

Career and Technical Education (CTE) Standards

What Are CTE Standards?

CTE standards can be defined as clearly articulated expectations of what students should know and be able to do at the end of a CTE program or course. Similar to other academic standards, CTE standards may be course¹ specific and created in conjunction with expert and community stakeholder input and review. Previously described as vocational education that provided job training and non-coherent elective courses, CTE is now academically rigorous and coherent, and prepares students for careers. CTE standards must include opportunities for students to acquire the knowledge and skills that are essential to today's workplace².

What Should Relevant CTE Standards Do?

High-quality, relevant CTE standards should be able to engage students in a coherent *program of study* that ultimately prepares them to enter into a career. Under the federal Carl D. Perkins Career and Technical Education Act of 2006, a program of study is a nonduplicative sequence of academic and technical courses that includes secondary- and postsecondary-level content and opportunities for high school students to earn postsecondary credit and that culminates in industry-based credentials and/or postsecondary degrees. In order to implement a program of study, state CTE program standards should be aligned vertically (if there is a middle school CTE program within the state and/or a postsecondary program), as well as with industry and college and career readiness standards³. Students engaged in CTE education at the secondary level should continue to be academically prepared to pursue a college education if that is the route the student chooses to take. Thus, rigorous academic standards, as well as industry-specific criteria, can be found embedded within relevant state CTE standards.

¹ National Association of State Directors of Career Technical Education Consortium. (2013). The state of career technical education: An analysis of state CTE standards. Retrieved from <https://careertech.org/sites/default/files/State-CTE-Standards-ReportFINAL.pdf>

² College & Career Readiness & Success Center. (2013). How career and technical education can help students be college and career ready: A primer. Retrieved from <https://www.aypf.org/wp-content/uploads/2013/04/CCRS-CTE-Primer-2013.pdf>

³ Advance CTE. (2017). Policy benchmark tool: CTE program of study approval. Retrieved from https://cte.careertech.org/sites/default/files/files/resources/Program_Approval_Benchmark_Tool_2017_FINAL.pdf

Importance of Stakeholder Input

Given the unique nature of CTE standards, and given the changing workplace environment, it is imperative for stakeholders to have opportunities to provide feedback and updates to CTE standards in a consistent manner, to maintain the relevance of the standards. Standards should be reflective of up-to-date best practices, technologies, and industry needs, so that students exiting a CTE program are prepared to meet workplace demands. Relevant CTE standards also articulate what students need to know and be able to do in order to successfully earn an industry credential or license upon completion of their course of study. Individuals who are entrenched within an industry are often able to provide this information to ensure that a state's CTE standards are germane to industry standards and requirements.

Regular and consistent stakeholder input ensures that state CTE standards maintain relevance within the changing economic climate of the state as well. Employability skills, opportunities for engagement with local businesses, and other experiential learning practices embedded within the standards allow for students to be engaged with real-world situations that lead to their attainment of workforce readiness skills⁴.

Integration of State Initiatives

Relevant CTE standards do not exist within a vacuum. Since states often have other important academic and economic initiatives in addition to CTE, the state's CTE standards should work in harmony with these other initiatives to achieve the goals set out across state initiatives, such as academic college and career readiness standards, STEM education, and/or soft skills. For example, CTE standards may ask students to be able to demonstrate their writing abilities in a content-specific form, or to engage in mathematical problem solving appropriate for the course. Also, specific states, such as Nebraska and South Dakota⁵, have leveraged their schools' use of CTE programs to close critical skill gaps within their rural communities.

Related Resources

- ◆ The [Common Career Technical Core](#) (CCTC), a state-led initiative to establish a set of rigorous, high-quality CTE standards, has been developed through a multi-step process with input from 42 states, the District of Columbia, and Palau. These standards have been informed by state and industry standards and developed by a diverse group of teachers, business and industry experts, administrators, and researchers. The CCTC includes a set of standards for each of the 16 Career Clusters, and their corresponding Career Pathways, that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills, and dispositions that are important to becoming career ready.

⁴ Association for Career and Technical Education. (2010). What is "career ready"? Retrieved from https://www.acteonline.org/wp-content/uploads/2018/03/Career_Readiness_Paper_COLOR.pdf

⁵ Advance CTE. (2017). CTE on the frontier: Catalyzing local efforts to improve program quality. Retrieved from https://cte.careertech.org/sites/default/files/files/resources/CTE_Frontier_Program_Quality_2017_0.pdf

- ◆ The Association for Career and Technical Education developed a [framework](#) outlining a high-quality CTE program of study, based upon a deep review of existing program-quality materials, in addition to detailed companion documents and state policy documents and tools. One of the 12 framework elements included in this draft document refers to a coherent, standards-aligned curriculum, which should include the following:
 - The program-of-study curriculum is developed with employer input, to prepare students for both further education and in-demand and emerging careers.
 - The curriculum is based on industry-validated technical standards and competencies.
 - The curriculum is aligned with relevant content and standards for core subjects such as reading, mathematics, and science, including federal, state, and/or local standards, as appropriate.
 - The curriculum incorporates employability skill standards that help students succeed in the workplace, such as problem solving, critical thinking, teamwork, communications, and workplace etiquette.
 - The curriculum allows for student application of integrated knowledge and skills in authentic scenarios.
 - Program-of-study standards are publicly available and accessible, as appropriate, to students, parents/guardians, partner organizations, and the community.
 - The curriculum is reviewed regularly by all relevant stakeholders and revised as necessary to reflect the latest advances in the field, evidence-based program models, and evaluations of student performance.



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