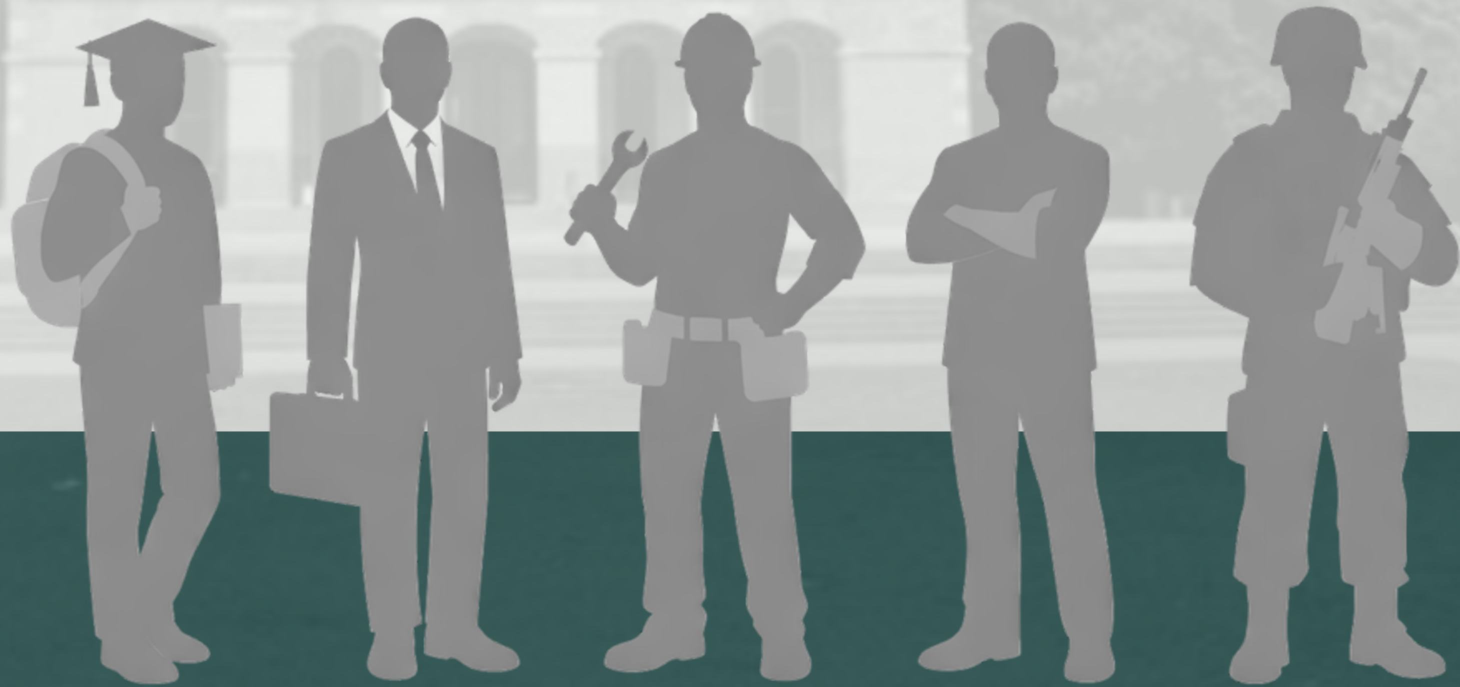
Reconsidering Alignment of High School Graduation Requirements with A–G Course Sequence

A Research Brief for California Educators & Legislators

March 2026



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Executive Summary

This Research Brief evaluates the proposal to align California's high school graduation requirements with the University of California/California State University "A–G" course sequence. The A–G sequence was originally designed as an admissions criterion for UC (and later CSU), not as a universal graduation standard. In fact, the majority of U.S. colleges, and California's own 116 community colleges, do not require A–G coursework for admission, relying instead on broader or open-access criteria (Glidden, 1988; Unmudl, n.d.). California's Master Plan for Higher Education intentionally limits UC and CSU to the top 12.5% and 33% of high school graduates, respectively (Glidden, 1988), implying that a majority of students will pursue other postsecondary routes for which A–G is less relevant. Early 20th-century educational reformer Abraham Flexner critiqued the traditional one-size-fits-all academic curriculum for failing to meet students' real needs (Flexner, 1916), a concern echoed by modern educators like Dr. Elliot Washor who highlight that today's high schools often disengage students by focusing narrowly on college prep at the expense of relevance and choice (Marshak, 2010; Washor & Mojkowski, 2013).

Empirical outcomes bear this out. When districts like Los Angeles, San Diego, San Francisco, and Oakland made A–G coursework mandatory for diplomas, graduation rates initially plummeted or required dilution of standards (e.g. accepting D grades) to avoid failure (Fleming, 2016; Public Policy Institute of California, 2016). San Diego Unified, for example, saw its graduation rate plateau in the high 80% range and begin to decline after a decade of A–G-for-all, leading the district to recently approve an alternative graduation pathway with less stringent course requirements (McWhinney, 2025). Los Angeles County data further illustrate a mismatch between A–G completion and students' actual postsecondary outcomes: Nearly 59% of L.A. County graduates complete A–G requirements (Los Angeles Regional Consortium, 2023), yet only about 39% enroll in UC or CSU, while almost half enroll in community college (Los Angeles Regional Consortium, 2023). Statewide, only ~30% of ninth-graders will earn a bachelor's degree by their late 20s. And of those graduates, over 40% may be underemployed in jobs that don't require that degree (Los Angeles Regional Consortium, 2023). These findings suggest that mandating a uniform university-prep curriculum for all is misaligned with the needs and realities of the majority of students, and the state workforce.

Instead, this brief recommends a diversified approach: to uphold high expectations and multiple pathways. Strengthen rigorous academic options for those pursuing four-year universities while equally valuing career-technical education (CTE), dual enrollment, and industry-recognized credentials (IRCs) that prepare students for direct entry into the workforce, military, apprenticeships ("earn-and-learn"), or entrepreneurship. Merced Union High School District's model, having every student graduate with a diploma plus CTE certification and college credits exemplifies how integrating A–G academics with technical and experiential learning can serve the "5 E's" of student postsecondary success: Enrollment, Employment, Enlistment, Earn-and-Learn, and Entrepreneurship. Such an approach would better fulfill the Master Plan's vision, without misalignment, opportunity costs, or forcing one single pathway for all.

History Repeating Itself:
One-Size-Fits-Few in General Education

Early 20th-century debates over high school curriculum foreshadow today's concerns. In 1916, Abraham Flexner (a prominent education reformer) published "A Modern School," sharply criticizing the era's college-preparatory secondary education. He observed that high school curricula were dominated by traditional academic subjects (Latin, classical literature, abstract math) taught "without close or constant reference to genuine individual or social need" (Flexner, 1916). Students mechanically endured years of material "remote from use and experience" out of habit and tradition, often failing to truly learn it (Flexner, 1916).

Flexner pointed to striking statistics: in 1915 over 75% of students who took the College Board exam in Virgil (Latin) failed to score even 60%, and nearly 70% of those tested in advanced algebra likewise failed (Flexner, 1916). In his view, the real outcome of forcing all students through a purely academic gauntlet was not intellectual uplift, but widespread disengagement and superficial learning "by means of devices...without intelligent insight"(Flexner, 1916). He called for a "modern" approach focused on practical learning and the amount of education that can be meaningfully delivered by age 18, rather than clinging to a university-style classical curriculum for its own sake (Flexner, 1916). Sounds familiar, doesn't it?

Fast-forward 100 years, and similar critiques are voiced today by student-centered educators like Dr. Elliot Washor (co-founder of Big Picture Learning). Washor argues that most large, traditional high schools still operate on a factory-model, offering a monolithic university-prep program that fails to engage many adolescents. He notes that in conventional schools students have little personalization, and too often "the coursework is irrelevant to both their personal goals and societal needs." Lacking relevance, many students become disengaged or drop out: a dynamic Washor and colleagues described as students "leaving to learn" because schools are not providing meaningful learning inside the building.

Through decades of work with personalized, interest-based schools, Washor has identified key conditions needed for "productive learning": strong relationships (teachers who know and care about students' interests), relevance (curriculum connected to real-world careers and student goals), choice (students having some say in what and how they learn), challenge (high expectations through projects and applied work), and opportunities for practice, play, and real-world application (Washor & Mojkowski, 2013). These conditions are rarely met by a one-size-fits-all university-prep curriculum. As one commentator summarized, in many high schools today students are "underserved in conventional, factory-model high schools" and a rigid focus on seat-time and test scores has created "a pervasive sense of uncertainty and hopelessness" for those who don't see a four-year university as their immediate aim (Marshak, 2010).

In short, both historical and contemporary perspectives caution that mandating the same purely academic path for every student will inevitably fail a significant portion of them. Flexner's and Washor's insights set the stage for examining whether a universal A–G graduation requirement would repeat these mistakes by squeezing all students into a single mold, focused towards a single goal.

The A–G Course Sequence: Origin and Intent

California's A–G course sequence comprises 15 year-long college-preparatory courses in history, English, math, laboratory science, foreign language, visual/performing arts, and electives. These requirements were developed by the University of California in the mid-20th century as an optional admissions standard. They were essentially a way to signal that an applicant had taken a strong high school curriculum aligned with UC's expectations (Public Policy Institute of California, 2016). The A–G list was never designed as a universal high school graduation template, but rather as a threshold for the top slice of students aiming for competitive, research-focused, four-year universities. In the 1960 Master Plan for Higher Education, California explicitly stratified the public college system: UC would select from the top 12.5% of high school graduates, CSU from the top one-third, and community colleges would admit all students, including those who did not fulfill a university-prep pattern (Glidden, 1988).

The Master Plan's vision recognized that a single academic track could not serve 100% of students. Hence different institutions with different missions. Consistent with that vision, the California Community Colleges (and the vast majority of U.S. community colleges) have open admission policies requiring only a high school diploma or equivalency, not specific course completions (Glidden, 1988; Unmudl, n.d.). Even most four-year universities nationwide do not rigidly require the exact A–G courses for admission; while they seek well-rounded academic preparation, they often accept various course combinations and place greater weight on grades, test scores, and other factors. In short, A–G has always been a UC/CSU-specific construct, not a universally required curriculum for postsecondary readiness. Said another way, only 23 CSUs and 9 UCs really care about A-G. The other 150+ private postsecondary institutions in California, and 116 California Community Colleges, do not require A-G courses as an entrance requirement.

It is also noteworthy that the nearly 5,900 private and out-of-state universities, which enroll many California students, often have more flexible or holistic admissions criteria. For example, Yale and many Ivy League schools recommend a similar college-prep curriculum, but they do not mandate each item; they consider students who show exceptional talent in other areas even if, say, one A–G area is slightly lacking. Many regional universities across the U.S. simply require a high school diploma and a certain GPA or test score combination, again without an A–G prescription.

Thus, aligning any California High School graduation requirement with A–G essentially means holding every student to the UC/CSU entrance bar, even though the majority of students will attend institutions or pathways that don't require that level of purely academic preparation. This disconnect raises concerns about efficacy and equity: are we demanding all students meet UC standards when only a fraction will attend UC? And if so, what is the opportunity cost for students who might benefit more from courses in entrepreneurship, career technical education, or other non-A–G offerings? These questions are crucial as we consider the broader landscape of student needs and post-high school destinations.

A–G is a key for the UC/CSU door. But California has many doors.

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The California Master Plan: Who Are We Preparing?

California's 1960 Master Plan for Higher Education provides a critical lens through which to view A–G requirements. By design, the Master Plan anticipated a differentiated student population: a top tier bound for research universities (UC), a larger tier for comprehensive universities (CSU), and a broad base for community colleges and vocational training. Concretely, only one-eighth (12.5%) of high school graduates were meant to be directly eligible for UC and the top one-third (33%) for CSU (Glidden, 1988). The remaining two-thirds of students would either go to community college, pursue technical/career education, join the military, or enter the workforce after high school. Aligning high school graduation requirements with A–G essentially assumes all students should prepare for UC/CSU. This is an assumption at odds with the Master Plan's intentional pyramid structure, and the reality of available seats and opportunities.

Put simply, A–G alignment is aimed at the needs of the few, not the many. This misalignment can be visualized with data from Los Angeles County (which, as the state's largest county, provides a representative microcosm). In recent years about 58–59% of L.A. County high school graduates meet the full A–G course requirements for UC/CSU (Los Angeles Regional Consortium, 2023). This is a notable achievement on the surface. However, far fewer actually attend those universities. Local data show that only 13% of L.A. County graduates enroll in a UC campus and about 26% enroll in a CSU (Los Angeles Regional Consortium, 2023). That combined ~39% enrollment in public four-year universities is roughly in line with the Master Plan targets (top third), and importantly it means that over 60% of high school graduates in the county do not go directly to a UC or CSU. Instead, 48%, nearly half, enroll in a community college in their first year after high school, and a small remainder (around 5% in-state private, 8% out-of-state four-year, 1% out-of-state two-year) pursue other options (Los Angeles Regional Consortium, 2023). These figures underscore that the typical California high school graduate's immediate destination is far more likely to be a community college than a UC campus.

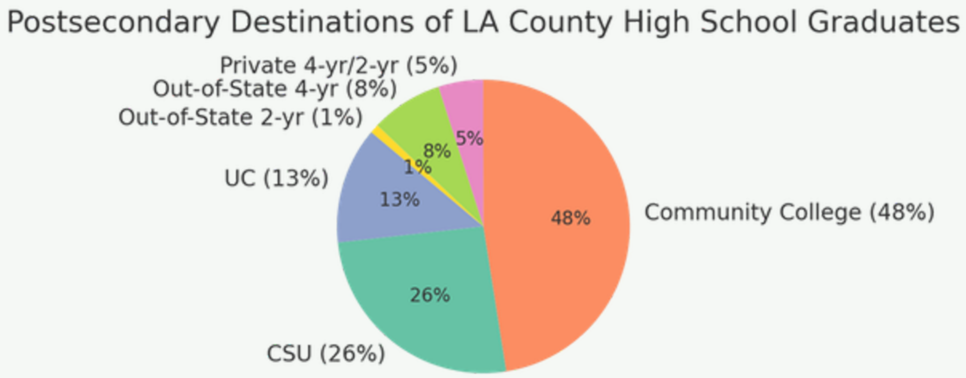

Figure 1. Postsecondary destinations of Los Angeles County high school graduates, Class of 2020. Nearly half of graduates enroll in community colleges (orange), whereas only about 13% and 26% enroll in UC and CSU respectively (Los Angeles Regional Consortium, 2023). The remainder attend private or out-of-state institutions. This reflects the Master Plan's design where the majority of students start in open-access community colleges or other pathways.

Crucially, community colleges do not require A–G courses for admission. They offer open doors to students with varied academic backgrounds. Additionally, In the UC system, we see that meeting A–G with a C grade may not guarantee actual readiness: over 50% of entering UC freshmen have historically failed UC's own placement (Subject A) exam in English, requiring remedial writing classes. This suggests that simply mandating courses by title (A–G) doesn't ensure mastery nor readiness.

Meanwhile, students who are not bound for a four-year university often find A–G course sequences (e.g. advanced algebra, chemistry, years of foreign language) unrelated to their post-graduation plans. Yet if those courses are tied to graduation, they must allocate time to them at the expense of, say, skill-based training courses, or work-based learning. For the approximately 50% of students who do not pursue any college immediately after graduation (Los Angeles Regional Consortium, 2023), an exclusively A–G-focused high school experience may leave them with neither a college degree nor marketable skills. The Master Plan intended for multiple postsecondary options to flourish; a high school policy that only values the UC/CSU prep track undercuts that spirit, and will actually harm a majority of students from gaining relevant experiences.

Community colleges are open access.
A–G-for-all puts a UC lock on an open door.

The Master Plan's enrollment targets highlight that A–G alignment would serve <u>at most</u> one-third of students well. And even for them, A–G success doesn't equate to university completion, as we'll see next. For the other two-thirds, we risk creating a preparation gap: Students forced to follow a university-prep path but then going into career paths where that preparation is not fully utilized, and lacking other skills that were pushed aside. The policy question is not whether academically capable students should take A–G (they should be encouraged to), but whether it should be forced on every student, even those whose talents and aspirations lie in different directions. The data suggest caution: broad-brush A–G mandates mismatch the diverse reality of our students' futures.

A–G is a map to one destination. But most students aren't headed there.

Outcomes in Practice: Mismatches and Unintended Consequences

When districts have attempted to require A–G for all, the results have been mixed and often problematic. A case in point is San Diego Unified School District, which in 2011 voted to make the A–G course sequence a graduation requirement (joining Los Angeles, San Francisco, Oakland and other districts in a "college prep for all" movement) (Public Policy Institute of California, 2016). The intent was laudable: to give all students, especially those from underrepresented groups, access to the coursework needed for university eligibility (McWhinney, 2025). After all, we want all students to be prepared and have the option to enroll in the CSUs/UCs, right? Well, implementation revealed serious challenges and the outcomes were less-than desired.

San Diego's class of 2016 was the first cohort under the new rules, and researchers at the Public Policy Institute of California (PPIC) projected that the graduation rate could drop to 72% for that class, down from 87.5% in 2014 before A–G was mandated (Public Policy Institute of California, 2016). They estimated 27% of seniors were at risk of not graduating on time due to the new requirements, even after summer school and credit recovery interventions, with disproportionately high impacts on English learners and special education students. In fact, PPIC noted that making A–G universal would likely yield a "10 percent" increase in UC/CSU eligibility but a "16 percent" increase in students failing to graduate! Essentially, for every additional student eligible for UC/CSU, more than one extra student would not receive a diploma. Confronted with this reality, San Diego (like Los Angeles Unified) chose to adjust its policy: they allowed D grades to count for graduation (even though UC/CSU require C or better) so that more students could earn diplomas. Yes, you read that correctly. This lowering of the bar helped avert massive failure, but it also meant the "university prep" rigor was in name only. Students could graduate with D's in A–G courses that would not actually get them into, nor be prepared for, UC/CSU.

Over the subsequent decade, San Diego Unified did manage to keep graduation rates relatively high (hovering in the high-80 percentile) through such adjustments and by expanding credit recovery options (McWhinney, 2025). Yet, cracks began to show. District data indicated the grad rate had "plateaued and begun to creep back down" by the early 2020s (McWhinney, 2025). In May 2025, San Diego's school board effectively reversed course: they approved a new, alternate graduation pathway with reduced requirements (for instance, fewer mandatory A–G courses), acknowledging that the one-size approach was leaving some students behind (McWhinney, 2025).

As a local news investigation put it, the district "quietly watered down" the graduation requirements. Meaning they backed away from full A–G alignment because leaders recognized (finally) that insisting on A–G for everyone was denying diplomas to students who might otherwise succeed via a different route (McWhinney, 2025). The alternate pathway will indeed allow some students to graduate without completing all UC/CSU prerequisites (they "won't have taken the classes needed to be accepted into college") (McWhinney, 2025), which is a tacit admission that the previous policy overshot. In essence, San Diego's decade-long experiment shows that making university-prep the default for all can unintentionally hurt the very students it aimed to help: namely those not on track for a four-year university – either by pushing them out of school or by giving them a diploma with lower standards (D grades). And in both circumstances, without needed employable skills.

"A–G-for all" doesn't create readiness. It creates a credit recovery industry.

Los Angeles Unified faced a similar reckoning: LAUSD's board made A–G a graduation requirement for the Class of 2016 and beyond, but when an internal analysis found that only about 50% of students would graduate if a "C or better" standard were enforced, the district relaxed the rule to allow D's for graduation (Fleming, 2016). In effect, LAUSD had to choose between mass attrition or watering down A–G, illustrating the bind that occurs when policy oversimplifies a plethora of student pathways.

Beyond graduation rates, another unintended consequence of an A–G-for-all focus is the potential crowding out of career-focused coursework. Most California high schools operate on limited instructional minutes and six-period or seven-period days. When A–G (which entails 15 year-long courses) becomes mandatory, scheduling flexibility diminishes. Many schools have responded by cutting back on electives like automotive, culinary arts, information technology, or career internships to ensure students have room for all A–G classes. In Los Angeles County, it's noted that "most high schools...removed career education, technical training, or work-based learning requirement for graduation" as they shifted toward a purely academic focus (Los Angeles Regional Consortium, 2023). This has occurred despite evidence that participation in CTE can increase engagement and even academic success.

A recent synthesis of research found that high school CTE participation is associated with higher graduation rates, higher college enrollment rates, and better labor market outcomes on average (WestEd, 2023). When we push all students into the same university-for-all mold, we risk disengaging those who might thrive in hands-on learning environment (which is a majority of learners). And we potentially deprive them of gaining industry certifications or relevant job experience in high school. Thus, the opportunity cost of an A–G mandate is significant: it can reduce access to skills-based learning that, for many students, is a more direct springboard to gainful employment, future success, and life fulfillment after high school graduation.

Even for students who do complete A–G and enroll in four-year universities, the pipeline to success is far from guaranteed. State and national data reveal substantial leakage in the educational pipeline. Figure 2 below illustrates, using Los Angeles County as an example, the outcomes for an entering cohort of 100 ninth-grade students (the data are drawn from a L.A. Regional Consortium analysis of multi-year outcomes). Out of 100 9th grade students, on average 82 will graduate high school on time, and about 51 will proceed to some form of higher education immediately (20 to four-year colleges and 24 to two-year colleges, with a few more to out-of-state or private schools). Of those, only ~27 will earn a bachelor's degree within six years. Furthermore, due to factors like underemployment, only around 16 out of the original 100 will secure jobs that actually utilize their four-year degree. The rest either do not complete college or end up in jobs not requiring a B.A. (Los Angeles Regional Consortium, 2023).

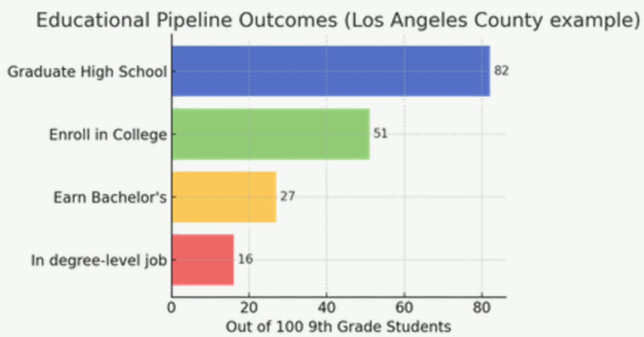

Figure 2. Educational pipeline outcomes for 100 California 9th-grade students (Los Angeles County data). Only 82 graduate high school; 51 enter college; 27 eventually earn a bachelor's degree, and roughly 16 secure a job requiring that degree. The steep drop-offs from graduation to degree completion illustrate that "university-for-all" is achieved by only a minority of the cohort. Meanwhile, about 49 students (of the original 100) do not complete any college by their mid-20s, highlighting the need for strong career preparation in high school for the majority of those who go straight to work, enlist in the military, or start their own business.

In other words, the current system yields a scenario where a majority of students do not obtain a four-year degree by their mid-20s, even among those who were "university-prepared" in high school. This contextualizes the limitations of a purely academic pathway: it works out well for some, and very well for a few, but many others either choose another path, fall off along the way, or struggle to translate the degree into a career.

In light of these failed experiments, a blanket policy of aligning graduation requirements with A–G seems at best inefficient and at worst harmful. It risks denying diplomas to many students, or forcing a dilution of standards to avoid that outcome. It also diverts time and resources away from military, occupational, or entrepreneurial training that could benefit the majority who won't (initially) attain a four-year degree. Finally, it promotes a misleading narrative that success equals a four-year university degree for all. When in reality, California's economy relies on a large proportion of workers with two-year degrees, certificates, apprenticeships, and other training – the kinds of preparation that A–G alone does not provide.

The Case for Industry-Recognized Credentials and CTE Pathways

Rather than doubling down on universal A–G, where we've already seen it unsuccessful, California should broaden its definition of college and career readiness to primarily include industry-recognized credentials (IRCs) and Career Technical Education pathways. There is mounting evidence that these are not alternatives. Rather they often yield equal or better outcomes for many students. The old assumption that "more education automatically equals more income" is incomplete, and increasingly inaccurate (Fleming, 2016). In today's labor market, the top earners in many skilled trades and technical fields (which often require a 2-year degree or an industry certification) out earn the average earners in fields requiring a bachelor's or masters degree (Fleming, 2016). For example, a licensed dental hygienist with a two-year degree or an avionics technician with industry certification can have a higher salary at age 25 than many liberal arts graduates working in non-technical jobs in their forties. Fleming's analysis shows that while bachelor's degree holders have a wide earnings range, 25% of associate degree holders consistently out-earn a quarter of bachelor's degree holders (Fleming, 2016). The overlap is significant, meaning it is not a given that a four-year university path is the most lucrative or secure. Moreover, in survey after survey, employers overwhelmingly stated that a candidate's actual skills and knowledge in a field are more important than the college credential. This reflects today's hiring shift: companies value what graduates can do (often demonstrated through internships, certifications, portfolios, etc.) at least as much as, if not more than, the type of degree they hold. An applicant who earned an AWS Cloud computing certification or an Autodesk CAD certificate in high school, for instance, may have a hiring edge for certain technical jobs over a candidate with a generic bachelor's degree but no hands-on skills.

Importantly, many of the jobs forecasted to be in demand in California's economy do not require a bachelor's degree, but they do require some technical postsecondary training. Sectors like healthcare (technicians, paramedics), information technology (network administrators, cybersecurity), advanced manufacturing, and the skilled trades are continuing to experience shortages of qualified workers (Los Angeles Regional Consortium, 2023). These are well-paying careers accessible through community college programs or apprenticeships that often include obtaining industry credentials. However, our K–12 system historically places these career pathways on a lower status track (the old "vocational ed" stigma). Thankfully that mindset is changing.

The "Credentials of Value" movement – led by organizations like ACTE, Burning Glass, and AdvanceCTE urges states to identify which high school–level certifications truly carry labor market value and to prioritize those in K–12 CTE programs. For example, a "Credential of Value" might be a CompTIA A+ certification for IT support, a NCCER construction certificate, or MSSC to secure a supply chain automation position. Students who graduate with these certifications (often earned through CTE courses and exam funding in high school) have a proven competence that often leads directly to a job or advanced training opportunity. Unfortunately, research shows a mismatch in many states between the credentials students earn and industry demand. In California, this gap has been highlighted by the Credentials Matter project. Many of the most popular certificates students pursue are not those most needed by employers, and vice versa (Credentials Matter, 2023). For instance, recent data showed that few K–12 students earned some of the top in-demand certifications like certain welding or CAD certificates, even though thousands of job postings requested them (Credentials Matter, 2023). This indicates a need to realign high school programs with real-world needs. Precisely the opposite of making everyone take A–G coursework, as recently suggested by the PPIC, that may have little connection to such state employment and economic development needs.

Another key point is that CTE and academic goals are not mutually exclusive; they can be integrated. A common misconception is that if a student pursues a technical pathway, it means "lowering expectations." On the contrary, a high-quality CTE pathway often incorporates rigorous academics and advanced technical content. For example, an engineering pathway might include physics and calculus (satisfying A–G science/math) but taught in applied ways, plus industry exams in CAD or engineering technology. The Los Angeles County Neglected Majority report emphasizes that "college-prep and career technical education are in fact complementary, not competing, goals" (Los Angeles Regional Consortium, 2023). The report advocates for all students to secure industry credentials alongside a rigorous general education. It is a "both/and" proposition. The reality is that a student who can code, weld, or provide patient care in addition to writing essays and solving equations is going to be better off in tomorrow's economy than a student who only has abstract academic knowledge and a university-prep transcript. By restoring CTE, work-based learning, and industry certification opportunities as core parts of the high school experience for all students, we prepare every learner for a wider range of outcomes.

The success of this approach can be seen in districts that have made career preparation a priority. The Merced Union High School District (MUHSD) stands out as a leading example in California. MUHSD explicitly sets the goal that "every student will walk off the graduation stage with a diploma in one hand and CTE certification/proficiency in the other, along with college credit on their transcript." (Merced Union High School District, 2025) This is a powerful vision: it means a student doesn't just meet minimum credits to graduate, but also has tangible evidence of skill (an industry certificate or at least proof of technical competency) and has successfully completed some college-level coursework (through dual enrollment with community colleges). In practical terms, Merced Union has massively expanded its CTE and dual-enrollment programs.

As of the 2025 school year, MUHSD offers 139 CTE courses across 15 industry sectors, taught by 133 dedicated CTE teachers (with an additional 32 community college instructors teaching college classes in the high schools). Popular pathways range from agriculture and health science to public safety and engineering. The district has invested in facilities and equipment (e.g. Livingston High's public safety program now has its own fire engine and ambulance for training giving students realistic emergency response experience) (Merced Union High School District, 2025). MUHSD's students can graduate with certifications like OSHA safety, Microsoft Office Specialist, or Certified Nursing Assistant, depending on their pathway. At the same time, many are earning CSU/UC-transferable credits via dual enrollment courses, which fulfill A–G subject requirements but also count toward college degrees. "Both/and" not "either/or"!

This integrated approach equips graduates for multiple pathways after high school. I call this refined focus, the "Five E's": some students **Enroll** in four-year universities (indeed, MUHSD still has A–G and a college-going culture, but not at the exclusion of other paths), others directly secure **Employment** with in-demand skills already verified and certified, some **Enlist** in the military (where their CTE skills often translate to advanced standing or technical roles), others pursue **Earn-and-Learn** programs like apprenticeships (union or non-union), and some go into **Entrepreneurship** (leveraging business skills gained in school enterprices and career technical student organizations (CTSOs), such as the student-run t-shirt printing business at Merced High's entrepreneurship class. The point is every student has multiple options, and will pursue a variety of impactful, successful paths. This should be our new goal: to prepare every learner for one, or more, of the Five Es.

Notably, MUHSD's approach has not sacrificed academic quality. It boasts competitive graduation rates and a College/Career Indicator (a state measure) well above state averages because students can fulfill that indicator through CTE pathway completion or dual enrollment just as well as through A–G. By treating a welding certification or college course credit as equally valuable to passing Algebra II, the district sends a message that multiple accomplishments are worthy. State policymakers should take heed: a "both/and" strategy yields better results than an "either/or". If a district like Merced Union, which is socioeconomically and ethnically diverse, can ensure students are both truly college and career ready, then surely the state can craft graduation policies to the same end.

High school success is a five-lane highway. A–G is only one lane.
California needs lanes for Enrollment, Employment, Enlistment,
Earn-and-Learn apprenticeship, and Entrepreneurship.

Policy Recommendations

To align high school education with the needs of all students, California School Boards should pursue a more flexible and comprehensive set of graduation pathways and reject a singular A–G path for every student. Below are key recommendations for state education leaders and elected officials:

1. Embrace Multiple Graduation Pathways: Develop state-sanctioned graduation pathways that are all held in high esteem and equally weighted. For example, in addition to a "UC/CSU Pathway" (A–G coursework), create a "CTE Pathway" where graduation requirements include completing a state-approved career pathway, earning an industry credential, work experience, and meeting basic academic standards (the state's minimum course requirements). Each pathways should require a solid foundation (e.g., 4 years English, 3 years math, etc.), but the CTE pathway might allow substitutions (like applied science or technical math in place of a third lab science or advanced algebra). North Carolina's model is instructive: it created a "Future-Ready Occupational" diploma track as an alternative to the university-prep track, allowing students to take more CTE courses in lieu of some university-prep electives, while still meeting core competencies (Fleming, 2016). California could pilot such dual pathways, ensuring that the CTE track is not a dead-end. It should articulate to community college programs, apprenticeships, or even university programs if students choose later on. This gives students and families a choice, rather than a one-size-fits-all mandate (Fleming, 2016).

2. Strengthen the "Career" in College & Career Readiness: Revise accountability systems (Dashboard indicators, etc.) to give weight to robust career readiness metrics. The state's College/Career Indicator already counts things like CTE pathway completion and industry certifications, but these need to be expanded and given equal prominence as A–G completion. (And when honestly reviewed, it is clear that many of the state's career readiness indicators are really university readiness indicators). By publicly reporting and valuing how many students graduate with industry credentials, relevant work experience, or dual enrollment credits, we incentivize schools to invest in those areas, not just A–G coursework. Funding streams like the K12 Strong Workforce Program and the new Golden State Pathways Program grants (which encourage integrated college-career pathways) should be continued and expanded to help schools develop programs where academic coursework and technical training reinforce each other. As the L.A. Regional Consortium report recommended, we should "destigmatize community college and trade schools while (re)educating stakeholders about the realities of a 4-year degree", making clear that a bachelor's degree is not the only path to success. A communications campaign along the lines of Utah's successful "1, 2, 4, or More" tagline could help shift mindsets at the school and district level.

3. Involve Industry in Defining Graduation Outcomes: The A–G course list gets regular updates from UC faculty; similarly, California should convene industry advisory associations/councils to identify a state menu of high-value certifications and experiences that could count toward graduation credit or recognition. For instance, completing a certain number of hours of work-based learning (internships or youth apprenticeship) might satisfy a senior project, Co-Op, or elective credit. Earning a "credential of value" (as defined collaboratively with industry and workforce boards) could substitute for a graduation/elective requirement. By weaving industry input into graduation standards, we ensure that what students accomplish in high school has currency in the labor market. States like Indiana and Wisconsin have started initiatives to incorporate industry credentials into graduation requirements. Other states like Ohio have created high school graduation paths with 250 hours of work experience. California should study those models and adapt accordingly to expand graduation pathways aligned with the diversity of our state's economy.

4. Provide Supports, Not Barriers, for University-Bound Students: Arguing against an A–G graduation mandate is not about limiting college access. It's about expanding preparation for all routes. For the small percentage of students who have the desire and academic ability to attend UC/CSU, schools should absolutely encourage them to take A–G courses (indeed, more students completing A–G is a positive trend when it's by choice). The state can support this by funding additional sections of dual enrolled, online options for A–G courses so that any student who aspires to university can get the courses they need. However, let's not force students who are struggling or uninterested in that path to forgo an equally viable alternative. Instead, bolster career counseling resources explicitly so that each high schooler has a meaningful ten-year plan that fits both their interests and aptitude – be it A–G intensive, CTE intensive, ROTC, or a blend. Students should be able to switch pathways if their goals change (with appropriate summer or online courses to catch up if needed). The goal is to avoid a rigid tracking at age 14, but still allow focus by the later high school years. A senior who knows he wants to be an electrician should not be forced to take Literature to graduate at the expense of an Engineering course. Likewise, a senior aiming for UCLA should not be discouraged from taking Physics. We know that personalized planning and opt-in informed self-determination of one's route through high school is key, yet this is seldomly prioritized nor measured.

5. Monitor and Publicize Career Outcome Data: We must collect data on the outcomes of students who graduate under different profiles. For example, track the employment rates, starting salaries, college completion, and military enlistment rates of students who (a) completed A–G only, (b) completed a CTE pathway/credential, (c) did both A–G and CTE, etc. This data, disaggregated by student subgroup, will inform whether multiple pathways are indeed serving students better. Early evidence from districts like Sacramento City (which has many Linked Learning pathways) or Long Beach (with its seamless K-16 system) could be examined to compare career outcomes - not just academic outcomes. If, for instance, students with an industry credential have higher full-time employment 24-months after graduation than those who only did A–G, that should be factored into policy decisions. The state's new longitudinal data system (Cradle-to-Career) offers an opportunity to conduct this kind of analysis...we in the field are hopefully optimistic. Using career data to continuously refine our approach will ensure we're meeting our State's core objective: preparing students for success in their chosen postsecondary endeavors, not just hitting arbitrary course counts.

Conclusion

The push to align high school graduation requirements with the UC/CSU A–G sequence comes from a well-intentioned place: a desire for equity and high expectations, ensuring no student is denied university opportunity by virtue of their high school curriculum. However, as outlined herein, a one-dimensional definition of college/career readiness may inadvertently create new inequities and ignore economic realities. Abraham Flexner warned over a century ago that clinging to an academic status quo "rather than [considering] present needs" serves neither the student nor society (Flexner, 1916). Today, we must recognize that the present needs of California's economy and communities are diverse. We need engineers and carpenters, doctors and dental hygienists, software developers and data center technicians, entrepreneurs and artists. Yet our policies and student enrollment numbers do not reflect this. Our high schools should be incubators for all these futures. Dr. Elliot Washor's ethos of "student engagement through relevance and choice" is not incompatible with academic rigor. Rather, it is what can make rigor possible for many learners who would otherwise disconnect.

By rejecting an inflexible A–G-for-all graduation requirement, California is not lowering standards; it is raising them for the majority of students.

Thousands of us educators are saying that a meaningful education is one that leads somewhere for each student: whether that's a UC classroom, a Google apprenticeship, a military technical school, or their own startup. The data from Los Angeles County make a compelling case: more than 40% of recent graduates who did everything we asked (went to university, got the degree) still found themselves underemployed (Los Angeles Regional Consortium, 2023). This is not an argument against the university. It is an argument for better preparation for multiple paths. If those students had, in addition to their degree,received some practical experience or certifications, they most likely would not be underemployed.

We do students no favor by insisting that the only respectable outcome is a four-year degree, or by designing high school primarily around obtaining one. As the LARC report concludes, "we should stop the 'university for all' rhetoric with false pretenses" and instead help students match their strengths to the "many ways to earn college credit while in high school" and the many paths to career success (Los Angeles Regional Consortium, 2023).

In practical terms, this means graduation policy flexibility and investment in career counseling, CTE, and community partnerships. It means celebrating a student who earns an AWS Cloud certification and goes straight into a $80k/year tech job at 18 years old, just as much as we celebrate the student accepted to UC Berkeley to study anthropology. It means substituting every-other "College apparel Wednesdays" with "Career apparel Wednesdays" and swapping out some university pendants in the Counseling Center with Military posters. Messaging multiple successful pathways can be done – indeed, must be done in our public schools.

California has often led the nation in education policy. By designing a graduation framework that honors the plurality of postsecondary routes, we can lead again and produce a workforce that is both broadly educated and specifically skilled. In rejecting an A–G alignment mandate, we affirm that our goal is not to produce a class of graduates many of whom are marginally prepared, but to produce a cohort of young adults who are all prepared to thrive in college, career, and civic life, each by their own design. This holistic, student-centered approach (with a redefined goal of the five Es) is the true path to future excellence in our high schools.

Two-Minute Public Board Comment

Board members, thank you for all you do for our students.

Tonight I want to share with you one simple metaphor:
A–G is a key. It's a good key. It opens the UC and CSU door.
But here's the reality: California has many doors.

And when we require A–G for every diploma, we are essentially saying:
"This is the only key that counts."
That may sound like equity to some. Because it sounds like we're removing barriers.
But in practice, we're doing something very different.

We're taking a university admissions checklist, designed for a small portion of students, and turning it into a graduation gate for all students.

And the data tells us what happens next:
Students lose electives, career pathways shrink, engagement drops, credit recovery explodes, and districts eventually water down the standard - often by accepting D grades - just to avoid denying diplomas. We've already seen that happen.

That is not opportunity. That is compliance.

California's own Master Plan for Higher Education makes the design clear:
UC is intended to draw from the top 12.5% of graduates, CSU from the top 33%.

Meanwhile, the largest destination for most of our students is community college, which does not require A–G.

So the question is not whether A–G matters. It does.
The question is whether A–G should be the definition of academic success for every student.
And the answer, based on history, data, research, and outcomes - is no.

Instead, our graduation goal should be stronger and more realistic:
We should prepare every student for one or more of the 5 E's:
Enrollment in higher education including community colleges,
Employment in a career equipped with skills and credentials,
Enlistment in the military,
Earn-and-learn apprenticeships,
or Entrepreneurship.

That is what real readiness looks like.
Let's stop using one key pretending it opens every door. And let's build a system that support, validates, and honors every possible future.

Thank you.

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Ethics Statement on AI Usage

This report was developed with the assistance of artificial intelligence (AI) to enhance the efficiency, accuracy, and depth of analysis. AI tools were used in combination with real human gray matter to aggregate publicly available data and generate structured narratives consistent with best practices in education research.

All assumptions, calculations, and interpretations were reviewed for consistency and accuracy based on industry standards and publicly reported figures. The use of AI in this report aligns with principles of transparency, accuracy, and accountability. AI was employed as an analytical aid, but the final conclusions, insights, and recommendations remain subject to human verification and professional judgment. Readers are encouraged to consider the methodologies and data sources presented and calculate the longitudinal pathways and educational trajectories for your local students leveraging both local and NCES data.

About the Author

Kevin J. Fleming Ph.D. is an educational strategist, author, researcher, and national thought leader focused on aligning education with workforce relevance and human potential. He is the founder and CEO of Catapult Masterclass, an educational innovation platform dedicated to transforming professional development so institutions can better prepare learners for a rapidly evolving workforce.

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