

# At What Cost:

## Strengthening California Community College Career and Technical Education Through Student Services

By Jewel Bourne



Multiplying the number of students who pursue and earn certificates and associate's degrees in career and technical education (CTE) is consequential to the college completion intent. In response to the view that career and technical education in both K-12 and community college is imperative to meet the changing needs of the labor market in California, CTE has been codified in the reauthorizations of the Elementary and Secondary Education Act. The Every Student Succeeds Act (ESSA) emphasizes students' college and career readiness, which is a departure from early policy focused only on college readiness. With the implementation of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), the imperative of career preparedness deepened, particularly for underrepresented student populations.

Perkins V legislation (2006) expanded to include (1) individuals with disabilities; (2) single parents, including single pregnant women; (3) out-of-workforce individuals; (4) homeless individuals; (5) youth who are in, or who have aged out of, the foster care system; and (6) youth with a

parent who is a member of the armed forces and is on active duty (Advance CTE & Association for Career and Technical Education, 2018 as cited in James-Gallaway, Keist, and Rockey, 2020) With this expansion we see a recognition of the role of higher education in meeting labor-market demand and in reducing persistent educational and economic disparities for students from historically marginalized socioeconomic and racial/ethnic backgrounds.

The inclusion of the College Career Indicator in California's accountability framework, the California School Dashboard, which first places individuals in one of three levels (Prepared, Approaching Prepared, or Not Prepared) represents an important shift from traditional academic assessment metrics to the inclusion of career and technical education. The College Career Indicator assesses students based on their 11th-grade English language arts, math smarter balanced assessment scores, CTE pathway completion, AP and IB exam performance, dual enrollment, and A-G course completion (Reed, Dougherty, Kurlaneder, & Mathias, 2018).

There is a substantial body of observational research documenting the impact of CTE participation on academic and labor-market outcomes (Kemple & Willner, 2008; Dougherty, 2018; Hemelet & Lenard, 2018) and a broader set of educational engagement outcomes (Kelly & Price, 2009). However, few studies have focused on examining the institutional supports that enable CTE pathway completion, which is defined as those students who complete all coursework, including the capstone course, with a grade of C or better to be considered career ready. (Reed et.al.,2018). The practical constraints of this paper prevent a comprehensive review of whether the mission of CTE has been marginalized from the academic core of the institution based on the system's strong and historic commitment to transfer (Shulock and Moore, 2013), but it does contest that ill-suited policy exists pertaining to CTE student support.

Additionally, this paper advocates for creating policy that ensures students receive equal opportunity to acquire information, guidance, and support for their educational goals.

### **National Context for Career Technical Education**

Amid renewed interest among federal and state policymakers, CTE has a substantial presence in American public education. Nationwide, there are more than 8 million secondary students and nearly 4 million postsecondary students enrolled in career and technical education (CTE) programming, as well as approximately 1.1 billion in federal investment supplemented by substantial annual state investments (Reed et al., 2018).

Though stigmatized due to the variety of academic and technical programs offered to the public and its commitment to open enrollment (Doyle, 2009 as cited in Gauthier, 2020), community colleges continue to be a leader in technical development. For example, California recently committed to an annual investment of over \$200 million in community college-based CTE degree programs (Bohn, Gao and McConville, 2018), in addition to \$500 million since 2013. These education funds expand career-pathway programs starting in grades nine and going through postsecondary schooling. With an increasing emphasis on CTE as a lever to advance educational and labor-market outcomes, as well as which CTE programs are delivered and the diversifying fields and industries included under the CTE umbrella, it is more important than ever to seek a comprehensive understanding of CTE students' completion persistence factors.

### **The California CTE Context**

Improving student success in community colleges is essential to addressing the need of Californians with college degrees, for closing the opportunity gaps across racial/ethnic populations, and for addressing the shortages of skilled workers. Despite national reports of nearly 21 million people holding an occupational associates' degree (U.S. Census Bureau, 2018), geographic data focusing on California indicates that only 3% of all entering degree-seekers earn vocational associate's degrees, and only 5% earn certificates. Meanwhile, one-third of community college course enrollments are in courses classified as vocational (Jones, 2013 as cited in Shulock & Moore, 2013). During the past two decades, California has made substantial policy and resource investments in CTE including Senate Bill 70 in 2005 (reauthorized in 2012 as SB 1070), which allocated \$20 million to CTE at the K-12 and community college levels. In addition to funding, the legislature addressed the goals and scope of CTE. Legislation through Assembly Bill 2648, passed in 2008, defined the notion of a CTE pathway as

a multiyear, comprehensive high school program of integrated academic and technical study that is organized around a broad theme, interest area, or industry sector, including but not necessarily limited to, the industry sectors identified in the model standards adopted by the state board

The legislation further articulates instructional goals as “project-based learning and other engaging instructional strategies that intentionally bring real-world context and relevance to the curriculum where broad themes, interest areas and CTE are emphasized.”

Other legislation (Assembly Bill 790) in 2011 authorized a Linked Learning Pilot Program and awarded \$2 million in competitive grants to school districts for the implementation of Linked Learning and technical assistance with the model. The stated purpose of the legislation was to “have more equitable opportunities to learn skills needed for entry into the workforce, to pursue postsecondary educational goals, and to contribute to the social cohesion of the state” (AB 2446 Assembly Bill).

More recently Assembly Bill 86 was signed into law, creating the California Career Pathways Trust (CCPT) and providing \$500 million in funds for CTE programs. The intended goals of the CCPT are to prepare students for “high-skill, high wage jobs in emerging and growing industry sectors in the local or regional economy through a sequenced, career-relevant curriculum following industry-themed pathways” (California Department of Education, 2017).

California policymakers and educators looking to career and technical education with a promise to meet “middle skills” requirements must continue to invest financially and allocate resources that advance student success, which is defined here as CTE certificate or degree attainment. Current California Education Code allows but does not require community colleges to provide counseling to include educational, career, and personal counseling (California Education Code Section 72620). Additionally, while the code sets forth a direction of the governing boards of the community college districts to provide and publicize an organized and functioning counseling program in each college to include academic, career, and personal counseling, these services are mandatory for first-time students enrolled in more than six units, students enrolled provisionally, and students on academic or progress probation (California Education Code Title 5 Section 51018 b-c). These policies do not prescribe requirements or expectations of the community colleges for students otherwise classified, specifically those who are not yet enrolled and/or interested in enrolling at a community college in specific career pathways.

Access to program and/or career advisement has wide-reaching student implications for CTE, college completion, and economic vitality, opportunities that are not being realized (Shulock and Moore, 2013). As we investigate California’s considerable investment, participation, and interest in developing equitable outcomes, it is crucial to examine how levels of support relate to subsequent outcomes for certain populations of students.

### **CTE and Historically Excluded Student Populations**

CTE has historically been seen as an academic outlet for lower-achieving or unmotivated students (Fraser, 2008; Gamoran & Mare, 1989; Kelly & Price, 2009). Moreover, persistent patterns of racial discrimination and unequal educational opportunities in U.S. schools has resulted in troubling curricular tracking patterns. Work from Oakes (1983) demonstrates that access to specific forms of vocational curricula—business versus building trades, for example—differed systematically based on the racial composition of schools. Predominately White schools had more access to the former, and schools with predominately minoritized populations had more access to the latter. Since the reauthorization of Perkins V, the more likely White population of CTE participants is demonstrating a changing perception that deserves special attention. These trends continue to highlight the gaps and exacerbate the need for investment in institutional agents whose charge is to support students whose educational career goals have been otherwise stymied due to marginalization such as the lack of investment and consideration of relevant support programs.

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In an effort to identify an appropriation of funds for these initiatives, institutions and administrators must consider that the federal funds for CTE are allocated in proportion to CTE completers. This recommendation recognizes the limitations of the federal institution funding structure that prevents institutions that are interested in developing comprehensive programs from doing as such. Without a promissory structure funding for institutions, the federal government should develop measures of assessment guided by practioners whose responsibilities include student-facing interaction. Shulock and Moore (2013) suggest there are clear differences in access that must be better understood; funding models that consider gendered, racialized, and socioeconomic experiences facilitate this acknowledgement.

Funding allocations that allow for the creation of support services for enrollment and participation of prospective, new, and continuing CTE students acknowledge lived experiences and enable navigation of campuses that are hostile and antagonistic (Museus, Griffin and Quaye, 2019). Reed et al., (2018) provide the following example for conceptualization: “if lower-income Latinx students participate in CTE at higher-than-average levels but have more limited access to a breadth of pathways, the CTE policy landscape may hinder economic mobility rather than promote it” (22). To better provide access to high-quality CTE programs, defined limitedly as degree attainment, resources should be directed to development of services that align with the demand and growth of programs that holistically match the specific personal and professional interests of the students (Holzer, Linn & Monthey, 2013).

### **Benefits of CTE Student-service Support**

Institutionalization of specific, appropriate, and adequate

enrollment and academic advising has implications for positive psychological benefits that contribute to completion. Kelly and Price (2009) suggest that students derive feelings of self-worth from successful engagement and completion of CTE coursework. This idea is complemented by the work of Finn (1997), who explains that feelings of efficacy and self-worth are important predictors of student success in school. Availability and effectiveness of student-support services that include academic tutoring, financial and economic counseling, financial aid counseling, cultural enrichment activities, workshops, and mentoring influence students' engagement in their learning, thus importantly influencing their decision to remain enrolled in or leave school all together (Agodini & Deke, 2004; Finn & Rock, 1997; Kelly and Price, 2009; Plank, DeLuca & Estacion, 2008; Rumberger, 2011).

The imperative of cocurricular support is necessitated by the reality that CTE students' experiences are expeditious (due to program term lengths). Furthermore, their interactions with potential supportive environments are often with CTE faculty whose experiences are related to industry and not foregrounded in traditional academic cultures with institutional knowledge. These students can be disadvantaged by these restrictive circumstances that can create confusion, potentially creating barriers to credential completion.

The growing field of literature on CTE in high school (Black, Grenard, Sussman & Rohrbah, 2010; DuBois, et al, 2011) demonstrates a trend that the unique model of instruction featuring mentoring, often over multiple years, enhances educational outcomes by providing clearer connections and pathways to a student's area of interest. These findings infer practicality to the community college context: Specifically, informing the development of a more engaging community college career technical environment that leads to higher probabilities of program completion. Additionally, the comprehensive coordination of students' educational plans has been linked to improved postsecondary arrangements and increased employability (Bishop & Mane, 2004; Kemple & Willner, 2008), presumably due to students' ability to apply learned technical, collaborative, and critical-thinking skills. To this point, the development of robust career and technical education student services is an opportunity to advance student voice and develop participatory decision making. The Great Schools Partnership (2013; as cited in Thrill, 2019) refers to student voice as "the values, opinions, beliefs, perspectives, and cultural backgrounds of individual students and groups of students in a school." The incorporation of

extensive CTE student services moves beyond the inclusion of the traditional voice and enables participation from a population of historically marginalized students whose empowerment is consequential to their persistence and degree attainment.

There is an additional burden of the community college to create and sustain these mechanisms with institutionally appropriate financial and professional talent resources. Inclusive and extensive student supports increase the likelihood of postsecondary career and technical education enrollment, retention, and completion (Reed et.al., 2018).

### **Conclusion and Recommendations**

Increasing the number of students who pursue, complete, and earn certifications and degrees is dependent on the assessment of policy. It is essential that our institutional procedures ensure efficient practice that influence students' experiences and outcomes. As the role of California community colleges in supporting the rebuilding of our economy grows, it is essential to review the policy infrastructure that advances workforce development. The promotion of workforce development through sub-baccalaureate credentials, certificates, and vocational assistance warrants assessment of practices that impact student outcomes.

Much of the consideration on the effectiveness of career and technical education has revolved around labor and economic advantages, but there remains limited research on what enables the success of students who are engaged in these programs. This paper sought to examine the necessity and benefits of implementing and expanding student services to create comprehensive CTE student-support networks.

Shulock and Moore (2013) assert that students who are enrolled in CTE programs are not normally counseled about program options and the roadmaps for completing them, whether they arrive directly from high school, are trying to advance their careers, or come from a position of unemployment. This finding certifies the need for discussion on which governmental and institutional practices need revision to assuredly advance retention and completion for CTE students. As supports vary across community college institutions for CTE, I recommend the following for improving persistence to career and technical certification and degree attainment:

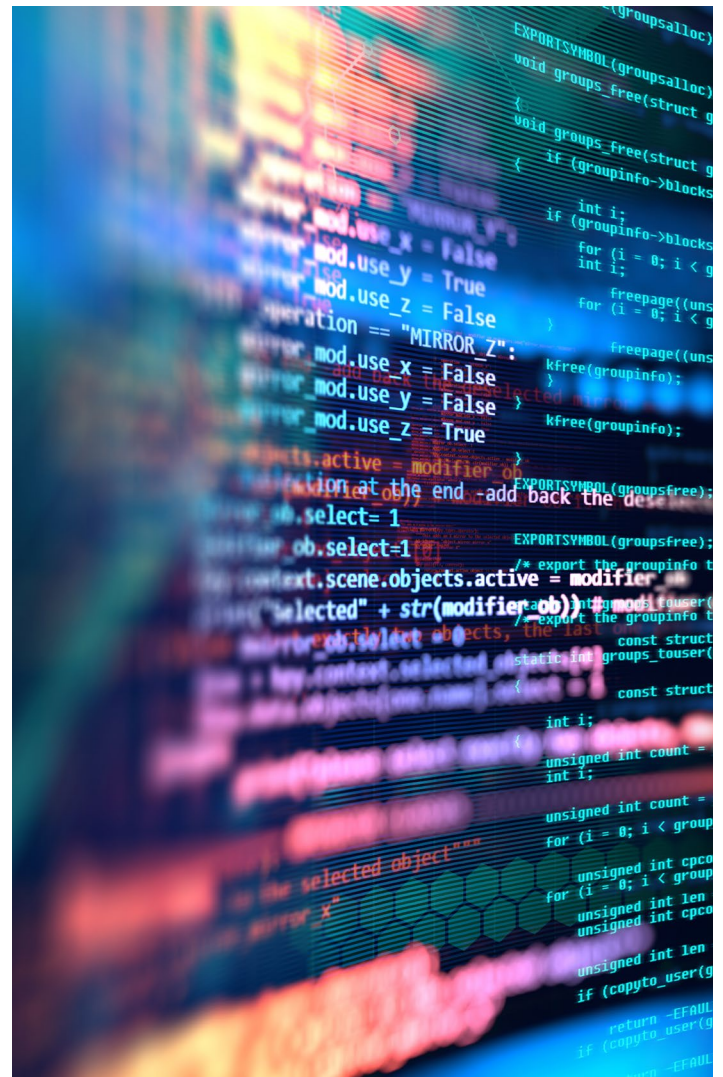
- Replace short term, competitive grant funding with stable funds to provide consistent and equitable access for students toward high-value academic and cocurricular programs statewide.

- Provide community college counselors with a better understanding of career pathways served by CTE programs through frequent and paid in-service trainings with field experts and practitioners. This may also include advisory boards made up of faculty, counselors, and administrators.
- Increase the hiring of trained and credentialed full-time academic counselors to decrease the student-to-counselor ratio. The hiring of more professionals will allot time for counselors to create and explain detailed student educational plans, as well as build relationships beyond transactional exchanges.

Understanding of the pivotal role of community colleges' CTE programs toward advancing equity and meeting workforce demands, these considerations are mindful of the increasing emphasis on student success, defined as college completion. Further, these recommendations consider the direct and indirect consequences for students, practitioners, and instructors as they attempt to develop a standard of best practices for persistence, particularly among students of difference<sup>1</sup> and students pursuing career and technical experience whose educational ambitions, within a California context, may have been stigmatized.

As we consider the specificity of career and technical curriculum, the need for experiential learning, and the opportunity for personalization to meet students' individual career and educational ambitions, it is imperative that detailed and relevant resources are provided. To ensure equitable opportunities for all to earn skills and the competencies that enable degree completion, the implementation of fundamental procedural change is needed.

In closing, every year thousands of people enroll in their local community college to pursue a variety of objectives; however, the policies that currently guide the actions of students and colleges, in many instances, have not been purposefully designed to support the CTE mission. As institutions are increasingly being held accountable for improving student outcomes for CTE programs of study, the recommendations for practices such as long-term funding sources and equipping and hiring counselors with industry-related experience to counsel students beyond general requirements will enable the building of transformational practices that are specific to the CTE mission, better ensuring future equity.




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<sup>1</sup>“Students of difference” is an umbrella term for diverse students that expands beyond race and/or ethnicity. Examples include LGBTQ+ students, students with disabilities, undocumented students, first-generation students, veteran students, students from diverse religious and spiritual backgrounds, and low-income students.

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