AN INITIATIVE OF ACTE

2018 ACTE Quality CTE Program of Study Framework

October 2018 | By: Catherine Imperatore and Alisha Hyslop

The 2018 ACTE quality framework is the latest step in ACTE's ongoing High-quality CTE Initiative—an initiative designed to answer the question "What is high-quality CTE?" During this project, we have identified a comprehensive, research-based quality CTE program of study framework and tested that framework through a recent pilot study. We are now developing resources to support use of the framework, and integrating the framework into our activities to recognize and disseminate best practices in CTE.

The framework is designed to apply to individual, local CTE programs of study spanning secondary and postsecondary education, although it may be adapted to other units of analysis. This voluntary tool can be used for program self-evaluation, program improvement and to encourage secondary-postsecondary collaboration. The framework's 12 elements and 92 criteria are designed to be as mutually exclusive as possible. For example, professional development that supports success across all of the quality elements is addressed under "Prepared and Effective Program Staff," not in each individual element, so it is important to review the entire framework for additional criteria that might be relevant to an element in which you are particularly interested. You can find more details and tools online at www.acteonline.org/high-quality-CTE.

1. Standards-aligned and Integrated Curriculum

This element addresses the development, implementation and revision of the program of study curriculum, including the relevant knowledge and skills taught in the program and the standards on which they are based.

a. The curriculum is based on industry-validated technical standards and competencies.
b. The curriculum is aligned with relevant content and standards for core subjects, such as reading, math and science, including federal, state and/or local standards, as appropriate.
c. The curriculum incorporates employability skill standards that help students succeed in the workplace, such as problem solving, critical thinking, teamwork, communications and workplace etiquette.
d. The program of study curriculum is developed with employer input to prepare students for both further education and in-demand and emerging careers.
e. The curriculum allows for student application of integrated knowledge and skills in authentic scenarios.
f. Program of study standards are publicly available and accessible to students, parents/guardians (as appropriate), partners and the public.
g. The curriculum is reviewed regularly by all relevant stakeholders and revised as necessary to reflect the latest advances in the industry, evidence-based program models and evaluations of student performance.

2. Sequencing and Articulation

This element addresses the key components of the definition of a program of study and the articulation, coordination and collaboration that support programs of study, career pathways and accelerated learning.

a. The program of study includes a sequence of courses and/or competencies across secondary and postsecondary education that incorporates technical, academic and employability knowledge and skills.
b. The program of study starts with broad foundational knowledge and skills and progresses in specificity to build students' depth of knowledge and skills.
c. Content and standards within the program of study are non-duplicative and vertically aligned to prepare students to transition seamlessly to the next level of education.
d. The program of study sequence leads to one or more recognized postsecondary credentials, including industry certifications, licenses, apprenticeship certificates, postsecondary certificates and degrees.
e. The program of study allows for multiple entry and exit points that incorporate recognized postsecondary credentials.
f. Students in the program of study have opportunities to earn credit that articulates to the next level of education, such as through dual or concurrent enrollment programs or stackable credentials.
g. Secondary and postsecondary CTE staff collaborate regularly on course sequencing, vertical alignment and opportunities for credit transfer agreements.
h. The program of study is coordinated with broader career pathways systems, as defined in the Workforce Innovation and Opportunity Act, as appropriate and available.

3. Student Assessment

This element addresses the types and quality of assessments used in the program of study, including the types of knowledge and skills that should be assessed, and assessments that lead to recognized postsecondary credentials.

a. Formative and summative assessments are integrated throughout the program of study to validate student learning gains, including both classroom/school-based and standardized, third-party assessments, as appropriate.
b. Assessments are aligned to program standards and curriculum and appropriate to students' current level of knowledge and skill attainment.
c. Assessments are valid, reliable and developed or chosen in accordance with relevant quality standards.
d. The program of study incorporates multiple forms of assessment, including performance-based assessment where students must demonstrate the application of their knowledge and skills.
e. Assessments within the program of study provide objective information on student attainment of industry-validated technical knowledge and skills.
f. Assessments within the program of study provide objective information on student attainment of academic knowledge and skills.
g. Assessments within the program of study provide objective information on student attainment of employability knowledge and skills.
h. The program of study prepares students for assessments that lead to recognized postsecondary credentials, as available and appropriate.

4. Prepared and Effective Program Staff

This element addresses the qualifications and professional development of program of study staff, including secondary CTE teachers, postsecondary CTE faculty, administrators and other personnel.

a. CTE staff supporting the program of study meet appropriate state, district and/or institution certification and licensing requirements.
b. CTE educators maintain up-to-date knowledge and skills across all aspects of an industry.

c. CTE educators maintain relevant evidence-based pedagogical knowledge and skills.
d. CTE staff engage in ongoing, rigorous professional development on a wide range of topics covering all elements of a high-quality program of study, as described in ACTE's *Quality CTE Program of Study Framework*, which might include pursuit of advanced educator certification.
e. CTE staff demonstrate leadership and commitment to the profession.
f. CTE administrators ensure that other program staff have the time, resources and supports to implement each element of a high-quality program of study, as described in ACTE's *Quality CTE Program of Study Framework.*
g. CTE and academic staff collaborate regularly and frequently to coordinate curriculum, instruction, assessment and extended learning activities and to analyze data for program improvement.

5. Engaging Instruction

This element addresses instructional strategies within a student-centered learning environment that support student attainment of relevant knowledge and skills.

a. Program of study instruction is driven by relevant content area standards and learning objectives.
b. Project-based learning and related instructional approaches, such as problem-based, inquiry-based and challenge-based learning, are fully integrated into the program of study.
c. Contextualized instruction results in students applying technical, academic and employability knowledge and skills within authentic scenarios.
d. Instruction emphasizes the connection between academic and technical knowledge and skills, including through cross-disciplinary collaboration.
e. Instruction incorporates relevant equipment, technology and materials to support learning.
f. Instruction is flexible, differentiated and personalized to meet the needs of a diverse student population.
g. Management of the educational environment builds a culture of learning and respect.

6. Access and Equity

This element addresses program of study promotion, student recruitment and strategies that support access and equity for various student populations, including by gender, race and ethnicity, and special population status (such as individuals with disabilities, individuals from economically disadvantaged families and English learners).

a. The program of study is promoted to all potential participants and their parents/guardians (as appropriate), in a manner that is free from bias, inclusive and non-discriminatory.
b. Students are actively recruited from populations that have been traditionally underrepresented, including by gender, race and ethnicity, and/or special population status.
c. Career guidance is offered to all potential and current program of study participants in a manner that is free from bias, inclusive and non-discriminatory.
d. Facilities, equipment, technology and materials are provided in a way that ensures all students have the opportunity to achieve success in the program of study, including by meeting Title IX, Americans with Disabilities Act and other accessibility requirements.
e. Curriculum, instruction, materials and assessments are free from bias, inclusive and non-discriminatory, and offered in a way that ensures all students have the opportunity to achieve success in the program of study, including through accommodations, as appropriate.
f. Supportive services, such as tutoring and transportation assistance, are provided to ensure all students have the opportunity to achieve success in the program of study, as appropriate.
g. Appropriate actions are taken to eliminate barriers to extended learning experiences, such as work-based learning, CTSO participation and articulated credit, for all students, including special populations.

7. Facilities, Equipment, Technology and Materials

This element addresses the alignment, appropriateness and safety of the physical/material components of the program of study, including laboratories, classrooms, computers, industry-specific equipment, and tools and supplies that support learning.

a. Facilities, equipment, technology and materials used in the program of study reflect current workplace, industry and/or occupational practices and requirements.
b. Facilities, equipment, technology and materials support and align to curriculum standards and program objectives.
c. Facilities, equipment, technology and materials meet federal, state and local standards for occupational safety and health in the related industry, as appropriate.
d. Students demonstrate safe and appropriate use and maintenance of facilities, equipment, technology and materials within the program of study.
e. Processes are defined and resources provided to regularly inspect, update and replace facilities, equipment, technology and materials.
f. The program of study maximizes student access to relevant facilities, equipment, technology and materials through partnerships and flexible delivery models.

8. Business and Community Partnerships

This element addresses business and community partner recruitment, partnership structure and the wide variety of activities partners should be engaged in to support the program of study and ensure programs are aligned with workforce needs.

a. Representatives of the program of study actively conduct outreach activities to develop partnerships to ensure the program of study is informed by employer and community needs.
b. Partnerships are formed with a diverse range of stakeholders who represent differing perspectives, including employers from small, medium and large businesses; industry representatives; community, workforce and economic development agencies; and other education stakeholders.
c. The program of study has a formalized, structured approach to coordinating partnerships, such as an advisory board or sector partnership.
d. Partners ensure that the program of study meets current and future workforce demand and skill needs by:
   - identifying, validating and reviewing curriculum
   - identifying appropriate assessments and recognized postsecondary credentials
   - evaluating facilities, equipment, technology and materials to ensure consistency with industry standards
e. Partners support students' and teachers' extended learning by:
   - identifying, providing and evaluating work-based learning experiences for students
   - participating in CTSO activities; for example, by serving as mentors and judges
   - offering opportunities, such as externships, for educators to stay current with industry-relevant knowledge and skills
f. Partners support the program of study in tangible ways, such as by investing funds, providing in-kind support and/or helping raise external funds to meet program of study goals.
g. Partners support program of study sustainability by advocating for and promoting the program of study.
h. Partners help to evaluate the effectiveness of the program of study in preparing students for further education and careers.

9. Student Career Development

This element addresses strategies that help students gain career knowledge and engage in education and career planning and decision-making, including career counseling, career assessments, curricula that helps students learn about careers, information about educational opportunities and workforce trends, and job search information and placement services.

a. Comprehensive career development is coordinated and sequenced to promote and support the career decision-making and planning of all students, including prior to entering the program of study.

b. Each CTE student in the program of study has a personalized, multi-year education and career plan that reflects exploration of the student's interests, preferences and abilities; and informs course selection, planning for further education and a career, and involvement in extended learning.
c. Career development activities are aligned with relevant national, state and/or local standards.
d. Students in the program of study and their parents/guardians (as appropriate) are provided accurate and timely information on extended learning experiences available through the program of study, such as work-based learning, CTSO participation and articulated credit.
e. Students in the program of study and their parents/guardians (as appropriate) are provided accurate and timely information on further education and training options, including application procedures, enrollment, financing, and their projected educational, employment and earnings outcomes.
f. Students in the program of study and their parents/guardians (as appropriate) are provided accurate and timely information on regional occupational trends and outlooks, high-demand and high-wage career opportunities, and the educational pathways that lead to current and projected career opportunities.
g. Students in the program of study have access to job search information and placement services as they near completion of the program of study.
h. Career development professionals have access to professional development and up-to-date information on extended learning experiences, education and training options, and regional occupational trends to aid students in education and career planning and decision-making.

10. Career and Technical Student Organizations (CTSOs)

This element addresses CTSOs, which are organizations for individuals enrolled in CTE programs that engage in activities as an integral part of the instructional program, including the delivery and availability of CTSO opportunities for student skill and leadership development.

a. The organization is an integral, intra-curricular part of the program of study, available to every student at some point during the program of study.
b. The organization is aligned with relevant national, state and/or local standards.
c. Organization activities develop and reinforce relevant technical, academic and employability knowledge and skills.
d. The organization provides opportunities for students to interact with business professionals.
e. The organization provides opportunities for students to participate in relevant competitive events.
f. The organization provides opportunities for students to participate in relevant community and school service activities.
g. The organization provides opportunities for students to participate in leadership development activities.
h. The organization is supervised by CTE staff with clearly defined roles.

11. Work-based Learning

This element addresses the delivery of a continuum of work-based learning involving sustained, meaningful interactions with industry or community professionals that foster in-depth, firsthand engagement with the tasks required in a given career field. Experiences may be delivered in workplaces, in the community, at educational institutions and/or virtually, as appropriate, and include a range of activities such as workplace tours, job shadowing, school-based enterprises, internships and apprenticeships.

a. A full continuum of work-based learning experiences, progressing in intensity, is accessible to every student at some point during the program of study.
b. Work-based learning experiences are aligned with relevant national, state and/or local standards.
c. Work-based learning experiences develop and reinforce relevant technical, academic and employability knowledge and skills.
d. Work-based learning experiences are intentionally aligned with each student's education and career goals.

e. Work-based learning experiences are provided through delivery methods that maximize meaningful interaction with business professionals.
f. Requirements and procedures for work-based learning experiences that address access, selection, liability, supervision, rights and responsibilities, safety, transportation, learning objectives and evaluations are formalized and shared in advance of work-based learning experiences with employers, students and parents/guardians (as appropriate).
g. Work-based learning experiences comply with relevant federal, state and local laws and regulations.
h. Work-based learning experiences are supervised by CTE staff with clearly defined roles.
i. Students engage in reflection and document learning resulting from work-based learning experiences, such as through a portfolio or presentation.

12. Data and Program Improvement

This element addresses collection, reporting and use of data for continuous evaluation and program improvement, as well as appropriate access to relevant data.

a. All stakeholders understand why data are collected, how they will be used and their value in supporting student success.
b. Processes and supports are in place in the program of study to ensure the timely and accurate collection and submission of valid and reliable data for required reporting.
c. In addition to data required for reporting, data aligned with program of study goals and the elements of ACTE's *Quality CTE Program of Study Framework* are collected to aid in program improvement.
d. Labor market information is used to inform program of study decision-making and support program improvement.
e. Privacy and security protections that adhere to all federal, state and local privacy laws are in place for data collection, storage, analysis and reporting.
f. Educators have access to relevant, valid and reliable aggregate data on all students participating in the program of study.
g. Educators have access to relevant, valid and reliable data disaggregated by gender, race and ethnicity, and special population status, thus facilitating the comparisons of access and performance among subpopulations and with the general student population and the identification of equity gaps.
h. Data is shared in an easy-to-understand format with students, parents/guardians (as appropriate), partners and the public.
i. There is a formal process in place for the systematic and continuous use of data, including student access and performance data and program evaluation results, for program improvement, including addressing equity gaps.

© 2018, Association for Career & Technical Education® (ACTE®).
All rights reserved. For permission to adapt or reproduce, contact
ACTE at acte@acteonline.org or 800-826-9972.