Eleven Elements of a High-Quality CTE System

The California State Plan for Career Technical Education establishes the vision, goals, and essential elements of a world-class career technical education system. CTE — with its focus on rigorous and engaging curricula, supportive relationships, and demonstrated outcomes — has become critical to the preparation of all students for career and academic success, postsecondary education, and adult roles and responsibilities.

The vision, mission, guiding principles, and goals of an ideal statewide CTE system, as well as the characteristics of an effective, high-quality CTE system, are embedded within the discussion of each of the following Eleven High-Quality Elements.

High-Quality Element One: Leadership at all Levels

"Institutional commitment and leadership at every level, including the institutions' governing boards, are vital to sustaining and expanding CTE. As in any system, effective leadership is needed to articulate and spotlight the need for CTE, galvanize support and resources, ensure sound management and coordination, and facilitate continuous improvement." (California State Plan for Career Technical Education, pages 56 & 57)

High-Quality Element Two: High-Quality Curriculum and Instruction

CTE offers rigorous, integrated, technical, and academic content focused on careers that are intrinsically interesting to students and is delivered through applied, performance- and project-based teaching strategies that facilitate understanding and mastery. It also instills essential transferable workplace and career management skills that students can draw upon over a lifetime of learning and career development. In addition, CTE is, by necessity, often taught in personalized learning environments (e.g., small classes, learning communities, student organizations, and worksites) that further augment the benefits of these programs. Finally, CTE programs are dynamic; curricula need to stay current with rapid changes in the workplace, requiring ongoing updates and learning on the part of CTE faculty.

High-quality curriculum and instruction in CTE includes the intentional reinforcement of the cognitive, academic, and technical rigor inherent in CTE and the alignment of CTE with academic and industry standards. It also includes the integration of CTE and academic content through a variety of strategies that foster complementary approaches to teaching and learning — strategies that draw on the best of what both CTE and non- CTE disciplines have to offer. (California State Plan for Career Technical Education, page 62)

High-Quality Element Three: Career Exploration and Guidance

Career exploration and guidance are central to CTE. They help ensure that students have access to information and experiences that allow them to envision a wide range of possibilities for their lives and to make informed decisions, both while in their educational programs and throughout their careers — decisions based both on their own interests, needs, and goals, and on a thoughtful assessment of opportunities. (California State Plan for Career Technical Education, page 72)

High-Quality Element Four: Student Support and Student Leadership Development

Students in CTE programs — indeed, all students — come to schools and colleges with a range of needs that must be addressed in order for them to succeed in their studies and transition to future endeavors. Needs may range from transportation, child care, and translation services to mentoring and coaching for success in highly challenging CTE competitions and projects or with transitions to new career opportunities. This section addresses the range of services and programs that support and reinforce technical and academic learning, with an emphasis on the relationships — organizational or personal — that make these programs work. It also includes outreach to students for enrollment in CTE, which, in itself, promotes learning and success. Stakeholders emphasize the importance of enrolling students into CTE programs as a means to engage them and facilitate learning, and the subsequent importance of providing the support services necessary to ensure their success. (California State Plan for Career Technical Education, page 79)

High-Quality Element Five: Industry Partnerships

The unique link between industry and education is an essential feature of CTE and distinguishes it from other types of instructional designs and models. Industry partners play crucial roles in ensuring that CTE curricula are current and relevant, and that students and educators have opportunities to explore their interests and learn important skills in the workplace. (California State Plan for Career Technical Education, page 86)

High-Quality Element Six: System Alignment and Coherence

In order to support the academic and career technical achievement of students in CTE programs, it is essential that all the components of the entire CTE system be effectively linked. System coherence and alignment incorporates several elements, including course sequencing, pathways, articulation, and coordination across sectors. The system alignment:

- Must incorporate secondary education and postsecondary education elements.
- Must include coherent and rigorous content, aligned with challenging academic standards and relevant career and technical content, in a coordinated, nonduplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed.
- May include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits. (California State Plan for Career Technical Education, page 89)

High-Quality Element Seven: Effective Organizational Design

For CTE to prepare students to meet rigorous standards and become lifelong learners with employable skills, the K–12, adult school, and community college systems need to be intentionally designed to ensure that this occurs. Minimally, this entails the development of organizational structures and processes that facilitate student access to programs, enable faculty to collaborate with one another, promote personalization, link students with business and industry for workplace learning, and encourage course and program completion. In so doing, CTE also blurs the line between education and the workplace, in such a way that all are working toward the common goal of ensuring student success and workforce readiness. (California State Plan for Career Technical Education, page 101)

High-Quality Element Eight: System Responsiveness to Changing Economic Demands

For California's immense and diverse economy to retain its prosperity and competitive position in the global market, education must meet the demand for skilled workers in a wide range of industries. A demand-driven system is responsive to current workforce development needs and labor market realities and predictions. (California State Plan for Career Technical Education, page 107)

High-Quality Element Nine: Skilled Faculty and Professional Development

Key elements of quality CTE are the skills of its instructors and the existence of a sufficient pool of skilled instructors to adequately staff programs. (California State Plan for Career Technical Education, page 112)

High-Quality Element Ten: Evaluation, Accountability, and Continuous Improvement

Evaluation and accountability are key to any system or program improvement process. Multiple accountability systems already exist in California to provide data that both meet specific requirements at the federal and state level and support program improvement efforts. These include systems mandated by NCLB, the Carl D. Perkins Act, and the Workforce Investment Act, as well as state systems designed to provide the Academic Performance Index for schools; ensure continued funding for high-quality, high-demand community college programs; and assess compliance with the requirements of many different individual programs in both segments. In view of the multiplicity of existing accountability systems, coupled with the intended integration of CTE into educational policy as a strategy to serve all students, any discussion of accountability must focus on utilizing, aligning, and expanding upon existing systems, and must emphasize program improvement along with reporting of compliance-driven data. Similarly, to the extent that such a system (or collection of systems) is intended to drive improvement in CTE for the benefit of all its customers — students, businesses, communities, and taxpayers statewide — it must report progress on measures that are meaningful to each of these groups. (California State Plan for Career Technical Education, page 117)

High-Quality Element Eleven: CTE Promotion, Outreach, and Communication

CTE offers myriad benefits to students, employers, state and regional economies, and communities. In order to ensure continued support for CTE, its benefits must be validated and made more widely known to students, parents, educators, counselors, community members, and policymakers. This plan makes explicit the need to clearly communicate the benefits of CTE to each of these groups based on evidence of its impact. (California State Plan for Career Technical Education, page 129)