI, no district met both the size and REAP eligibility criteria. We added Aromas-San Juan Unified School District manually as the next-largest district, with 1,028 students, meeting the above criteria in region V. In region XI, San Marino Unified School District was added to the sample with 2,909 students; however, that district did not respond to the study request. In our initial outreach, we did not receive any responses from districts, small or large, in regions VII and VIII, so we added to the sample the next-largest rural districts meeting our criteria in those regions: Laton Unified School District (nonrespondent) and Shandon Joint Unified, respectively.

Additional data sources

Descriptive statistics on the sampled districts are drawn from publicly available data from the California Department of Education. Descriptive statistics on teacher credentials issued are drawn from publicly available data from the California Commission on Teacher Credentialing.

Limitations

This study sampled 24 districts out of more than 1,000 in the state and received responses from a total of 17—comprising both large, urban and small, rural districts. The sample does not include medium-size districts. Given the relatively small sample size, findings from this study are limited to the districts interviewed and are not generalizable to all districts in the state. Still, findings do apply to districts serving nearly 1 in 6 California students. Additionally, interviews were limited to district superintendents and/or human resources personnel and did not include teachers, families, or students in those districts. Findings related to teacher attitudes are based on district leaders' perceptions of teacher attitudes.

Endnotes

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