



Creating Inclusive Educational Environments for Students With and Without Disabilities

Examining Dual Credential Pathways in California



**Thompson Policy Institute
on Disability**



Nat Hansuvadha, Ph.D.

California State University, Long Beach

Andrew Wall, Ph.D.

Fenix Research and Evaluation

Meghan Cosier, Ph.D.

Chapman University, Thompson Policy Institute on Disability

Kaylie Holke, M.A.

Chapman University

Audri Gomez, Ph.D.

Chapman University, Thompson Policy Institute on Disability

Marquita Grenot-Scheyer, Ph.D.

CSU Long Beach, and Chair, California Commission on Teacher Credentialing

Linda Blanton, Ed.D.

CEEDAR

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1 in 7 PK–12 students is identified as a student with a disability and receives special education or related services.

Nationally, approximately 1 in 7 PK–12 students is identified as a student with a disability and receives special education or related services (Office for Civil Rights, 2025), a proportion mirrored in California’s public schools (California Department of Education [CDE], 2025). As a result, nearly all educators, regardless of role, credential, or school context, teach students with disabilities and shape learning environments that must support students with diverse strengths, identities, and support needs. Inclusive classrooms, where all students have the opportunity to learn, play, and access the general education curriculum, are becoming increasingly common. Furthermore, research has suggested that students with and without disabilities experience improved outcomes in inclusive settings (e.g., Cole et al., 2020, 2022; Gee et al., 2022; Jones & Winters, 2024). Accordingly, preparing educators to teach in inclusive environments is not a peripheral concern. Rather, such preparation is central to ensuring access, belonging, and opportunity for California’s students.

The purpose of public education is fundamentally tied to creating environments in which all students can learn, participate, and thrive. When students are supported to reach their full potential, the benefits extend beyond individual outcomes to broader social and economic gains, including civic participation, workforce engagement, and community well-being (Carter et al., 2012; Kurth et al., 2015). Ensuring educators are prepared to design and sustain inclusive learning environments is a shared responsibility and a critical policy lever for advancing educational equity and access statewide.

Despite this imperative, educational systems too often fall short of fully realizing inclusive learning environments that enable all students to flourish (Morningstar et al., 2017). Students with disabilities and learning differences frequently experience barriers to access, participation, and belonging in schools, often as a result of structural and instructional practices that were not designed with inclusion as a core assumption (Kurth et al., 2016). This persistent gap between the stated goals of education policy and students’ lived realities poses a significant challenge for educator preparation and school systems alike. Addressing this misalignment requires intentional policy attention to how educators are prepared to meet the needs of California’s increasingly diverse classrooms. 3

In this report, in alignment with the California Department of Education Taskforce (CDE Taskforce, 2015), we defined inclusion as: A coherent system of education, [in which] all children and students with disabilities are considered general education students first; and all educators, regardless of which students they are assigned to serve, have a collective responsibility to see that all children receive the education and the supports they need to maximize their development and potential, allowing them to participate meaningfully in the nation’s economy and democracy. (p. 7).



In this report, we examined system-level alignment in educator preparation policy, with a particular focus on California’s efforts to prepare teachers to support inclusive PK–12 environments. Central to this analysis was the state’s “Common Trunk” approach to teacher credentialing. Adopted in 2016 by the California Commission on Teacher Credentialing (CTC), the Common Trunk establishes a unified set of teaching performance expectations (TPEs) that apply across multiple subject, single subject, and education specialist credential pathways. This policy reflects a deliberate shift toward a shared professional foundation for all teachers that emphasizes competencies related to supporting diverse learners, fosters inclusive and culturally responsive classrooms, and implements evidence-based instructional practices (California CTC, 2016).

Recent policy developments have further reinforced the Common Trunk as a foundation for inclusive preparation models, including dual-credential pathways and broader efforts toward universal teacher preparation. By positioning inclusion as a core expectation of teaching practice rather than a specialized add on, California’s credentialing framework reflects a growing recognition that access for students with disabilities depends on alignment between policy and practice across systems.

(Mis)alignment Between PK–12 Schools and Higher Education

Although California’s PK–12 system has moved toward inclusive practices, higher education institutions have continued to face different systemic pressures and have worked to integrate these complex shifts into their longstanding structures and programs. Further alignment between PK–12 and higher education systems remains a complex challenge, given the different government, fiscal, and reward systems driving each sector. Initiatives from groups such as the California Alliance for Inclusive Schooling (CAIS), the national CEDDAR Center, the Thompson Policy Institute at Chapman University, Supporting Innovative Practices, and others focus on bridging K–12 and higher education systems. Here, we highlight the pressing need for further systems alignment, pointing to PK–12’s need to enhance inclusive schools and to the higher education system’s preparation of teachers to help shape the future of inclusive schools in California.

These efforts draw on the national work of CEEDAR Center (2025) and efforts from other states to accomplish similar goals, such as the Ohio Deans Compact (2026). The Ohio Deans Compact exemplifies a systems-level approach to educator preparation that centers shared responsibility for inclusive practice across the PK–12 continuum. The Ohio Deans Compact demonstrates how aligning higher education, PK–12 systems, and state partners around common expectations can strengthen preparation for teaching students with disabilities. This work reinforces the notion that expanding access and belonging for students with disabilities requires coherent, collaborative preparation models rather than siloed or specialized pathways alone.



K–12 School Inclusion Context

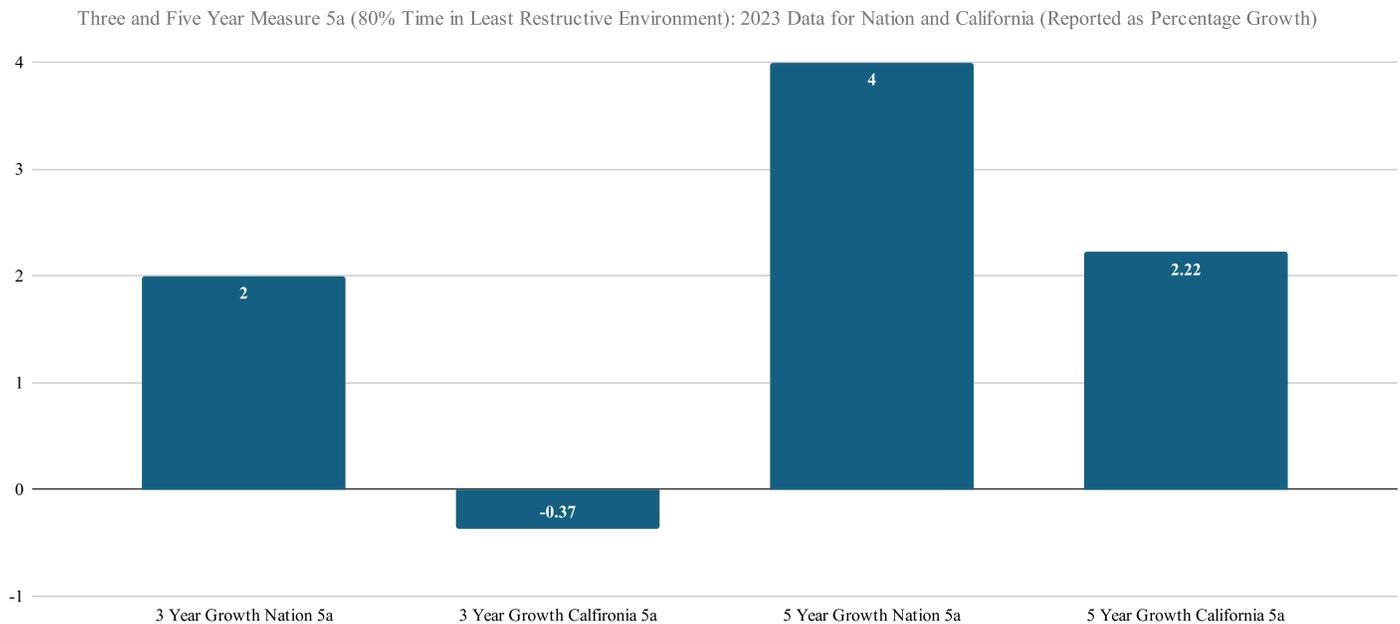
Approximately 850,995 students (14% of all students) received special education services across California as of 2024-2025 (CDE, 2025). The state, on average, underperforms against national benchmarks and its own articulated goals in ensuring that students with disabilities are educated primarily in general education environments, signaling persistent implementation gaps across the system. Access to general education is measured by the percentage of students who spend 80% or more of the school day in a general education classroom; nationally, this figure is 67%, compared to just 59% in California. Moreover, California’s growth trajectory lags behind the national trend: from 2018 to 2023, the percentage of students educated in least restrictive environments for 80% or more of the day increased by 4 percentage points nationally, compared to just 2.2 percentage points in California (CDE, 2025; National Center for Education Statistics. (2024).

Additionally, California has not kept pace with national measures of inclusion, showing slower growth than the national average and not fully meeting its own state goals for inclusion (see Figure 1). This slower progress in expanding access to general education is reflected in student outcomes, as students in California continue to demonstrate persistently low proficiency rates on statewide English language arts and mathematics assessments, and a graduation rate of approximately 77.1%, which is well below the statewide average of 87.8% for all students (California Department of Education, 2024).

K-12 Inclusion Context In California

Figure 1

Nation and California Comparison of Growth in Percentage of Students in the Least Restrictive Environment 80% of the Time or More



Compounding these challenges is California’s persistent shortage of qualified special education teachers: nearly 1 in 3 special education teachers enters the classroom on a substandard credential or emergency permit, and the state has continued to experience declines in newly issued special education credentials, limiting districts’ capacity to provide inclusive instruction, coteaching, and specialized supports in general education settings (Ondrasek et al., 2020).

In response to statewide data indicating a persistent need to advance inclusion in California schools, the California Legislature and CDE have established a coordinated system of support designed to promote inclusive practices and drive schoolwide transformation. The statewide system of support provides expert technical assistance and professional development to support district efforts to create inclusive school environments. These supports include needs assessment, strategic action planning, access to demonstration sites of inclusive excellence, support for inclusive policy and practice, and even financial support to districts (see www.sipimpact.org). Evaluation evidence has suggested these efforts are leading to more inclusive educational experiences for students with disabilities (Supporting Innovative Practices, 2024).



Advancing Teacher Preparation With Inclusive Education

California’s initiatives to align with inclusive education in PK–12 schools include teacher preparation programs that enable future teachers to earn dual licensures (i.e., general education and special education) through blended or dual-credential programs. These teacher preparation pathways prepare candidates to earn two teaching credentials simultaneously, typically a multiple subject credential, also referred to as a general education credential (which authorizes teaching all subjects in a self-contained elementary classroom) and an education specialist credential, also referred to as a special education credential (which authorizes teaching students with disabilities, such as mild/moderate or extensive support needs). However, some pathways do offer single subject (secondary subject matter authorization) and education specialist credentials. These programs are designed to equip teachers with the knowledge and skills necessary to effectively teach students with and without disabilities in inclusive classroom settings for students with and without disabilities (Pugach & Blanton, 2011).



Teacher Preparation Pipeline

To understand how teacher preparation programs prepare educators for inclusive classrooms, it is informative to see the trends associated with teacher credentialing in California, which provide context for the pathways currently preparing educators. Data from the California CTC have indicated significant variability in new teacher credentials over the past 5 years. The average number of new education specialist credentials was 5,860 in the 2019–2020 academic year. New education specialist credentials peaked during the COVID-19 global pandemic in 2020–2021 at 6,843, then declined nearly 31% over the next 2 years to 4,737, before rebounding 19% in 2023–2024 to 5,633. The 2023–2024 new education specialist credentials total was still 18% below the 5-year high in 2020–2021.

Another interesting contour of the education specialist pipeline is that 46% of new individual credentials are prepared by private, not-for-profit institutions, 23% are by California State University (CSU) institutions, and less than 1% are by University of California institutions over the past 5 years. Institutions offering dual-credential programs, both public and private, prepared 21% of new education specialists earning a credential, though not all of those are in dual-credential programs. We note, at this time, estimating how many dual-credentialing students are being prepared is not feasible, as no central data at the state level track this information.

“Only about one-fifth of new education specialists come from programs offering dual-credential pathways.”

Search for High-Quality, Dual-Credential Programs

California's investment in dual-credential programs reflects a strategic response to intersecting challenges in educator preparation, workforce shortages, and inclusive education policy. Through these accelerated programs, teacher candidates can obtain two distinct credentials in a shorter time frame and with fewer units than if they pursued each credential separately. Although dual-credential or blended programs offer promising opportunities for developing future teachers to educate all learners, program effectiveness depends on thoughtful implementation, institutional collaboration, and sustained support for both teacher candidates and the schools that employ them.

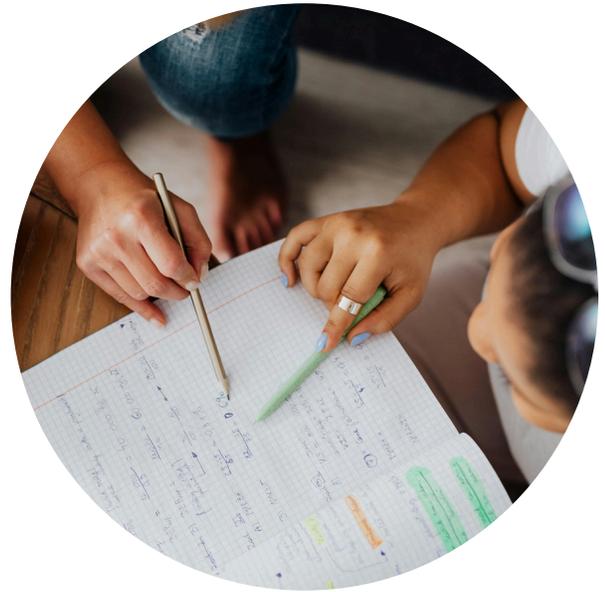
Over the last 10 years, an increasing number of institutions in California have offered dual-credential programs. One potential primary motivator of dual-credential programs is to mitigate the chronic shortage of special education teachers across the state (Patrick et al., 2023). According to data from the California CTC (2025a), special education remains among the highest need areas, with many districts relying on teachers with emergency or provisional permits. By allowing candidates to pursue both credentials simultaneously, the state aims to create a more adaptable and better-prepared teaching workforce.

Another driving factor is the movement toward inclusive education and increasing access to general education curriculum, contexts, and peers for students with disabilities receiving special education services. The Individuals with Disabilities Education Act (IDEA, 2004) and California's own multitiered system of support (MTSS) initiatives have emphasized the need for educators to support students with disabilities in general education classrooms, reflecting a primary imperative to recognize that students with disabilities are first and foremost general education students. Dual-credential programs aim to prepare teachers who can differentiate instruction, collaborate across disciplines, and foster inclusive learning environments effectively from the outset of their careers.

California's efforts are also aligned with the goals of educational equity and access. Students with disabilities, particularly those from historically underserved communities, often experience disproportionate disciplinary action, placement in restrictive settings, and lower academic outcomes (Office of Special Education Programs, 2020). Teachers with dual credentials are better positioned to address these disparities by applying inclusive pedagogy and trauma-informed practices within general education settings. Furthermore, the CDE's *One System* report (2015) and its 2021 update reinforced the value of dual credentials by emphasizing high-quality instruction and seamless services for all students. Dually credentialed teachers are well-positioned to advance these goals by supporting coteaching models; implementing evidence-based practices, such as Universal Design for Learning (UDL) and MTSS; integrating and assessing early learning; and improving accountability for student progress.

Search for High-Quality, Dual-Credential Programs

Regardless of the certification pathway, the focus should be on ensuring high-quality teachers. Although dual-credential programs have the potential to frame dual certification as a transformative approach to fostering equity and inclusive education, most dual-credential programs in the United States present it as a practical means to obtain two teaching licenses without elaboration on inclusive education (Gomez-Najarro et al., 2023).



To understand the nuances of dual-credential programs effectively, Pugach and Blanton (2009, 2012) and colleagues (Gomez-Najarro et al., 2023) extensively analyzed dual-credential programs in the United States and proposed a typology that distinguishes between discrete, integrated, and merged models. These models are defined by the degree of faculty collaboration and curricular integration between general and special education, not by licensure outcomes or administrative structures.



Conceptual Framework

In examining inclusive education in California, and specifically high-quality teacher preparation programs designed to prepare educators to work in and create inclusive environments, we deployed the dual-certification program typologies of Pugach and Blanton (2009, 2011). Pugach and Blanton (2009, 2011) identified three types of dual-certification programs: discrete, integrated, and merged.

DISCRETE	<p>Discrete Dual-Certification Programs essentially prepare candidates separately for general and special education. Despite its name and ability to earn two teaching credentials, the courses, clinical experiences, and faculty remain largely separate and siloed between the two disciplines. There is little effort to create pedagogical cohesion or philosophical integration between general and special education.</p> <ul style="list-style-type: none"> • Key Features of Discrete Dual-Certification Programs: • Two parallel credential programs with minimal overlap. • Students complete two distinct sets of requirements for each credential. • Often leads to two separate teaching credentials.
INTEGRATED	<p>Integrated Dual-Certification Programs intentionally align general and special education coursework to offer a more cohesive preparation. Though each credential focus is distinct, there appears to be deliberate coordination between the two areas, fostering more inclusive teaching approaches (e.g., shared courses). Candidates begin to understand how principles of general and special education intersect.</p> <ul style="list-style-type: none"> • Key Features of Integrated Dual-Certification Programs: • Shared coursework or coordinated assignments. • Cross-disciplinary faculty collaboration. • Field experiences may include both general and special education settings, with reflective connections made between them.
MERGED	<p>Merged Dual-Certification Programs, as the most unified and seamless model, reconceptualize general and special education as a single knowledge base, with no artificial division between the two. Merged programs prepare candidates to teach in inclusive classrooms seamlessly, with a strong emphasis on equity, collaboration, and UDL. Courses are codeveloped and cotaught, and student teaching occurs in inclusive settings.</p> <p>Key Features of Merged Dual-Certification Programs:</p> <ul style="list-style-type: none"> • Curriculum is fully integrated. • Students are prepared through a single philosophical and pedagogical lens focused on inclusion and equity. • Faculty from both areas work in a unified department or team. • Fieldwork reflects inclusive and cotaught environments.



Dual-credential programs provide distinct benefits:

- **Increased teacher versatility:** Graduates are eligible to teach in both general and special education classrooms, increasing their employability and utility to school districts.
- **Stronger inclusive practices:** Candidates are trained with a unified philosophy, fostering stronger collaboration, coteaching models, and seamless support for diverse learners.
- **Workforce pipeline expansion:** These programs create a larger pool of qualified educators, particularly in underserved communities.
- **Reduced segregation of students with disabilities:** Teachers trained to work across settings are more likely to support inclusive placements, reducing the marginalization of students with disabilities.

Despite these advantages, dual-credential programs also face significant challenges:

- **Program intensity and duration:** Completing two credentials often requires additional coursework, clinical hours, and teacher performance assessments, which may deter candidates from pursuing or completing the program, especially those with financial or time constraints.
- **Faculty and curriculum integration:** Educator preparation programs must effectively integrate general and special education frameworks, which may require shifts in departmental structures and pedagogical approaches (Gomez-Najarro et al., 2023).
- **Maintaining depth and quality:** There is concern that spreading content across two credential areas may compromise depth in either one credential area, especially in complex domains like behavior management or subject-specific pedagogy.
- **Systemic barriers:** District hiring practices, funding limitations, and school structures may not yet fully support the flexible roles dual-credentialed teachers can play.

Methodology

To investigate the development and trajectory of inclusive education and dual-licensure teacher preparation, with the aim of informing policy and practice in California, our research team employed an integrated mixed-methods design (Tashakkori & Teddlie, 2010).

Quantitative and qualitative data were collected throughout the study and were analyzed to seek triangulation of results during the interpretation of findings. Our mixed-method data collection sought to answer the following research question:

How are dual-credential inclusive teacher preparation programs in California currently structured and evolving (to prepare candidates for inclusive education)?

Our research team collected and analyzed two primary data sources for this project. First, we used secondary data to examine trends in K–12 least restrictive environments, educational credentials, and to identify dual-credential programs. Second, we conducted a document analysis of websites of institutions of higher education to identify the prevalence and type of dual-credential programs. Third, we conducted qualitative interviews with deans of colleges of education to better understand high-quality dual-credential programs.

Secondary data sources included existing 2024 survey data from 19 of 23 CSU campuses to identify dual-credential programs across the system. In addition to identifying the existence of dual-credential programs, responses identified proposed changes to teacher licensure that would make it more efficient for candidates to earn a dual credential. To examine trends in educational credentials in California, credential data from the California Teacher Commission were downloaded from their website for the academic years 2021–2022 to 2023–2024 (California CTC, 2025b). Third, to examine trends in the least restrictive environment in California as compared to the nation, we collected data from the U.S. Department of Education website (National Center for Education Statistics, 2024) and the CDE (2025). In the case of downloaded quantitative data, all data were downloaded, transformed into a Microsoft Excel spreadsheet format, cleaned, and then analyzed using Microsoft Excel and SPSS.

The second data source was a document review of websites from colleges of education in California (e.g., Blumenreich & Gupta, 2015; Reagan et al., 2021). We selected program websites as a data source, similar to Gomez-Najarro et al. (2023), because campus websites reflected the “most visible and accessible documents that programs and organizations use to present themselves to the world” (Blumenreich & Gupta, 2015, p. 91). Institutional and program websites were examined across the CSU system, the UC system, and the Association of Independent California Colleges and Universities (AICCU, n.d.) to determine if dual-certification programs were offered and to what extent these programs reflected the different typologies of dual certification in the research literature.

According to California CTC (2025b), 251 approved institutions offered an educator preparation program (EPP) categorized by five types of systems in the state: CSU, UC, private/independents, local education agencies (LEAs), and other. In total, there were 23 CSUs, 10 UCs, 48 private/independents, 168 LEAs, and one other (i.e., the Association of CA School Administrators). We included in our analysis colleges and universities with preservice EPPs offering a multiple-subject and/or single-subject credential alongside an education specialist credential. We then narrowed the sample to EPPs that offered the two most prevalent special education authorizations: Mild to Moderate Support Needs (MMSN) and Extensive Support Needs. Our analysis excluded EPPs that offered a dual credential with Extensive Support Needs or education specialist credentials such as Deaf and Hard of Hearing. Additional inclusion criteria required that programs be housed within accredited institutions of higher education, distinguishing them from alternative certification routes through school districts or county offices of education. Although LEAs provide invaluable experiential training and support for teachers, focusing on preservice EPPs enabled a systematic examination of higher education-based structures, curricula, clinical practices, and strategies that shape teacher preparation across institutions. By analyzing these programs, we sought to identify patterns, strengths, and issues across dual-certification programs within traditional preservice EPPs.

We developed a comprehensive analysis for each institution using Google Sheets, recording summaries of key content and pasting relevant website text as evidence to support our data. We included hyperlinks to maintain access to the webpages and to be able to revisit specific dual-certification programs. For each program, we began by searching for keywords and phrases (i.e., “dual/concurrent/combined/joint credential/certification”) on the institution’s home page and searched the university catalog to fact check whether institutions offered dual-credential programs. We then moved back and forth among college and school of education websites, institutional and departmental pages that included lists of academic majors, and specific program webpages that referenced dual certification. We also visited college webpages to determine whether dual-certification programs were listed in multiple places (e.g., departments or programs housing elementary and secondary or housing special education credential programs). Additionally, we collected and examined advising sheets and roadmaps to analyze data on program length and timeline of each dual-certification program, as well as student-teaching expectations.

As Table 1 depicts, we examined 81 universities offering an initial teaching credential, resulting in 23 CSUs, 10 UC schools, and 48 AICCU. Across these California institutions, 22 were initially identified as offering a dual-credential program or pathway. Upon closer review, one UC offered a multiple-subject credential program with a deaf and hard of hearing credential program, which did not meet our inclusion criteria and was excluded from our analysis, resulting in 21 institutions of higher education offering a dual-credential program or pathway. Five were offered at the undergraduate level, whereas the majority were offered at the postbaccalaureate and graduate level (see Table 2). Although very few integrated undergraduate dual-credential programs exist in California, they represent a distinct entry route into teaching with distinct program structures, timelines, and student outcomes. Thus, our analysis primarily focused on the most prevalent pathway in the state, postbaccalaureate dual-credential programs, which helped to avoid conflation across undergraduate degree and postbaccalaureate credential programs.

Table 1: Number of Dual-Credential Programs

Institution Type	CSU	UC	Independent	Total
Multiple subjects or single subject and a MMSN or ESN credential	23	10	48	81
CTC-approved “combined” program	5	0	6	11
Percentage	22%	0%	12.5%	13.6%
Programs offering dual-credential program or pathway	8	0	13	21
Adjusted percentage	35%	0%	27%	26%

Note. ESN = Extensive Support Needs, CTC = Commission on Teacher Credentialing, MMSN = Mild to Moderate Support Needs



Table 2: Dual-Credential Programs by Units and Length

Postbaccalaureate/graduate programs

Institution Type	CSUs (7)	UCs	Independents (13)	Total (20)
Average units	53 units	N/A	40 units	45 units
Average length	4 semesters/ 2 years	N/A	3.7 terms	3.6 terms

Undergraduate programs

Institution type	CSUs (2)	UC	Independents (3)	Total (5)
Average units	115 units	N/A	99 units	104 units
Average length	5 years	N/A	5 years	5 years

Note. **See [Coding Protocol for Academic Terms](#)



Interviews with campus deans, whose institutions offered a dual-credential program, provided a rich data source for this study. Regardless of their specific duties, education deans are catalysts for change. Situated as someone pivotal in higher education, deans have the influence to drive reforms and advance their institution’s mission, translating vision into action. Given this positionality as “agents of change” (Benedict et al., 2022), our aim was to understand how education deans understand and support teacher education reform initiatives via dual-credential programs.

In total, four campus deans were purposely selected based on three criteria: first, we selected deans from institutions with dual-credential programs; second, we sought deans from each of the following institutional systems: CSU, UC, and AICCU institutions (private, not-for-profit). Third, we identified leaders likely to have specific knowledge of the development and implementation of their dual-credential programs. Interviews with deans were based on Pugach and Blanton’s (2009, 2012) conceptually driven dual-certification program typologies guide, were semistructured, and lasted between 45 and 60 minutes. Interviews were conducted via Zoom, recorded, and transcribed for analysis.



FINDINGS

In our analysis of 21 California institutions offering a dual-credential program or pathway, we observed greater divergence than similarity with respect to nomenclature, program coursework, clinical experience expectations, and their recognition by CTC as an approved “combined” program. At the same time, our findings revealed programmatic policies and practices that exemplify strategic structural approaches to inclusive teacher preparation in some institutions, including a shared, or common trunk, of coursework; cotaught student-teaching placements; and strategic planning to reduce financial and temporal demands of dual-credential pathways. These findings were consistent with broader trends in the literature, which have emphasized the importance of integrated coursework, collaborative clinical experiences, team-taught classes, and program design to reduce programmatic and financial barriers (Gomez-Najarro et al., 2023; Pugach et al., 2019). Collectively, EPP practices in California illustrate how institutions are working to embed inclusive education concepts in teacher preparation and attract future teachers while also negotiating issues of feasibility and sustainability (Gomez-Najarro et al., 2023).

Naming Convention Confusion

Among the 21 institutions we identified as offering a dual-credential program or pathway, there was considerable variation in terminology to name and describe these programs. Specifically, program labels ranged from “dual” (n = 11), “concurrent” (n = 3), “inclusive education” (n = 1), “joint” (n = 1), or through the use of a combined title such as “[Credential A] and [Credential B]” (n = 6). Such variation reflected the absence of a standardized naming convention and raises questions about how institutions conceptualize the relationship between credentials, coursework, and clinical experiences within these programs.

The inconsistency in nomenclature and how institutions label their programs shape how programs are understood by prospective candidates, faculty, external stakeholders, and potentially may lead to markedly different interpretations of what constitutes a dual-credential program. For example, terms like “dual” can be interpreted in reference to two parts or elements, which is an accurate label, albeit a minimum threshold for programs labeled as dual programs. However, programs with this nomenclature may also have very distinct program structures and student outcomes from one another, even when CTC requirements are similar. Likewise, “concurrent” programs, as labeled by three institutions in our analysis, may simply imply “operating or occurring at the same time . . . by two different authorities” (Merriam-Webster, n.d.). In this case, two credential programs may be connected only by program name, but may run parallel to each other with no crossover in curriculum, faculty, or learning outcomes. Despite its name and ability to earn two teaching credentials, candidates are essentially prepared separately for general and special education.



Discrepancy With CTC Recognition of “Combined” Programs

The confusion in naming convention is reinforced and complicated by the discrepancy of what CTC identifies and approves of institutions that offer what they call a “combined” program— defined as either a multiple subject and education specialist credential or a single subject and an education specialist credential. In our analysis, some institutions offering a dual-credential program or pathway were not recognized by CTC as approved “combined” programs. Of the 21 programs we identified as offering a dual-credential program or pathway, only 11 institutions were recognized as a combined program on the CTC website. Ironically, several institutions, which were not acknowledged as a combined or dual-credential program, prominently advertised dual or concurrent pathways on their college or program websites, advising materials, and in university catalogs. Consequently, visibility of programs does not always align with formal CTC program approval or recognition. This discrepancy highlights a gap between institutional representation of program offerings and official state recognition.

The reverse was also true for CTC-approved combined programs that appeared fragmented with traditional boundaries in general and special education preparation. For example, coursework specific to one credential was taken in separate academic terms from the second credential, along with separate student teaching placements for each credential (Pugach & Blanton, 2009, 2012). These programs lacked pedagogical cohesion between general and special education, reflecting a discrete typology of inclusive teacher preparation.

For prospective students, policymakers, and even EPP faculty in different disciplines, this misalignment can create confusion regarding the program’s actual status and legitimacy. Without a shared language, efforts to compare programs across institutions, articulate common standards, and build consensus around inclusive teacher preparation become significantly more challenging. Although this misalignment in nomenclature may seem trivial, prospective candidates may be misled about the availability or recognition of a dual-credential pathway, potentially affecting their program choice, financial investment, and career planning.

Scholars have similarly noted that inconsistent program terminology can complicate cross-institutional data analyses and hinder the development of coherent policy frameworks (Cochran-Smith et al., 2016; Zeichner, 2018). CTC must navigate these differences to evaluate programs, approve new pathways, and track credentialing data.

Data Gaps in Dual-Credential Programs

Plausible reasons for this misalignment are the nature of data used by CTC to monitor and report program approvals. CTC data emphasize credential issuance and general program approval rather than providing a detailed breakdown of every dual program combination offered by institutions. A second explanation is that CTC relies on institutional self-reported data, which may be incomplete or inconsistently updated across reporting cycles. Additionally, data reported to CTC may reflect program information that is 1 or more years behind, meaning more recent programmatic changes or newly updated program pathways are not immediately captured in official state records. These lags in reporting approval timelines may explain, in part, why institutions advertise dual programs that do not appear in CTC's current list of "combined" programs. From a policy perspective, outdated or inconsistent data may hinder workforce planning, making it difficult to assess how many dual-credential teachers are actually being prepared to meet statewide needs and obscure EPP data—especially given the critical shortage of special education teachers in California, where accurate data are essential for responsive policy and resource allocation.

In our analysis, two recently developed dual-credential programs were launched this year, which may also explain the underreporting of dual-credential programs. For example, one institution in southern California collaborated across three departments at their university (i.e., Dual Language, Special Education, and English Learner Education) to implement a distinct dual Multiple Subjects Bilingual Authorization (BILA) and Special Education program. This accelerated program was developed in response to a statewide initiative to address critical teacher shortages in high-need areas (Bilingual/Special Education) after the passage of Proposition 58 and the development of bilingual/dual-language programs.





Shared Vision

Serving as a guiding framework for EPPs, program learning outcomes (PLO) articulate what program graduates should know and be able to do, aligning with state standards (e.g., California TPE), accreditation requirements, and college or university missions. By articulating a shared vision, especially for dual-credential programs, PLOs signal to candidates, faculty, district partners, and accreditation bodies what the program values and prioritizes while translating professional standards into actionable commitment statements that can be enacted in coursework and clinical practice.

At some universities, the college of education home pages or program websites prominently highlighted equity and inclusive education as central core values across all initial teacher credential programs. For example, PLOs at one private institution in southern California called attention to preparing teachers who create “inclusive, welcoming environments that support diverse learners and students with varying needs, abilities, and backgrounds through tailored instructional approaches.” Likewise, principles of inclusive teacher preparation were further reinforced among other PLOs in the same dual-credential program, moving beyond lip service in which candidates apply “learning, instruction and motivation theories to support learners’ cognitive, linguistic, social, emotional, physical and moral development through inclusive and developmentally appropriate learning experiences.”





Common Curricular Trunk

Following a shared vision, our analysis identified the greatest extent of collaboration and integration of special and general education through a universal set of shared courses. This “common trunk” of coursework foregrounded inclusive education in dual-credential programs (CDE, 2021), aligning general and special education coursework to offer a more cohesive preparation. Programs seeking to blend different credential disciplines included common courses such as Foundations of Inclusive Education, Teaching for Equity, Differentiating Instruction for Inclusive Classrooms, and Inclusive Educational Systems, introducing all teacher candidates to topics including legal foundations in special education, behavior, case management, and assessment. In several dual-credential programs, teacher candidates were prescribed to take the same set of core courses, oftentimes in their first term, reflecting curricular integration of course content via a common body of content knowledge for all teacher candidates. Recognizing positive student outcomes for cross-disciplinary learning, some programs sequenced their program with “universal preliminary credential core requirements” for all candidates prior to taking specialized courses in special education (e.g., Applied Behavior Analysis) or prior to their final practicum.

Meanwhile, minimal coordination across general and special education teacher preparation was reflected in program sequence and coursework in some programs, which operated with one credential as a primary or base credential with the second credential as a “stackable” second credential. For instance, program websites or catalog information advised candidates to complete all multiple subjects courses and final practical requirements prior to beginning education specialist courses. This additive approach was reflected in language that promoted separate credential “options” and referenced seeking advising from each credential program.



Inclusive General Education Student Teaching Placements

The clearest distinctions among dual-credential program pathways were evident in student teaching. These differences were reflected in the structure and type of placements, the extent of coteaching opportunities, and the level of integration across credential areas. In our analysis, we identified separate general and special education student-teaching assignments for the vast majority of programs, which reinforced traditional and separate educator preparation systems with minimal integration or crossover of clinical experiences.

In fact, only two dual-credential programs merged student teaching assignments in cotaught general education classrooms. Consequently, both programs were also embedded in teacher residency models: a structured, year-long partnership between a school district and higher education institution where teacher candidates (i.e., the residents) teach alongside an experienced mentor teacher (California CTC, 2025b; Fitz & Yun, 2024). Residents move through the program as a cohort and receive substantial financial and educational support in exchange for a commitment to teach in the district after completing the program (Fitz & Yun, 2024).

In one of the dual-credential teacher residency models at a public institution in southern California, student teachers were placed in elementary collaborative coteaching (CCT) classrooms in a neighboring school district as part of a year-long teacher residency. According to the district website in which student teachers were placed, CCTs were described as general education classrooms where general and special education teachers team teach while differentiating instruction and implementing positive behavior support, curricular adaptations, and specialized academic instruction for students with and without disabilities. Likewise, we noted a similar student-teaching structure at a private university offering a dual-credential teacher residency program, where student teachers participated in a year-long coteaching residency model that builds professional practice “rooted in culturally sustaining pedagogy and equity consciousness.”

For dual-credential programs leading to both a general and a special education credential, CTC program standards require “substantive experiences in general education, inclusive, and special education settings” within the 600 clinical practice hours across the arc of the program, and are also encouraged to extend clinical practice for an additional 150 hours (California CTC, 2024, p. 2). In our analysis, it was unclear if and how programs are meeting these additional hours, or the type of supervision and mentorships candidates receive.

To attract and support candidates pursuing two credentials, institutions advertised an internship pathway option for candidates to fulfill their special education credential requirements after completing their single-subject or multiple-subjects clinical hours in earlier semesters. This cost-effective approach significantly reduces financial barriers for candidates seeking two credentials through the implementation of effective clinical feedback and mentorship (Patrick et al., 2023).

Streamlining Dual-Credential Programs

Some 4-year institutions advertised that candidates could obtain two credentials (i.e., general and special education) without completing additional units or coursework to earn a second credential. For instance, teacher candidates could add an education specialist credential to their program with no additional required units to their multiple-subjects or single-subject credential (though additional exams and student teaching were still expected). Echoing this program structure, several universities promoted a master’s in teaching or related master’s degree program in which candidates complete their graduate degree alongside requirements for a preliminary teaching credential, with as few as 0–3 additional units to earn the second credential.

This curriculum design of streamlining two credentials for the cost and length of one credential highlights the marketing value of cost and time efficiency and accelerated completion. Such framing also underscores how institutions leverage program design and messaging to appeal to prospective candidates seeking less costly and time-prohibitive credential pathways (Gomez-Najarro et al., 2023). Condensing the curriculum may reflect coordinated and strategic moves to attract, prepare, and graduate dual-licensed preservice teachers, which may have its tradeoffs in emphasizing breadth over depth (Gilmour & Wehby, 2020).

Although dual-credential programs are a proliferating model of teacher preparation in California and the United States, they have yet to adequately meet the demands of students with disabilities in least restrictive general education settings. Most programs reviewed in this study demonstrated few elements of an inclusive dual-credential program, such as shared coursework and coordinating program advising, yet very few programs evidenced explicit collaboration and a unified general and special education preparation into a single, cohesive experience that reflected tenets of inclusive teacher preparation. Most programs maintained traditional boundaries between disciplines, though coordination to reduce units and coursework was highly evident.

Programs with a more seamless model of inclusive teacher preparation integrated general and special education content throughout the program and provided extensive cotaught student teaching in inclusive classrooms. However, cotaught student teaching placements may likely be less a reflection of EPP faculty collaboration or program vision and more of a reflection of K-12 schools' availability and quality of inclusive education settings with local school district partners, despite students with disabilities spending more time in general education settings. More importantly, although clinical practice in different settings matters in preparing dual-credentialed preservice teachers, so does the quality of supervision, mentorship, and how inclusive settings are used (Backes et al., 2025).

Depending on placement of student teachers to meet clinical practice hours, there are concerns that insufficient clinical experience may not fully prepare future teachers in either general education or special education settings upon hire (Rosenberg & Sindelar, 2020). Backes et al. (2025) argued that teacher preparation should align with career entry settings to increase teacher attrition. Their research revealed that special education teachers placed in inclusive settings upon hire are more likely to succeed and stay when their student teaching mirrored that context, whereas those beginning in more restrictive special education settings show stronger retention when trained accordingly. Both EPPs and policymakers should therefore consider tailoring teacher preparation pathways to reflect the contexts where new teachers are most likely to serve, or desire to teach, to strengthen both teacher retention and effectiveness.

FINDINGS: DEAN INTERVIEW THEMES

Campus deans representing the CSU and AICCU institutions provided rich data sources for this study (Benedict et al., 2022). Four educational deans were chosen or recommended by their peers for possessing specific knowledge of the development and implementation of dual-credential programs at their institutions. Across individual interviews with education deans who offered a dual-credential program or pathway in California, prominent themes emerged and are detailed next in our findings.

Dual Credentials as a Strategy for Inclusive Education

This theme was especially prominent in programs that were faculty-driven and philosophically motivated, rather than purely market-driven. For example, all deans reported how they appointed like-minded faculty (often special education faculty), who shared the same goal or vision of building a dual-credential program or pathway and served as faculty champions for inclusive education. One education dean, whose college received technical assistance grounded in inclusive education scholarship and leadership to design their program, recounted:

“And so we got a group of faculty together from across our general ed and special ed programs to really conceptualize what it would be to do an urban dual-credential program from scratch. If there were no boundaries, if there were no limitations, how would we develop the program? We used an MTSS framework, so I really worked very closely with the faculty in the program development.”

Across interviews, deans articulated the need for dual-credential teachers to effectively teach diverse learners, which included:

- Deans consistently emphasized the belief that all teachers need skills traditionally associated with special education, including differentiation, UDL, MTSS, and collaboration.
- Dual programs were described as intentionally blurring the boundary between general and special education, reinforcing the idea that teachers serve all learners.

The process by which each IHE designed their dual programs or pathways greatly differed, but the consensus was the same: dual-credentialed teachers possess assets that are a benefit to students and PK-12 schools. One dean shared, “And I do think that as people in the ed specialist field have forever said, all classroom teachers need [special education] skills, and I don’t disagree with that.”



Two Years, Too Much: Time-to-Degree, Cost, and Candidate Burden

Although deans strongly advocated for dual-credential programs and pathways, they also identified time, cost, and workload as the most persistent challenges affecting their dual-credential programs. This tension between educational quality and what deans believed was best for dual-credential candidates contrasted with market viability, which directly shaped program sustainability decisions. Across interviews, the theme of Two Years, Too Much was characterized in the following ways:

- Longer programs that were 2 or more years in length were associated with:
 - “Student overwhelm”
 - Lower enrollment
 - Negative student perceptions as “the long program”
 - Eventual program redesign or closure
- Dual pathways were repeatedly described as a “heavy lift” for candidates, even those considered high-performing students.

Market pressure strongly favored 1-year or 3-semester models for dual-credential programs and pathways, even when deans believed longer programs produced better-prepared teachers.



Further, the internal conflict deans experienced in deciding to extend or reduce the time for candidates to earn dual credentials was exacerbated when they considered the financial toll on candidates, as one dean reflected:

“Maybe that was a misstep early on, when we started to think people would wait that long to earn their credentials, because the financial side, whatever, would be taken care of. Again, we’re a first-generation HSI [Hispanic-serving institution] campus, and these folks are working two to three jobs, hustling to pay for their education. . . . We recognized it was a little inappropriate to think they could wait that long before they started working.”

Overall, the demanding workload of candidates concurrently pursuing both a general and special education credential was a major theme across private and public IHE systems, whether deans cited students’ ability to finance their education.

Complex and Challenging Clinical Practice and Placement

A prominent issue all deans acknowledged was the dilemma of clinical practice in dual-credential pathways. Repeatedly, key issues included:

- Difficulty securing inclusive placements where candidates could authentically practice dual roles.
- Reliance on “alternative” placement models (e.g., primary placement followed by a brief “ancillary” placement) to reduce time.
- Tension between special education internships and residencies and the ability to complete general education clinical requirements.

For example, most deans acknowledged the disconnect between inclusive educational practices promoted in their dual programs or pathways and what school districts offered, which translated to separate and siloed student-teaching placements in general and special education. This issue was further complicated in dual-credential pathways that reduced their student-teaching load by only requiring one full term in special (or general) education, followed by an abbreviated placement in another setting. As one dean explained:

“Candidates could choose either the education specialist classroom, and then they’ll do an ancillary placement in a gen ed classroom or flip. We prefer the ED specialist because we think it’s more demanding, but they can choose, but they don’t have to do two . . . they have to do the full placement in one and then an additional experience, which isn’t a full-time semester. . . . So, that’s how you constrain some of the time to degree is you don’t have to do two full experiences.”

To compensate for the secondary and abbreviated student teaching experience (often in general education), one dean explained how she monitored candidates’ clinical placements to ensure they were with “strong subject matter teachers.” These examples captured the constraints of student teaching and clinical placements in preparing dual-licensed teachers for inclusive education in settings that do not or rarely exist.

Residency Programs: Opportunity and Complication

Deans expressed teacher residencies as both a solution and a complicating factor in the context of dual-credential programs. Residencies were referred to as a “saving grace” and provided healthy financial incentives to attract and support candidates. This approach also opened strategic partnerships between institutions of higher education and school districts, with one dean expressing gratitude for their county office of education, which provided grant-writing support to school districts seeking residency grant proposals.



At the same time, deans communicated complexity in using residencies as a vehicle to support dual-credential pathways. Shared observations across interviews included:

- Retaining healthy and stable cohort sizes.
- Combining residency and dual-credential requirements can overburden candidates due to extensive workload.
- Power dynamics between LEAs and candidates can create conflicts of interest, particularly around evaluation and advocacy.

Overall, residencies alleviated significant financial barriers for candidates pursuing dual credentials, though deans recommended other financial incentives to support candidates beyond residencies. Other feasible routes included: building an undergraduate or paraeducator pipeline; providing hiring bonuses to dual-credentialed teachers; and designing multiple pathways, such as a 2-year cohort pathway, for those working part time while earning their credentials.



Using Existing Infrastructure Rather Than Building New Programs

A consistent operational theme for most institutions is that they did not create entirely new dual-credential programs or pathways; instead, they used current infrastructures, which made implementation of dual pathways more feasible. Key strategies included:

- Building pathways or crosswalks using preapproved general education and education specialist credential programs.
- Relying on a common trunk model, aligning coursework to satisfy requirements for multiple credentials.
- Avoiding new CTC program approval by demonstrating that:
 - Existing special and general education programs were already approved.
 - Changes to credential programs did not exceed thresholds for “substantive revision.”

Institutions of higher education strategically examined universal TPEs to build their pathway and align TPEs from general and special education using the common trunk. Likewise, two institutions justified using special education as their foundation to design their pathway, as one dean explained:

“What we decided in conversation with the faculty was that there’s so much needed for obtaining the special education credential. So, using the EDSP coursework as the foundational coursework was what was agreed upon. And so, from there, we needed to look at where there may be overlap in any of the single-subject courses that were the pedagogical courses or the methods courses.”

The opportunity for faculty to look for similarities and overlap across program standards, rather than differences, helped to blur the boundary between general and special education. This approach reinforced the idea that teachers serve all students and helped faculty to expedite curricular design of their dual pathways and programs.

Enrollment Viability and Institutional Context Matter

Although student enrollment outcomes and program implementation varied across the institutions represented among the deans we interviewed, they all agreed that context matters more than design alone. From a fiscal point of view, deans weighed key contextual factors in shaping and sustaining their dual-credential pathways, including:

- Regional labor markets and district hiring needs
- Institutional mission (e.g., access oriented vs. market driven)
- Student demographics (e.g., first-generation, working students)
- Competition and status from nearby institutions

Two deans reported that institutional status matters in recruiting teacher candidates into their programs, especially when compared to other institutions of higher education in proximity whose reputations were more or less favorable. Institutional status and reputation were communicated by one dean from a private institution, who shared, “Our employment numbers tend to be pretty high, even with the challenges in the county, partly just because of our status within the county, and also, to be honest, the lack of status with [nearby CSU].” However, these comparisons of institutions occurred not only between private and public institutions, but also between universities in the same higher education system. This trend was illustrated by one dean at a smaller CSU, who reflected they were a “stepsister” to a larger and more popular CSU. The same dean also stressed student demographics of those attending public institutions, which impacted program decisions, student outreach, recruitment, and retention. Unfortunately, even philosophically strong dual-credential programs were closed or restructured when they no longer aligned with student financial realities and enrollment patterns.

Employment Outcomes: Strong Demand, Mixed Implications

All deans confidently reported high employability for dual-credentialed graduates, whom districts “love to hire.” However, given the perennial needs of school districts, these hires were almost exclusively in special education. Thus, deans expressed key concerns about graduates’ placement in special education and its implications, which included:

- Graduates were often funneled into special education roles, regardless of initial intent.
- Loss of teacher agency in job placement.
- Lack of teaching positions that used the dual credential.
- Concern about teacher burnout and early attrition in special education

Although employment outcomes for dual-credential teachers were almost always guaranteed in special education, deans shared reservations that highlighted the tension between system need and teacher sustainability; one dean stated:

“My fear with a program like a dual credential is [candidates] just think it’s about employability, and given the need for ED specialists, when you have that dual credential, chances are you’re going to be placed in an ED specialist position. And I don’t think they exactly are anticipating what they’re getting themselves into. And so, I do wonder, longer term, whether there’s going to be a burnout factor even more quickly.”

Thus, although the demand for graduates from dual-credential programs and pathways was significant, deans acknowledged the lack of inclusive placements for their graduates, which conflicted with their teacher preparation.





Need for Policy Alignment and Incentives

Across interviews, deans emphasized that long-term viability of dual-credential programs and pathways depends on policy and system-level support, including clearer CTC crosswalks and streamlined standards across general and special education. More seamless collaboration and coherence among CTC, CDE, school districts, and preparation programs were also suggested.

Further, deans recommended supports for both faculty and students pursuing dual credentials, which included:

- Incentives for faculty program development
- Financial incentives for candidates (e.g., tuition relief, hiring bonuses)

Without these supports, dual-credential pathways were described as labor intensive to build and sustain. Also, given the high faculty workload across public institutions of higher education, for example, one CSU dean provided a clear rationale for faculty compensation, saying:

When we ask faculty to pick up some significant work to do without compensation, I think that is a barrier to start with because then you've got people trying to, with the best of intentions, just not having sufficient time to do the work, so I think that is one is incentivizing folks to do the work. And so, our faculty are amazing, but with the 4-4 teaching load and research and service expectations, and then to take on big work, we cannot do that without finding external support for them.

In conclusion, dual credentials are a viable mechanism to advance inclusive education, and deans consistently suggested that dual-credential programs or pathways are best understood not as a single model, but as an ecosystem shaped by philosophy, labor markets, candidate realities, and institutional capacity. Deans consistently supported the idea of dual preparation for inclusive education, while acknowledging that current structures and policies within distinct higher education systems and CTC require careful (re)design to remain equitable, feasible, and sustainable.

Discussion

This paper examined the structure, implementation, and evolving role of dual-credential teacher preparation programs in California through the lens of inclusive education and workforce development. Our findings suggested that California's expansion of dual-credential programs represents one response to chronic special education teacher shortages and the need for exceptionally prepared teachers to enact inclusive practices in California schools. The effectiveness of these programs is highly contingent upon program design, institutional capacity, and alignment across preparation programs, school districts, and state policy structures. Consistent with prior research (Pugach & Blanton, 2009, 2012), dual-credential programs cannot be understood as a singular approach within educator preparation programs, but rather as a model among a range of other models that vary significantly in philosophical orientation and curricular integration.

Applying Pugach and Blanton's (2009, 2012) typology illuminated critical distinctions among discrete, integrated, and merged models of dual certification across California institutions. Discrete models remain prevalent, offering efficiency in licensure attainment, but they can fall short of a cohesive vision of inclusive education due to siloed coursework, clinical practice, and limited faculty collaboration. Integrated and merged programs more closely align with inclusive education principles by intentionally blurring the boundaries between general and special education, and emphasizing shared pedagogical frameworks such as UDL, MTSS, and collaborative practice. Deans' interviews indicated that conceptually driven programs, most often championed by special education faculty, were more likely to adopt integrated or merged approaches, suggesting that faculty leadership and institutional values play a pivotal role in shaping program quality beyond licensure outcomes alone (Reese et al., 2018).

Despite strong support for dual-credential preparation, findings underscored persistent tensions between preparation for inclusion, candidate burden, and market viability. Cost, time to degree, and workload emerged as universal challenges across dual-degree institutional contexts, particularly for first-generation and working students. Deans' characterization of longer programs as "too much" reflected broader structural inequities in higher education that disproportionately affect candidates from historically underserved backgrounds. Although shorter pathways increase enrollment and completion, they may also constrain opportunities for deep clinical practice and reflective integration of general and special education competencies. This tension raises important questions about how to balance access with rigor.

Clinical practice was a particularly significant challenge in realizing the promise of dual-credential programs. Deans consistently reported difficulty securing authentic, inclusive placements that allow candidates to enact dual roles in practice. As a result, many programs rely on abbreviated or sequential placements that risk reinforcing, rather than dismantling, the separation between general and special education. Teacher residency programs were identified as both an opportunity and a challenge, offering financial support and stronger district partnerships, while at the same time having an overly demanding student workload.



These findings suggest without systemic changes to district placement structures, dual-credential preparation alone cannot resolve the disconnect between inclusive ideals and school-based realities.

Employment outcomes reveal a tension at the core of dual-credential outcomes for individuals who complete programs (Gilmour & Lam, 2025). Although graduates are highly employable, they may be funneled into special education roles, often regardless of their intent to teach in inclusive or general education settings. This pattern raises concerns about teacher autonomy and attrition, particularly given the well-documented demands of special education teaching (Backes et al., 2025). Deans' calls for stronger policy alignment, financial incentives, and clearer credential crosswalks highlighted the need for system-level efforts to sustain dual-credential pathways. Overall, findings position dual-credential programs not as a panacea, but as a promising mechanism for advancing inclusive education—one that requires policy action, institutional investment, and a reimagining of clinical and employment placements to fully realize the potential of inclusive preparation.

Implications

Dual-credential programs are a strategic tool to expand the number of teachers prepared to work in inclusive settings, especially in high-need and underserved communities. However, teacher preparation should serve as one of several approaches to preparing future teachers for inclusive education. Inclusive education initiatives must operate concurrently in a continuum of the teaching profession, spanning the preparation of future teachers and school leaders, induction programs, professional learning for in-service teachers, administrators, and other school-related professionals.

Opportunities for growth and support to expand dual-credential programs across the state are within reach and provide exceptional and distinct teacher preparation models for inclusive education.

Need for Cross-Program Collaboration

Crafting a truly integrated dual program requires intentional partnership between and among general and special education faculty and department chairs. Some programs we reviewed stressed that implementing an effective dual-certification program demands “collaboration, support, inclusion, patience, [and] advocacy” across departments. Otherwise, content in both coursework and clinical experiences appeared separate and siloed. Programs must bring together instructors from both credential areas to jointly design curriculum and field experiences. Aligning course content so that teaching methods courses serve both credentials often requires extended planning.

- **State-Level Financial Aid Reform.** University deans called for policies that provide adequate financial support for teacher candidates enrolled in dual programs, including extended aid eligibility and stipends.
- **Expanded District–University Partnerships.** Strengthening collaborations between school districts and universities can help create stipended internships and teacher residencies that attract, support, and hire candidates upon completion of their program.

Policy Pathways for a Stronger Teacher Pipeline

From a policy perspective, California already has many of the pieces in place, including recent legislation (e.g., California Assembly Bill 1110), to analyze how to improve dual-credentialing programs to meet the state’s goal of increased integration of students with disabilities in general education settings. California Assembly Bill 1119 (Patel), a 2025–2026 legislative proposal titled, “Teacher Credentialing: Dual Credentialing: Workgroup,” aims to increase inclusion by expanding pathways for teachers to become dually credentialed. This bill supports broader access for students with disabilities and addresses the longstanding shortage of education specialists in California by making the route to credentialing more efficient. By March 1, 2027 (as amended), CTC must convene a workgroup to design efficient dual-credentialing pathways for:

- Aspiring teacher candidates (e.g., multiple subjects, single subject, PK–3, and education specialist credentials).
- Current teachers holding general education credentials to obtain an education specialist or early childhood specialist credential.
- Current education specialist teachers to obtain general education teaching credentials.

The workgroup is tasked with (a) analyzing existing routes for obtaining additional credential and supplementary authorizations; (b) identifying overlapping coursework (“common trunk”) that can count toward both credentials; (c) examining barriers and opportunities in existing credentialing systems; (d) considering models from other states for dual credentialing and pathways for out-of-state, dually credentialed teachers to practice in California; and (e) recommending changes, fiscal supports, and incentives. CTC has played a pivotal role in redesigning educator preparation and credentialing by adopting TPEs, which set the standards that candidates must meet to earn a credential.

Building on this foundation, policymakers should continue to expand and promote dual-certification programs that prepare preservice teachers to work effectively across both general and special education. Such preparation enhances the state’s capacity to deliver inclusive, high-quality instruction and meet the diverse needs of California’s student body.

The CDE’s (2015) One System report and its 2021 update reinforced the value of dual credentials by emphasizing high-quality instruction and seamless services for all students. Dually credentialed teachers are well positioned to advance these goals by supporting coteaching models, implementing evidence-based practices such as UDL and MTSS, integrating and assessing early learning, and improving accountability for student progress.

Although California has built momentum over the last 10 years, the state faces significant challenges in preparing future teachers for inclusive education practices in EPPs, especially compared to the strides made in PK–12 school districts. For example, higher education in California is highly decentralized, unlike the more centralized PK–12 systems overseen by the state Board of Education (Myung, Hough & Marsh, 2025). The UC and CSU systems, along with private and independent universities, have distinct missions, priorities, and considerable autonomy and infrastructure in their curricula and program development. Distinct accountability measures and legal frameworks guiding PK–12 systems and higher education also make it challenging to implement uniform, statewide guidelines for inclusive teacher preparation across all teacher training programs. However, promising practices in PK–12 schools and higher education spotlighted in this research brief provide emerging evidence and models of alignment and synergy across systems that support inclusive education.



Recommendations to Strengthen Dual-Credential Pathways

1. California CTC

In alignment with AB 1119, we recommend that the Commission do the following:

- Align education specialists and multiple- and single-subject standards to reduce areas of duplication and remove redundancy to facilitate the development of inclusive credential programs that are efficient, accessible, and high-quality.
- Align TPEs across all education specialists and multiple- and single-subject standards to facilitate the development of inclusive teachers.
- Provide clear guidance and standard definitions for currently credentialed general education teachers to continue teaching while earning an education specialist credential.
- Provide clear guidance and standard definitions for currently credentialed special education teachers to earn a general education credential (i.e., multiple subjects or single subject).
- Provide clear guidance and standard definitions for dual-credential pathways (including General Education/Education Specialist and Mild/Moderate–Extensive Support Needs) to promote a common language across credential programs statewide.
- Support for residency programs that lead to a dual credential, including preference in state grant applications.
- Develop and clarify guidance for teacher apprenticeship pathways, including how registered teacher apprenticeships can align with dual-credential and residency models, recognizing that these pathways are newly emerging and still being defined in California.
- Collaborate with technical assistance centers (e.g., CAIS, CEEDAR) to highlight and examine exemplars of dual-credential programs on the CTC website.
- Identify the elements of high-quality, inclusive clinical placements within teacher preparation programs.
- Create a system for tracking individuals who obtain a dual credential and monitor programs that offer dual-credential options.
- Allocate student teaching stipends to incentivize dual-credential pathways, allowing candidates to receive a stipend for each semester of clinical placement.





2. State-Funded Technical Assistance and Support Infrastructure

- Require state-funded technical assistance centers, including the Statewide Residency Technical Assistance Center, California Collaborative for Educational Excellence, and Supporting Innovative Practices, to include an explicit focus on dual-credential pathways and residencies that prepare all teachers to teach students with disabilities while maintaining appropriate specialization.
- Require PK–12 special education technical assistance projects to include a deliverable that identifies districts, schools, and classrooms serving as model inclusive clinical placement sites.
- Implement communities of practice across the state for programs offering dual-credential programs, such as the Center for Transformational Educator Preparation Programs (CTEPP), which supports the ongoing transformation of all CSU educator preparation programs.
- Provide guidance to LEAs on how community schools' funding can be strategically allocated to support teacher residency and apprenticeship models, including braided funding approaches that align workforce development with inclusive school improvement efforts.

3. LEAs

- Identify and provide access to high-quality, inclusive clinical placements for student teachers, including supporting mentor teachers.
- Maintain continuous exchange of best practices with IHEs to support inclusive student teaching experiences
- Provide hiring opportunities and mentorship specific to dual-credential hires
- Use existing support structures within districts and LEAs for collaborative support and networks (i.e., professional learning communities and instructional coaches focused on inclusive education)





4. Institutions of Higher Education

- Program leadership (e.g., deans and associate deans) work with faculty to clarify the roles of both general and special education teachers in educating students with disabilities in PK–12 schools.
- Use research and models on teacher education for inclusion in the design of dual-certification programs.
- Establish school partnerships that ensure high-quality, inclusive clinical placements.
- Examine administrative structures in education colleges and schools to eliminate barriers to faculty collaboration and a focus on inclusive practices and collaboration.
- Deans/EPP leaders prioritize collaborative reform in their college strategic plans and shared goals as central to the institution/EPP culture.
- Clarify Professional Roles: Establish a shared understanding of general and special educators' responsibilities in serving students with disabilities across PK–12 settings.
- Align Faculty Expectations: Communicate and reward collaboration across teaching, research, and service
- Incentive collaborative initiatives in curricula redesign and teaching innovation across general and special education faculty and departments.
- Communicate expectations for collaboration and interdisciplinary work in teaching, service, and research for faculty hire, tenure, and promotion.
- Build and maintain strong PK–12 and state-level partnerships and ongoing communication and exchange of best practices.
- For higher education-based programs, secure political and financial support from campus leadership (e.g., provost, president) and state agencies.
- Collaboratively with LEAs, targeted financial and logistical support for candidates in dual-credential programs to complete extended clinical practice requirements, often exceeding 600 hours across multiple settings, ensuring candidates are not financially disadvantaged during prolonged placements.

Conclusion

Our review of teacher preparation efforts to develop educators who are prepared to create spaces of belonging and inclusion for all individuals is a story of many good elements that need to be systemically pulled together to create a more coherent system supporting inclusive education. The existence and ongoing emergence of dual-credential programs illustrate the possibilities already in place to prepare exceptional and transformative inclusive educators. The acknowledgement of what exists is a powerful example of what is possible.

What is not yet achieved is a strong, normalized system of preparing, placing, and then supporting dual-credential or other committed and well-trained individuals, as educators in inclusive classrooms throughout California. For that to happen, findings and recommendations of this report offer a roadmap. Highlights of that roadmap include deepening understanding of how dual credentials fit into the teacher preparation pipeline in California, creating pathways and examples of doable dual-credential pathways for institutions and individuals, identifying and supporting school districts to place and sustain the most highly qualified inclusive educators in ways that honor their preparation and commitments, and ultimately providing funding support for teacher candidates to seek additional training to exceptionally prepared to be inclusive educators ready to see all youth.

Our findings and recommendations outline how to build a system that is aligned to advanced inclusion and student achievement for the diverse students in California schools. The citizenry of California is capable, complex, and diverse in perspectives and needs. Our system of preparation of educators must advance further in its sophistication to truly be able to be inclusive of that advanced, diverse populace. In a time when the core of democratic ideals at times feels under threat, we humbly seek a view of education that is inclusive of all, reflecting the best of what is possible when we share a commitment to ensuring every human's capability is given a chance to flourish.



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