



Getting Down to
FACTS



Teacher Certification Policies: Balancing Quality and Access in the Teaching Profession

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Like many states, California grapples with the persistent challenge of recruiting and retaining a high-quality, diverse teacher workforce. Nationally, teacher shortages remain widespread, and in some cases are growing (Nguyen et al., 2024; Tan et al., 2024), while enrollment in teacher education programs has declined on average (Wilson & Kelley, 2022). Despite efforts to diversify the K-12 teacher workforce, the teaching profession today remains predominantly White and female (Gist & Bristol, 2022), underscoring structural barriers to equitable access into the teaching profession. In particular, testing requirements and broader systemic inequities in educational access and opportunity across the P-20 pipeline continue to constrain efforts to diversify the K-12 teacher workforce (Bardelli et al., 2024; Carver-Thomas, 2018; Nettles et al., 2011). At the same time, broader shifts in the labor market may further shape who enters and persists in the teaching profession.

Consistent with these broader national trends, California faces shortages of fully credentialed teachers, particularly in math, science, special education, and bilingual education (Carver-Thomas et al., 2024). When schools have shortages of fully credentialed teachers, they may be forced to increase class sizes, cut course offerings, and assign teachers to cover courses outside of their field (Podolsky & Sutcher, 2016). At the same time, California diverges from national trends in important ways. For example, California has seen *increasing* numbers of individuals completing teacher education programs after a dip in 2022 (Carver-Thomas et al., 2024). Still, the number of teacher education program completers is still much lower than its peak in 2004-05 (Leung-Gagné et al., 2026). Following significant state investments in diversifying the teacher pipeline, the teacher workforce in California has also become more racially/ethnically diverse in recent years (Leung-Gagné et al., 2026). These conditions underscore both the progress California has made to improve the teacher workforce, and the enduring

challenges that remain. Taken together, these dynamics raise pressing questions about the capacity of existing systems and policies in the state to strengthen the teaching profession.

How teachers are prepared, credentialed, and ultimately distributed across the state's education system has profound implications for students' equitable access to high-quality instruction. Underqualified teachers are both less effective (Goldhaber & Brewer, 2000) and are more likely to leave teaching (Deneault & Riehl, 2025), yet these teachers disproportionately teach students of color and students from low-income families in California (Lafortune et al., 2025). Addressing the statewide systems that oversee policy for preparing and credentialing the state's teachers is a critical lever for driving improvement in the education system at large, as high-quality teachers are one of the most important school-based factors for supporting student achievement (Chetty et al., 2014; Rivkin et al., 2005). Balancing quality and access in entry to the teaching profession therefore remains one of the most enduring challenges facing the field at large (Grossman et al., 2026), and California in particular. All states establish credentialing requirements for teachers intended to safeguard quality while ensuring access; however, the systems and requirements for credentialing vary widely across states (Ronfeldt et al., 2026). Given this variation, it is critical to understand the capacity of California to prepare and credential new teachers into the profession.

This report examines what makes California's credentialing system unique and how its structures present particular challenges, and opportunities, for driving improvements in the teaching profession. Our central aim is to understand the extent to which the current teacher credentialing system is designed to support coherence in the preparation and credentialing of new teachers. More specifically, in this report, we seek to address the following research questions:

- (1) Is the system well-designed to prepare teachers appropriately by content area, grade-level, and student population served?
- (2) What are some of the ways in which the current system may create challenges for those interested in entering the profession?
- (3) How could we reimagine pathways into teaching that address those challenges?

To answer these questions, we conducted a scan of the landscape of teacher credentialing in California, relying on public policy artifacts, existing research, and interviews with key stakeholders across the state's policy and higher education system. In particular, we drew on public artifacts from the California

Commission on Teacher Credentialing, state legislation related to teacher credentialing, and prior research and news articles on teacher credentialing in California. We also conducted interviews with a range of key stakeholders in the state, including state policy leaders, researchers, faculty members, and practitioners with expertise on the state’s credentialing system. The findings represent our syntheses of these artifacts, research, and interviews.

We begin by providing an overview of the current system of teacher credentialing in California, before discussing the challenges of the current system, and the long-term and short-term opportunities to address those challenges.

Current System of Teacher Credentialing in California

The purpose of a teacher credentialing system is to ensure that teachers who take on primary responsibility for student learning are well prepared for their work. This generally entails meeting a set of requirements related to subject matter preparation, pedagogical preparation, and supervised clinical teaching experience. Since education is under state control in the United States, each state has its own system for credentialing teachers, and requirements for prospective teachers can vary significantly. To understand the specific opportunities for teacher credentialing in California, we provide a brief overview of the ways in which California’s teacher credentialing system is unique. We begin by providing historical context on how the current system was initially designed and then describe the system as it operates today.

Historical Context

The current structures of California’s credentialing system were largely set in place by a set of reforms in the 1960s and 1970s and have not been substantially changed since. In particular, the Licensing and Certified Personnel Law of 1961 (more commonly referred to as the **Fisher Act**) and the Teacher Preparation and Licensing Law of 1970 (more commonly referred to as the **Ryan Act** after its primary author, Assemblyman Leo Ryan) are responsible for many of the current policies. The most significant lasting legacy of the Fisher Act is its focus on *subject matter preparation* for prospective teachers. For several decades after the Fisher Act, all teachers were required to complete an academic

undergraduate major, rather than a major in education, and to complete a fifth-year of post-baccalaureate study (Sandy, 2006). Although the ban on undergraduate Education degrees was ultimately lifted nearly 50 years later through AB 170 in 2017 (California State Assembly, 2017), the vast majority of teachers in the state still go through fifth-year programs.

The Fisher Act was initially motivated by the belief of policymakers that the education degree had been watered down and did not include sufficient subject matter preparation. A consequence of this change was that it shifted authority over undergraduate education for future teachers away from schools of education and to academic departments (Fensterwald, 2017), in line with critiques of schools of education of that time by James Koerner, Arthur Bestor, and others. Additionally, under the Fisher Act, the landscape of teacher credentialing in California in the 1960s became highly fragmented, with 340 separate credentials offered in the state (Inglis, 2011).

Recognizing the need for greater centralization and quality control over teacher credentialing, the Ryan Act further reformed the system for teacher credentialing in California. The development of the Ryan Act was significantly shaped by James Koerner, the author of *The Miseducation of American Teachers*, who had become known for his critiques of education schools and called for their increased regulation by the state (Inglis, 2011). Notably, the Ryan Act represented “the first shift toward basing the earning of a credential on the performance of the candidate seeking the credential” (Tierney, 2011, p. 12). In this way, the Ryan Act elevated the importance of subject matter preparation for teaching (e.g., through the reliance on preparation in academic majors, rather than an education major). While the specific subject matter requirements (also referred to as “SMRs”) required for teacher credentials have evolved over time, this focus on subject matter preparation remains a hallmark of California’s teacher credentialing system. In 2021, Assembly Bill 130 expanded the options for candidates to demonstrate SMRs, including through approved undergraduate coursework (California Commission on Teacher Credentialing, 2026d).

One of the most significant contributions of the Ryan Act, however, was its creation of the **California Commission on Teacher Credentialing (CTC)**, which gained jurisdiction over teacher credentialing from the California Department of Education (CDE). CTC is understood to be the oldest autonomous state standards board in the United States (California Governor's Office, 2025). The CTC also oversees teacher induction through a two-year job-embedded support and mentorship for new

teachers in their first two years of teaching. CTC is notable in that it operates independently from the CDE, leaving control over teacher credentialing and induction structurally disconnected from oversight of K-12 education. The CTC functions as an agency of the Executive Branch of the California State Government and has nineteen members (fifteen voting members, and four ex-officio non-voting members). The Governor is responsible for appointing fourteen of the voting members and the State Superintendent of Public Instruction (or their designee) serves as the final voting member. CTC membership include an intentional mix of representatives from the three public higher education systems in the state (i.e., University of California, California State University, and California Community Colleges), as well as “six classroom teachers, one school counselor or non-services credential holder, one governing school board member, one early childhood faculty member, two public members, one school administrator, one human resources administrator, and one higher education faculty member from an institution that grants baccalaureate degrees” (California Commission on Teacher Credentialing, 2026a).

The mandate of the CTC is to help coordinate across the various systems which come together to shape teacher credentialing and preparation, and enforce the professional practices of educators. However, the challenge of coordinating across higher education is further compounded by the historic fragmentation of the higher education sector in California (Bastedo & Gumport, 2003; Dunens & Kaul, 2020). Therefore, while the Ryan Act sought to coordinate a fragmented system, it does so within a broader context of deep fragmentation within the public higher education system, and in the states’ education governance system more broadly. As we describe later in the report, this creates unique challenges for the system of teacher credentialing in California, particularly given that the substantial fragmentation in oversight over teacher learning can limit the coherence of teacher education and development.

Overview of California’s Credentialing System: Credentials, Pathways, and Providers

The current landscape of teacher credentialing in California is characterized by its wide diversity of credentials, pathways, and providers available to prospective teachers. On the one hand, this diversity of options affords flexibility for those who seek to enter the profession, supporting access.

However, as we explore in the following section on challenges in the system, this variation may also create challenges in ensuring consistency in quality across the state. In what follows, we briefly describe the credentials, pathways, and providers operating in California today.

Credential Types. California authorizes teachers through a set of credentials organized based on the population of students served and the content area in which teachers may work. There are four primary teacher credentials offered by CTC:

- **Multiple Subject Credential.** The multiple subject credential authorizes teachers to teach *all subjects* in a self-contained classroom, most commonly in elementary school.
- **Single Subject Credential.** The single subject credential authorizes teachers to teach a particular content area (e.g., mathematics, social science, English, chemistry) in a departmentalized class, most often in middle and high school. Unlike the multiple subject credential, the single subject credential authorizes instruction in a specific content area.
- **Education Specialist Instruction (i.e., Special Education) Credential.** As described by the CTC, the education specialist instruction credential “authorizes the holder to conduct Educational Assessments related to student’s access to the academic core curriculum and progress towards meeting instructional academic goals, provide instruction” across diverse settings, including special education and general education settings (California Commission on Teacher Credentialing, 2026b). This credential includes the following specialty areas: (1) Mild to Moderate Support Needs (MMSN), (2) Extensive Support Needs (ESN), (3) Early Childhood Special Education (ECSE), (4) Deaf and Hard of Hearing (DHH), and (5) Visual Impairments (VI).
- **PK-3 Early Childhood Education Specialist Instruction Credential** (henceforth referred to as the “PK-3 credential”). The newly authorized PK-3 credential authorizes teachers to teach in any self-contained general education classroom in grades preschool through third grade, including transitional kindergarten (TK). Introduced in 2024, the PK-3 credential is the newest approved teacher credential in California (California Commission on Teacher Credentialing, 2025c). The PK-3 credential emerged to help meet the demand for qualified teachers for California’s statewide adoption of statewide universal TK for all four-year olds (California Commission on Teacher Credentialing, 2025a). As the Learning Policy Institute estimates, the new TK initiative

will require districts in California to hire an additional 11,900-15,600 lead TK teachers by 2025-26 (Melnick et al., 2022).

All four credential types authorize teachers to provide instruction for English learners.

In addition to teaching credentials, CTC also awards a range of other credentials and permits (e.g., services credential, substitute permits, English Learner Authorization, Child Development permits). We do not address each of these credentials and permits here, as they are beyond the scope of this report.

Notably, apart from the PK-3 Credential, teacher credentials in California are not differentiated by grade bands. For example, the multiple subject credential authorizes teachers to teach in any grade-level from preschool through adult education. In other words, teachers receive the same credential regardless of the specific grade level in which they ultimately teach. Though this approach provides greater flexibility in hiring teachers to address workforce needs, this approach ignores research documenting the importance of aligning instruction with students' developmental trajectories across grade-levels (e.g., Coburn et al., 2018; Duke & Block, 2012; Snow & Biancarosa, 2003; Stipek et al., 2017). As we discuss in the following section, this structure may create challenges for preparation quality, particularly for single subject teachers, because teacher candidates are not necessarily trained for the developmental stage or grade-level content in which they are ultimately placed. Given the substantial variation in instructional demands across grade levels, this lack of grade band specificity may contribute to mismatches between teachers' preparation and practice.

Though each of these credentials has different requirements (which additionally vary depending on the particular pathway teachers enter teaching through), there is a great deal of similarity across the requirements for these credentials (Bell et al., 2018). For example, all of the credentials described above require teachers to hold a baccalaureate degree, demonstrate subject matter knowledge, and complete a minimum amount of fieldwork. Since the 1990s, the CTC has been organized around a shared vision of the *California Standards for the Teaching Profession* (CSTP), which articulates what the state expects teachers to know and are able to do once they enter the classroom. Though the CSTPs are designed to provide a shared framework to align the diverse systems involved in teacher credentialing and induction (e.g., the CTC, TK-12 schools, teacher preparation programs, higher education) in order to ensure that all teachers receive the same level of preparation, prior work has documented wide gaps in the preparation of teachers in California across pathways and teaching contexts (Bell et al., 2018).

Two-Tier Credential System. California’s teacher credentials operate through a two-tier structure, a model grounded in research on teachers’ developmental trajectories (Sandy, 2006). Across all four credential types (i.e., multiple subject, single subject, PK-3, and special education), this two-tier model requires teachers to first earn a **preliminary credential** (or Level I credential) following their initial preparation, and then a **clear credential** (or Level II credential) after completing a CTC-approved induction program and/or earning National Board certification. The preliminary credential is a non-renewable license issued to candidates who have met all the requirements of a Commission-approved preparation program (described in the following section), and is valid for up to five years. Within five years, teachers must complete the requirements to earn their clear credential, or they will be unable to obtain a clear credential to teach in California public schools. The specific requirements for the clear credential vary slightly based on the credential type and pathway. Some credentials (e.g., the PK-3 credential) only allow teachers to earn a clear credential upon completion of a CTC-approved induction programs, whereas other credentials (e.g., the multiple subject credential) provide teachers with the option of either completing CTC-approved induction program *or* earning certification by the National Board of Professional Teaching Standards (NBPTS).

Pathways. In order to balance quality and access in the teaching profession, California offers multiple pathways for teachers to receive their credentials. Though the particular pathways available to teachers vary across each credential type, the full range of pathways includes both *traditional* and *intern* routes, as well as options for teachers with teaching experiences in other contexts (e.g., out-of-state or international experience).

The **traditional pathways** are offered through CTC-approved institutions of higher education (IHEs), including the University of California (UC) system, the California State University (CSU) system, and a range of private universities. Teachers who go through this pathway complete their coursework and clinical practice requirements prior to serving as teachers of record. This pathway is offered for all four credential types described above.

California also authorizes several **intern pathways**, which are alternative programs that allow teacher candidates to serve as teachers of record while completing their credential requirements. As in other states, these pathways were created to help support districts in meeting their staffing needs. These pathways include: (1) *District Intern* programs, which are operated by local education agencies

(LEAs), (2) *University Intern programs*, which are operated by IHEs, and (3) *Early Completion Option (ECO)* programs. ECO programs offer candidates across Multiple Subject and Single Subject intern credentialing programs an opportunity to waive parts of their coursework requirements by demonstrating the requisite skills and knowledge through a Commission-approved assessment and clinical practice by passing a Commission-approved teaching performance assessment (Note: The TPA must be passed on the first attempt to qualify the ECO candidate for a credential). Additionally, California provides separate credential pathways for *out of state*, *outside the United States*, and *Peace Corps* prepared teachers for select credential types. There is also a credential pathway to earn a single subject or multiple subject teaching credential with private school teaching experience.

Beyond the traditional and intern pathways, the state also offers **emergency-style permits** (including Provisional Internship Permits [PIPs] and Short-Term Staff Permits [STSPs]) and **teaching waiver documents**. As is true in many other states, permits and waivers are used by employers as a stopgap to address teacher shortages, with the understanding that teachers must complete their credentialing requirements to be fully-prepared to teach students in the long-term. Permits and waivers are often referred to as “substandard credentials” because they are understood as an indicator of the health of the teaching profession, and of the state of teacher shortages in particular (Leung-Gagné et al., 2026).

- **Emergency-style permits** allow employing agencies (e.g., school districts, county offices of education) to fill acute staffing needs by hiring individuals who are not yet fully credentialed. STSPs and PIPs are only available if the employing agency documents that they made significant efforts to recruit fully-credentialed teachers and are unable to fill a vacancy (California Commission on Teacher Credentialing, 2022a, 2022b). Both STSPs and PIPs are available in the areas of Multiple Subject, Single Subject, and Educational Specialist.
- CTC also issues **teaching waiver documents** to support employing agencies to hire fully credentialed teachers to classrooms that do not align with their particular credential authorization. As CTC describes, “Waivers are issued or denied based upon the criteria and factors such as the school district’s continuing needs; the support the school district will provide to the applicant; or extenuating, extraordinary and unanticipated circumstances” (California Commission on Teacher Credentialing, 2025g). California issues two types of waivers: (1)

short-term waivers, which can only be issued once to any individual and for any given class, and authorize individuals to be hired to teach outside of their credentialed area; and (2) *variable term waivers*, which “provides the employing agency up to one year to: 1) allow individuals additional time to complete a credential requirement, 2) facilitate assignment in school programs to address issues of educational reform, 3) allow geographically isolated regions with severely limited ability time to hire and develop personnel, or 4) obtain waivers for situations when all other hiring efforts have been exhausted” (California Commission on Teacher Credentialing, n.d.d).

In 2023-24, the greatest share of newly credentialed teachers were prepared in California IHEs (75.7 percent total; 54.1 percent in traditional pathways and 21.6 percent in university intern pathways), whereas 4.5 percent of teachers were prepared in California LEAs and the remaining 19.7 percent of teachers were prepared out-of-state (California Commission on Teacher Credentialing, 2025f). More than half of new teaching credentials were obtained through traditional pathways (California Commission on Teacher Credentialing, 2025f). While there was a rise in the use of teaching waivers during the COVID-19 pandemic, there has been a decline in waivers used since then. Whereas the state issued 928 waivers in 2020-21, there were only 415 waivers issued in 2023-24 (California Commission on Teacher Credentialing, 2025f). More significant has been the rise of emergency-style permits: the number of PIPs and STSPs grew nearly tenfold from 2012-13 to 2024-25 (Leung-Gagné et al., 2026). Notably, these patterns vary by teaching area. For example, Smith and Li (2026) find that, in 2025, over 50 percent of education specialist teachers in 2025 were on emergency-style permits, whereas 32 percent of multiple subject teachers and 27 percent of single subject teachers were on emergency-style permits.

Providers. The breadth of California’s credentialing system is reflected in the large and diverse set of institutions which are authorized to prepare and induct teachers. The Commission on Teacher Credentialing (CTC) bears authority for accrediting and approving all affiliated institutions across pathways to ensure consistency in quality, and only CTC-approved programs are eligible to recommend candidates for a credential. CTC requires that all approved programs meet a set of shared standards (California Commission on Teacher Credentialing, n.d.b.). Currently, there are 96 institutions approved to offer preliminary credentials in the four credential areas described (i.e., Multiple Subject, Single

Subject, Educational Specialist, and PK-3), including all 23 CSU campuses, 9 UC campuses, 46 private/independent institutions, and 18 Local Education Agencies (LEAs). Taken together, the number of approved providers highlights the scale of the state’s effort to regulate quality across the entire system of credentials, programs, and pathways.

Challenges of the Current System

Currently, the certification system in California faces a number of challenges. One significant challenge has to do with the fragmentation of systems overseeing education in the state. A recent PACE report outlines the problem of fragmentation and incoherence and provides recommendations for change (Myung et al., 2025). Most notable is the distributed responsibility for teacher learning, and the disconnection between oversight of the K–12 system and oversight of teacher credentialing and support for continued professional development. While the CTC is responsible for policies related to preservice education, responsibility for ongoing professional development lies with the California Department of Education (CDE). As one state policy expert raised: “Why would you put some capabilities for professional development in a separate agency than the one that you're tasking to run all of your state's technical assistance and support programs? That to me just doesn't make sense.” This bifurcation of responsibility over teacher credentialing and ongoing teacher development makes it challenging to create and implement policies that support teacher learning across the career. This challenge is exacerbated by the deeper, systemic challenge of coordination across the public higher education system in California. The same policy expert expanded:

It's not just that K-12 and higher education aren't coordinated, that's bad enough....

We also have this problem in coherence between higher education. There's no structural interaction between CSU, UC, and Community Colleges...And then on top of that, you have this teacher credentialing problem...especially the CSU does the bulk of teacher credentialing, but often without any alignment to what we're trying to accomplish within K-12.

As the issue of fragmentation around governance for education will be addressed by other Getting Down to Facts reports (e.g., Ripma & Loeb, 2026), we simply note that this issue affects the state’s ability to ensure that teachers are supported in continuing to develop and refine their knowledge and skills once they are in the classroom.

A second challenge has to do with communications. The current website, which serves as a portal for information on teacher certification, is difficult to navigate, and the distinctions among the various pathways and certifications are often opaque. Although there is a page that provides a streamlined overview of pathways into teaching (<https://www.ctc.ca.gov/credentials/roadmap-to-teaching/becoming-a-teacher-in-california/pathways-to-credentialing>) it is not necessarily easy to find for individuals seeking information on how to become a teacher. At a time when many districts are facing shortages, clear and compelling communications about pathways into teaching are essential. We heard a similar concern regarding communications about undergraduate pathways for becoming a teacher. As one state policy leader noted:

I think that undergraduate teacher preparation in California institutions may suffer from a branding issue. I don't know how many candidates, people who are applying for college who may want to be a teacher, they're looking for: where is the teaching degree option? And you got to want it pretty bad to see something listed as an integrated undergraduate teacher preparation program and think, "Oh, that's for me."

Similarly, better communication about financial support for becoming a teacher, such as the Golden State Teacher Grant (GSTG) Program and residency programs, might encourage more people to consider teaching as a career. Without communicating such funding opportunities to prospective teachers, they may fall short in acting as *recruitment* mechanisms.

A third challenge facing efforts to ensure consistently high quality teacher preparation has to do with the sheer number of pathways and providers in the state. As noted above, California currently offers multiple distinct pathways towards preliminary certification (California Commission on Teacher Credentialing, n.d.c.), and recognizes 96 institutions, including programs run by universities, national online educator preparation programs, and districts (California Commission on Teacher Credentialing, n.d.a.) While providing multiple pathways into teaching helps address issues of access for individuals seeking to enter teaching, it also makes it more difficult to maintain consistency in the quality across so many different providers.

Not included in this list of 96 institutions are the state's community colleges, which play a crucial role in the teacher pipeline. As of 2024, 29 percent of UC graduates and 51 percent of CSU grads begin their higher education in community colleges (California Community College Chancellor's Office,

n.d.), yet with few exceptions, community colleges are generally not included in the conversation around teacher preparation. This is a particularly notable gap, given that 70 percent of students enrolled in the community college system are from racially/ethnically diverse backgrounds (California Community College Chancellor's Office, n.d.), and the community college system may represent a key lever for diversifying the teacher workforce. Multiple studies indicate that transferring from community college into a four year institution to complete a bachelor's degree is already difficult (e.g. Baker, 2016). Given the challenge of completing both subject matter coursework and certification requirements in undergraduate programs, policymakers need to think more carefully about how to integrate community colleges into the overall system of teacher preparation. This is particularly important for the new PK-3 certification, given that preparation for early childhood education has generally been handled in community colleges. One state policy leader we interviewed shared:

We'd love to get more of that alignment so that the community colleges are already very involved in the early childhood permits and some of them are trying to move into the early childhood teacher credential space...We are not there at the moment, and I'm sure there will be turf battles if we were to start to go in that direction. Just getting people to agree to align is this enormous barrier because the sectors in California, the fragmented governance system is such that it's not only fragmented at K-12, it's fragmented for higher education as well. There's no higher education body. Many states will have a higher ed coordinating body.

In this way, meaningfully integrating the community college system in the broader system of teacher credentialing may require addressing some of the deeper challenges of fragmentation in the higher education sector. Although there have been efforts to recognize and bring in the clinical practice experience that teacher candidates pursuing the PK-3 credential have earned in community colleges (California Commission on Teacher Credentialing, 2025b), there is more work to do to build more coherent pathways between community colleges and teacher credentialing in California.

An additional challenge has to do with the lack of integrated data systems that enable policymakers to track community college students interested in teaching and their journey through higher education. If one goal is to build stronger undergraduate pathways into teaching, the inability to track the role of community colleges across the pipeline into teaching is a significant challenge (Bell et al., 2018). The Cradle-to-Career data system in California (<https://cadatasystem.wested.org/>) would

address this concern because being able to track students from high school through eventual employment as educators would allow researchers and policymakers to identify possible obstacles, such as transfer from community colleges or length of programs, that contribute to leakages in the system (Fullerton, 2026).

Entry requirements for certification can pose another challenge for prospective teachers. Certification requirements exist for a good reason—to ensure that candidates possess the knowledge and skill required for teaching. However, such requirements can also serve as an obstacle to those seeking to enter the profession, requiring them to invest time and resources in meeting those requirements. For these reasons, states have a vested interest in balancing efforts to maintain quality at entry into teaching with ensuring an adequate number of teachers to serve students. One of the most onerous, and hotly contested, requirements has to do with the tests that prospective teachers are required to pass prior to entering the profession. Such tests may serve an important function in assessing whether candidates possess the knowledge and skills required for effective teaching, including knowledge of basic skills, subject matter knowledge, and knowledge of how to teach reading, for elementary teachers. However, questions have also been raised about both the predictive power of these tests and inherent racial bias (e.g., Goldhaber & Hansen, 2017). Currently, California already allows for multiple options for addressing both basic skills and subject matter knowledge. For example, California allows for a bachelor’s degree to be used in lieu of a basic skills assessment, and teachers can provide evidence of subject matter knowledge by completing a major or Commission-approved program of study aligned with the credential area or program of study, rather than taking a standardized test. In the past, candidates seeking a multiple subjects or education specialist credential were required to take the Reading Instruction Competence Assessment (RICA) to demonstrate knowledge of teaching reading. However, given critiques of the assessment for teaching reading, the CTC replaced the RICA with an alternative literacy performance assessment for assessing knowledge of teaching reading.

A particular challenge facing California relates to the legacy of the Fisher Act of 1961, which prohibited an undergraduate major in education and required that teachers possess a subject matter major. In addition, the Fisher Act required a fifth year for teacher certification, making the majority of teacher education programs in California either postgraduate or Master’s programs. In this respect,

California has been an outlier among states, which generally offer both undergraduate and postgraduate teacher education programs. As noted above, these requirements were historically tied to ensuring that teachers had adequate subject matter preparation, as well as a distrust of education schools (Inglis, 2011). However well-intended, these requirements have made earning a credential more difficult and expensive, particularly for first-generation college students, and may affect the diversity of the teaching workforce. As one state policy expert shared with us: “Across the country, there are places that have figured out how to do a lot in undergraduate teacher education, but we make it harder for everyone.” While the state has made significant investments to expand integrated teacher education programs in the past decade, there are still opportunities to build out undergraduate teacher education in California.

Although the prohibition against undergraduate teacher education was lifted in 2017 (California State Assembly, 2017), a relatively small share of teacher education programs in California are offered at the undergraduate level. The state provided financial incentives to support the planning and implementation/expansion of 4-year integrated teacher education programs (ITEP) through AB 181, which a number of universities took up. The ITEP grants were specifically designed to support the development of programs that prepare teachers in designated shortage areas (e.g., special education, bilingual education, TK, kindergarten) and partner with the community college system (California Commission on Teacher Credentialing, 2025d). As of December 2025, there were 90 total ITEP programs operating across the state (personal communication, CTC). The share of new teacher candidates enrolled in ITEP programs has also increased over time, from 6 percent in 2018-19 to 9 percent in 2024-25 (Leung-Gagné et al., 2026). Early evaluations of the initiatives have identified a number of barriers preventing successful implementation of these programs (California Commission on Teacher Credentialing, 2025d). Most notably, the number of requirements for certification and subject matter preparation did not decrease in many cases, which made it difficult to complete teacher certification in 4 years. As one higher education leader we interviewed shared:

The state put a lot of money into [ITEP], but the reality of how it played out was that it still required the full degree plus the credential. What we found was that you were basically taking [a] 120-unit degree and a 30-some-unit credential program and smooshing them together and saying, "Okay, what are the minimum things that we can pare off?"...Well, that's not a four-year

degree....If you don't know that you were interested in becoming a teacher when you started in year one of your first year, there was no way you were going to get through that in four, even four and a half or five years, because it was so rigid in how it was set up....There were a handful of places that did it really well and did get it into 120 units. And in those instances, it's because they really did look at: what is the overlap, what is the integration? How can we be creative around meeting those demands?

Further, the lack of infrastructure for CSUs and community colleges to collaborate around teacher education has challenged the success of the ITEP model. One program grantee of ITEP shared in a report to the legislature, "One of our biggest challenges in this first year was working with two community colleges that have different infrastructures and visions for building a teacher pipeline into special education." As such, although ITEP may represent a move in the right direction, there remain significant implementation challenges in practice that the state must grapple with if it seeks to expand the model.

An unanticipated consequence of the fifth year requirement for teacher certification has to do with access to federal Pell grants for postgraduate teacher education. Although Pell grants are generally intended for undergraduate students, federal legislation stipulates that California programs can choose to use these funds for *either* undergraduate or graduate teacher education (United States Senate, 1998). However, programs cannot use the funds for both, forcing programs to decide whether to support undergraduate or graduate students. Although the state shifted away from the ban on four-year programs in 2017, the federal Pell statute may disincentivize programs from expanding undergraduate education degrees (Leung-Gagné et al., 2026). Although the initial intent of the Pell was provision to support students' ability to afford fifth year programs in California, the policy has had unintended downstream effects on the state's ability to concurrently support four-year and fifth-year programs. This creates a challenge for programs that want to provide funding for both undergraduates and graduates and could disincentivize efforts to create new undergraduate programs.

The work of teaching differs by both content and developmental level of students; teaching kindergarten and teaching AP Physics requires very distinct forms of knowledge of both young people and subject matter. This content and developmental specificity of teaching has naturally led to different credentials for teachers of different grades and subject matters. However, as noted above, California is

somewhat unique in offering very broad grade band certifications, making it difficult to provide developmentally appropriate teacher education for prospective teachers. For example, the single subject credential, generally obtained by secondary school teachers, allows teachers “to teach the specific subject(s) named on the credential in departmentalized classes, such as those in most middle schools and high schools, in grades preschool, K–12, or in classes organized primarily for adults” (California Commission on Teacher Credentialing, 2025e). In other words, if one obtains a single subject credential in biology, that person could teach biology to students ranging from preschool to adults. A multiple subject credential enables teachers to teach “all subjects in a self-contained classroom, such as the classrooms in most elementary schools, in grades preschool, K–12, or in classes organized primarily for adults.” (California Commission on Teacher Credentialing, 2026c). Certification for special education teachers also enables teachers to teach students from preschool through age 22.

The challenge in such broad grade bands has to do with the specialized knowledge that teachers need of child development, subject matter, and how to teach that subject matter at different grade levels. PK-3 teachers, for example, need a deep understanding of how to teach early reading, which includes attention to both phonemic awareness and early comprehension strategies. This differs from the knowledge of teaching reading to older elementary students and middle school students, who are generally “reading to learn” rather than learning to read (e.g. Duke & Block, 2012; Snow & Biancarosa, 2003). Similarly PK-3 teachers teaching early numeracy may need deep understanding of different informal strategies young children use to engage in addition and subtraction and how to build from these strategies into more formal knowledge of mathematics, while middle school teachers must understand how to introduce algebraic thinking to early adolescents. Given the relatively constrained time in teacher preparation programs, broad grade bands make it challenging for teacher educators to cover in depth the subject matter, pedagogical content knowledge, and curricular materials teachers need to teach content well to a diverse set of learners. The newly developed PK-3 credential provides a strong model as it addresses these concerns by tying certification to a much narrower grade band and enabling teacher educators to focus on both the content and developmental stages of young children in more depth.

An additional challenge of such broad grade bands has to do with how clinical experiences during teacher preparation prepare teachers for their first jobs. Multiple subject teachers are certified

to teach in both elementary and secondary schools, but they rarely have time to spend extended time in both settings; most of their time will be spent at a single grade level where they develop experience with the curriculum and learners at that grade. New research has documented that first-year teachers are more effective when the grade level of their first job corresponds to the grade in which they student taught (Atteberry et al., 2017; Blazar, 2015), a finding that makes good sense given that teachers have already had a year to develop the specialized knowledge of both the curriculum and the developmental needs of their learners. However, broad certification areas may make it less likely that teachers are hired into jobs that align with their student teaching placements.

California is an outlier among other states in the sheer breadth of its certification areas (see Association for Middle Level Education, n.d.). The vast majority of states offer overlapping certifications at 3 levels, often K or PK-6, grades 4-8, and 6-12. Although still broad, these levels recognize the difference between teaching elementary, middle, and high school, while offering some flexibility around staffing needs through overlapping grades in the certification bands. In practice, the vast majority of candidates for multiple-subjects credentials in California will do their student teaching in elementary schools, just as the vast majority of candidates for single subjects credentials will conduct their student teaching placements in middle or high schools, given the constraint of self-contained or departmentalized settings embedded in the certification authorization.

Certification in special education is similarly broad, both in terms of content and age range. Although there are areas of possible specialization depending upon the nature of student needs, the education specialist credential allows teachers to teach in a wide variety of settings, from general education classrooms, to resource rooms, to hospitals and correctional facilities. The credential authorizes teachers to teach students from either birth (specializations in Deaf and Hard of Hearing Visual Impairments) or Transitional kindergarten (specializations in Mild and Moderate and Extensive Support Needs) through age 22. In addition, although there are extensive guidelines for the teaching of reading, under the Teaching Performance Expectations for Educational Specialists, expectations for preparation in other content areas are not clearly spelled out, referring only to opportunities for beginning special education teachers to “learn and practice subject-specific pedagogies and strategies, including language development strategies:

Approved preliminary preparation programs provide opportunities for beginning teachers to learn and practice subject-specific pedagogies and strategies, including language development strategies. Beginning teachers demonstrate their knowledge of these pedagogies and strategies for student support by passing a Teaching Performance Assessment (TPA), successfully completing course work that includes both instructional and subject-specific pedagogy, and engaging in a range of clinical practice experiences. (California Commission on Teacher Credentialing, 2024)

Although this model is not uncommon across the country, the breadth in developmental stages of learners and in content creates challenges for teacher education programs and raises questions about whether beginning special education teachers are well prepared to teach any particular subject or grade level well. A counter example exists in the Early Childhood Special Education (ECSE) specialist credential, which delineates a particular developmental stage for which teachers are prepared.

A final challenge with the current certification system is that the role of the CTC concludes when teachers are awarded the clear credential, yet issues of teacher learning and development persist across the career (Kirst, 2025a). Due to the fragmentation mentioned earlier, responsibility for continued professional development for teachers lies with the State Department of Education, and currently California has no mechanism for tying professional learning to more advanced credentials or differentiated roles for teachers. Such differentiated credentials exist in other states as a way to recognize and retain experienced teachers, and to tie professional learning opportunities to more advanced credentials. For example, Maryland's ambitious *Blueprint for Maryland's Future* reforms passed in 2021 offer teachers two advanced tracks: (1) a teacher leadership track, which allows experienced teachers to stay in their role as teachers but serve an expanded role as mentors for other teachers, and (2) a school leader/administrator track, which supports teachers' advancement into leadership roles (Grossman et al., 2026). Such state models help articulate a development trajectory for teachers, which places value on their experience and knowledge, and positions them as professionals in their schools.

Opportunities

In light of these challenges, we see several pathways forward for the state to strengthen its system of teacher credentialing to help ensure that all students have access to a high-quality teacher. In what follows, we describe both long-term opportunities, which will require deeper system-wide changes, and short-term opportunities, which the state might be able to more quickly act upon.

Long-Term Opportunities

1. Rethink the governance structure for oversight of teacher development across the teacher career pipeline.

As noted above, policies governing teacher credentialing play a significant role in ensuring that teachers are well prepared for the job. In California, these policies are largely under the purview of the CTC, which oversees the requirements for initial and continuing teacher credentials as well as the many programs that prepare teachers to teach in California. Although all states control policy over teacher licensing, the CTC is unusual in that it operates independently from the California Department of Education (CDE). This governance structure has led to fragmentation between initial teacher certification and ongoing professional development and career advancement for teachers. This fragmentation can make it harder for the teacher credentialing system in California to respond nimbly to new needs, leaving it less agile than other states. For example, as Ripma and Loeb (2026) describe, if the California Department of Education or California State Board of Education wanted to introduce shifts to teacher credentialing requirements, they would need to first convince CTC to make those shifts. Whereas in a state such as Texas, shifts to teacher credentialing can be adopted centrally by the State Board for Educator Certification.

Therefore, there is value in the state grappling with the challenge of streamlining oversight over teachers' preparation and development. Governor Newsom's proposed 2026-27 budget already calls for significant changes to state education governance (Office of the Governor, State of California, 2026). Building on these shifts to governance, there may be an opportunity to better coordinate oversight of teachers' work, from their initial certification through ongoing professional learning, mentoring, etc.

(Kirst, 2025b). Whereas other states have state-level policy infrastructure to support teacher leadership (Grossman et al., 2026), California does not have any such support through the credentialing system (Education Commission of the States, 2025). The uniqueness of California’s governance structure, in which CTC and CDE remain structurally siloed, despite their shared oversight over the teaching profession, may create problems for ensuring the overall coherence of the system.

2. Rethink the number of educator preparation providers in order to ensure consistently high quality preparation for all teachers.

Although the diverse range of educator preparation providers in the state may be designed to support access and address workforce needs, the large number of education preparation providers creates challenges for ensuring *coherence* and *quality* across the statewide credentialing system. Particularly given the small number of teachers going through many programs, there may be value in rethinking the number of providers for both initial and continuing teacher education, and tailoring programs to meet the needs of local regions, in order to ensure greater coherence and quality in teacher preparation and induction across the state. Given differences across the state in access to teacher education programs (see Mathews et al., 2024 for an analysis of teacher education deserts in California), careful attention will need to be paid to areas that lack access to teacher preparation programs or are experiencing teacher shortages.

Shorter-Term Opportunities

1. Redesign CTC website to make it easier for prospective candidates to understand how to become a teacher.

A relatively straightforward improvement would be to redesign the CTC website to more effectively communicate both the pathways into teaching and the potential funding streams to become a teacher. Though the website was recently redesigned with this aim, there is room for it to be more user-friendly, particularly to prospective teachers. For example, the state has already invested substantially in efforts to support the teacher workforce, such as the Golden State Teacher Grant (GSTG) Program, which provides teacher candidates with an upfront grant as part of their student aid

package to support their preparation costs (Leung-Gagné et al., 2025). However, in order for such investments to support *recruitment*, they must be communicated to prospective teachers in the state in an accessible way. Existing models in other states exist for such a website, such as TeachPHL, a website hosted by the Philadelphia Citywide Talent Coalition, to provide information and resources to prospective teachers in Philadelphia (<https://teachphl.org/>). Similarly, Washington states' TeachWA site offers clear guidance to prospective teachers, helping them identify which pathway into teaching for which they are eligible (<https://teachwa.org/becomeateacher/pathways/>). Both websites provide clear technical guidance and positively frame the benefits of becoming a teacher to prospective candidates. Through state-level funding, the CTC is currently working in partnership with the Kern County Superintendent of Schools on a statewide multimedia campaign to help recruit and retain teachers in California from April 2026 through July 2028. This partnership may offer a compelling model that the state could scale more widely to support teacher recruitment and retention moving forward.

2. Reimagine certification grade bands.

Building on California's recent successful effort to create a new PK-3 credential, we see an opportunity to create narrower grade-level bands for certification in the state. Creating narrower certification bands, for example one that prepares teachers to teach middle school grades, would enable preparation programs to target the upper elementary and middle school curriculum in core content areas while also focusing on the developmental needs of this distinctive age group. Although the majority of teachers earning a middle grades credential are likely to teach in middle schools, such a credential could also prepare upper elementary teachers as subject specialists. In a number of states in the US, including North Carolina, and in other countries across the world, it is not unusual for teachers to specialize within one or two content areas in the upper elementary grades (Bastian et al., 2023). Although this may cause some challenges for principals wishing to assign teachers to any grade within an elementary school, we believe that the advantages to students of more targeted preparation for specific grade levels are worth the trade-off.

Similarly, there is an opportunity to narrow the single subject credential to focus on grades 6-12 in core academic subjects. While there may be a need to continue to offer specialist subjects such as art or music that cover K-12 to provide specialist instruction in elementary schools, secondary teachers

who teach core academic subjects in middle or high school need specific preparation in both the subject matter taught in these grade levels and in adolescent development. In large part, teacher preparation programs already treat the single subject credential as preparation for grades 6-12, so this change would likely reflect current practice. There have been previous efforts to reconsider the grade band configuration for teacher certification in the past; in 1995, SB 1422 created a work group to explore potential changes (personal communication, Mary Sandy, CTC), and perhaps it is time to revisit this recommendation.

3. Create incentives for streamlined dual certification programs with special education.

Given the growing number of students with special needs who are already in general education classrooms (Gallegos, 2026; National Center for Education Statistics, 2024), California might also consider creating additional incentives for prospective teachers to earn streamlined dual certification in both special education and either multiple or single subjects to encourage teacher preparation programs to develop dual certification programs. Assembly Bill 1119, signed by the governor in October 2025, has already asked the CTC to create a workgroup to investigate the feasibility of expanding dual certification programs, so there is a clear opportunity to follow through on this.

4. Build out models of undergraduate teacher education for PK-3 and multiple subject credentials.

To make preparation programs more accessible, California could consider building on the ITEPs to expand models of undergraduate teacher education for those seeking PK-3 and multiple subject credentials. In the 2016-17 fiscal year, the Legislature approved \$10 million for the Integrated Undergraduate Teacher Preparation Grants (“ITEP”). The 2022-23 Committee on Budget, Education Finance: Education Omnibus Budget Trailer Bill, AB 181, authorized the Commission to allocate \$20 million in one-time grants to regionally accredited institutions of higher education (IHEs) for four-year integrated teacher preparation programs, including student teaching, and/or to adapt an existing Commission-approved five-year integrated teacher preparation program to a four-year program. These grants supported the planning for, creation of, or expansion of four-year integrated programs of professional preparation that produce teachers across a number of different certification areas.

The legislation acknowledged the crucial importance of partnering with community colleges to create undergraduate pathways to certification for the large number of students who begin higher education in the community college system. Such partnerships need to address both elements of coursework that could be completed in the context of community colleges and clinical experiences, given the requirement of 600 hours of field experience for initial certification. In one strong example of an integrated undergraduate program, San Francisco State University worked closely with five community colleges to create an integrated four year program leading to a PK-3 credential, with ITEP support. Due to strong collaboration across SFSU and the community colleges, transfer students with an associate's degree in Early Childhood Education could complete the BA/credential program in 2 years. Students were able to complete a major in Child Development which fulfilled certification requirements as well. This partnership also created opportunities for students to complete some of their clinical experiences while still enrolled in community colleges (personal communication, Linda Platas, SFSU).

Expanding undergraduate teacher preparation programs will require the design of subject matter courses that fulfill requirements for either an academic major or general education along with credential requirements. Majors in child development, psychology, or the learning sciences all provide opportunities to include content relevant to credential requirements in child development and learning, especially for the PK-3 and Multiple Subject certification areas. Similarly, students can take courses in U.S. history, required for certification, as part of their general studies requirements at either 2-year or 4-year colleges. Designing programs that enable students to complete their B.A. and certification as undergraduates will take strong collaboration across both departments within a college and across community and four year colleges as well. However, for those who know early on they want to become teachers, undergraduate programs offer a more affordable and expedited route into teaching.

Conclusion

These are challenging times for the teaching profession, with the morale of teachers hitting a 50-year low (Kraft & Lyon, 2024), enrollment in teacher education programs dropping, and many states experiencing teacher shortages. Although the teaching shortages in California have eased somewhat and enrollment in teacher education is beginning to recover (Carver-Thomas et al., 2024), this is an opportune time to rethink policies that may contribute to the challenges of recruiting and retaining a strong and diverse teaching workforce for California’s students.

California’s unique history—marked by policies prohibiting undergraduate majors in education and, until recently, requiring a fifth year (post-baccalaureate) for certification—has created potential obstacles for individuals who enter higher education knowing they want to teach. California has already invested in the creation of new integrated undergraduate programs, as a way to address this issue, and now may be the time to address the implementation challenges facing these programs, even as post-baccalaureate programs will continue to play an important role in serving individuals who make the decision to teach either late in their undergraduate programs or after graduation.

California also has the opportunity to step back and rethink other aspects of its certification structure that make it unusual in the national landscape, including grade bands of certifications and the absence of advanced certifications for experienced teachers. The new PK-3 credential offers a strong model of certification that is tied to the needs of a well-defined student population and curriculum and enables teacher preparation to focus on the developmental needs and curricular content related to the primary grades. The creation of this new credential may make it possible to consider other more targeted certifications that serve upper-elementary/middle school students. Unlike many states in the US, California currently does not have an infrastructure to support differentiated roles for teachers or credentials that identify teacher leaders (Grossman et al., 2026). At a time when California must focus not only on recruiting teachers into the profession but retaining them as well, this is an opportune time to think more broadly about how to create opportunities for mid-career teachers and to tie differentiated roles for teachers to opportunities for continued learning and development.

Given the interrelated nature of these challenges and opportunities, we believe it is critical to take a more holistic look at the teacher credentialing system in California rather than making piecemeal changes. Creating a task force that is charged with studying the challenges facing the credentialing

system and making recommendations for systemic reform could be a logical next step. The goal of the recommendations would be to create a more coherent and high-quality system for recruiting, preparing, certifying, and supporting teachers across their careers, with a focus on creating data systems that allow California to focus on continuous improvement. Such a task force would need to include diverse stakeholders from the K-12 and higher education systems, including community colleges, and represent both urban and rural areas across the state, and recommendations would need to attend to the size and diversity of California in relation to local teacher workforce issues.

A strong public education system depends centrally on the strength of its teachers. Ensuring that California has a strong, well-prepared teaching force is part of the CTC's mission, and one it takes seriously. Our report highlights areas for turning existing challenges into opportunities to improve the certification structure and strengthen the preparation of California teachers.

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