

Community College CTE Program Review Tool-Kit



Community College CTE Program Review Toolkit

This document was created with input from Iowa community college chief academic officers (CAOs) and other administrators. This toolkit is meant to assist community college staff during the evaluation of career and technical education (CTE) programs. The standards listed are the minimum components that should be evaluated during CTE program review. Additional evaluation standards may be added by the community colleges if desired. The document contains suggestions for evidence that may be used to demonstrate that state accreditation standards for CTE program evaluation are being met. Additionally, this toolkit has suggested questions that colleges can incorporate into their program review templates. This is an evergreen resource in which new pieces of evidence or suggested questions may be added or removed over time.

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CTE Program Evaluation Standards

- 1) Students are proficient in knowledge, skills and abilities
- 2) Positive return on investment
- 3) General education curriculum is aligned with program outcomes
- 4) Opportunities for students to pursue other educational and/or co-curricular opportunities
- 5) Program removes barriers for students, including special populations
- 6) Curriculum is current and relevant
- 7) Continued professional development of instructors
- 8) Equipment and facilities are adequate
- 9) Student outcomes are disaggregated and addressed
- 10) Alignment with additional postsecondary opportunities

Additional Standards

- Industry or professional standards
- Advisory council
- Pathways with secondary institutions

CTE Program Review

Periodic program review ensures a career and technical education (CTE) program's continued quality, fulfillment of labor market needs and cost effectiveness. Iowa Code Chapter 258.4 requires that the Iowa Department of Education (Department) review at least 20 percent of approved CTE programs annually. This mandate is accomplished by directing colleges to review at least 20 percent of their CTE programs annually by utilizing instructional program review processes approved by the Department through the state accreditation process. Also, colleges should review each CTE program at least once every five years as a key component of their institutional planning and budget processes.

College academic administrators and faculty have the primary responsibility for evaluating instructional programs to make informed decisions about improvement and continuation. In addition, institutional program review processes shall ensure program compliance with state and federal laws governing career and technical education, as well as state and institutional accreditation standards.

This toolkit serves to assist community college staff during the evaluation of CTE programs. The standards listed in Iowa Administrative Code chapter 46 are the minimum elements that should be evaluated during CTE program review. Community colleges can add additional components to their program review processes as they see fit. Suggested questions that can be used in the college's program review template are included at the end of the document.

This document also contains examples of evidence that can be used to demonstrate that state accreditation standards for CTE program evaluation are being met. These pieces of evidence are not all inclusive, and other types of evidence may be used to demonstrate the meeting of standards. Additionally, community colleges may also use evidence that is used for Higher Learning Commission (HLC) accreditation, especially for *Criterion 3.F. Program Review*. Please see the [Providing Evidence for the Criteria for Accreditation](#) document on the Higher Learning Commission's [website](#) for more information about types of evidence that are used for HLC accreditation.

CTE Program Review Requirements and Criteria

In addition to institutional program criteria, Iowa Code Chapter 258.4(7), 281 IAC chapter 46.6(4) and 281 chapter 21.62(4) require that CTE programs are reviewed to ensure that they meet board standards and that programs:

- Are compatible with educational reform efforts;
- Are capable of responding to technological change and innovation and
- Meet the educational needs of students and the employment community, including students with special education needs or protected by state or federal civil rights regulations.

Each community college must have a process that ensures at least 20 percent of CTE programs are reviewed on an annual basis. The Department will ensure compliance through the community college accreditation process established in 281 chapter 21.

The CTE program review must include an assessment of the following:

1. Students are proficient in the knowledge and skills aligned with industry expectations.
2. The program yields a positive return on investment for students.
3. The general education curriculum in the program is aligned with the program outcomes.
4. The program provides opportunities for students to pursue other educational opportunities, other co-curricular opportunities or both at the community college.
5. The program removes barriers for all students, including special populations defined by the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins V), to access educational and employment opportunities.
6. The curriculum is current and relevant.
7. There is continued professional development of instructors.
8. The equipment and facilities are adequate.
9. Student outcomes, including, at a minimum, program enrollment rates, retention rates, completion rates and employment rates and wages, are disaggregated, at a minimum, by gender, race and ethnicity and other special populations defined by the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins V) and addressed by the program.
10. The program aligns to additional education and training opportunities.
11. The program has implemented prior cycle goals and has developed additional plans for improvement.

The following additional standards should also be addressed through the program review process:

- Industry or professional standards
- Advisory council
- Pathways with secondary institutions

CTE Program Evaluation Standards

Standard 1: Students are proficient in the knowledge and skills aligned with industry expectations.

***Previous Standard:** Competencies in each program are being mastered by the students enrolled.*

The review of CTE programs should assess how well students demonstrate proficiency in knowledge and skills aligned with industry expectations. This includes evaluating students' proficiency in technical skills through assessments, as well as their ability to apply these skills in real-world contexts. Additionally, the community college should have program-level goals and outcomes outlining the knowledge and skills students should be proficient in after completing a program. These program outcomes, which are often required by other accreditors, should also be aligned with industry expectations.

Standard 2: The program yields a positive return on investment for students.

***Previous Standard:** The program costs are proportionate to educational benefits received.*

Return on investment measures the financial benefits of earning an award or a degree against the expenses involved, like tuition and potential student loans. It is important because it helps students make informed decisions about their education, ensuring they are investing wisely in their future and career prospects.

The Department is currently developing a formula for return on investment that colleges will be able to use.

Standard 3: The general education curriculum in the program is aligned with the program outcomes.

Previous Standard: *The CTE curriculum is articulated and integrated with other curricular offerings required of all students.*

According to Iowa Administrative Code chapter 21, associate of applied science (AAS) and associate of applied arts (AAA) degrees must consist of a minimum of 15 semester (22.5 quarter) credit hours of general education and include at least one course from each of the following areas: communications, social science or humanities and mathematics or science. Diplomas must include at least three semester (4.5 quarter) credit hours of general education. The purpose of this standard is to ensure that the general education curriculum within a CTE program is aligned with program outcomes.

During state accreditation, the Department team will be ensuring that the college is intentional about the types of general education offerings incorporated in the program curriculum. Program faculty should reflect on this general education coursework during the program review process and during advisory and curriculum meetings.

Standard 4: The program provides opportunities for students to pursue other educational opportunities, other co-curricular opportunities or both at the community college.

Previous Standard: *The program provides opportunities for students to pursue other educational interests in a postsecondary setting.*

Students should have the opportunity to participate in college-sponsored organizations and/or earn additional credentials related to their program. Providing co-curricular and additional educational opportunities to students in CTE programs is crucial for enhancing their overall development, preparation for the workforce and career success. These opportunities, such as career and technical student organizations (CTSOs), work-based learning (WBL), community service and other extracurricular and educational activities, help students develop essential employability skills, build confidence and connect with the real world of work. The primary examples of co-curricular opportunities include CTSOs, which are student-led organizations that complement CTE courses, providing students with additional career-focused activities, competitions and leadership development opportunities. CTSOs provide a platform for students to practice teamwork, leadership, communication and problem-solving skills, all of which are highly valued in the workplace. Participating in co-curricular programs also allows students to explore different career paths, gain insights into specific industries and even develop professional networks.

Program faculty should reflect on the different types of educational and/or co-curricular opportunities that are available to students in their CTE programs. Extracurricular educational opportunities include career exploration activities and work-based learning experiences. The state of Iowa defines WBL as sustained project-based learning in partnership with an employer, simulated work experiences aligned with industry-recognized credentials, high-quality pre-apprenticeships aligned to an apprenticeship, student learner programs, internships, and apprenticeships. Examples of CTSOs include National Professional Agricultural Student Organization (PAS); SkillsUSA; Business Professionals of America (BPA); Future Business Leaders of America (FBLA); Family, Career and Community Leaders of America (FCCLA) and Future Health Professionals (HOSA). Other co-curricular opportunities that align with CTE programs may exist at the community college as well.

Standard 5: The program removes barriers for all students, including special populations defined by Perkins V, to access educational and employment opportunities.

Previous Standard: *The program removes barriers for all students to access educational and employment opportunities.*

The program review process should evaluate the different types of programs and services that exist to help remove barriers for all students, including [special populations defined by Perkins V](#). Examples of programs or services include, but are not limited to, academic advising, disability support services, Veterans' services, career services, learning assistance and academic support services, financial aid, campus childcare, co-curricular activities, health services and/or TRIO. Additionally, program faculty should reflect on student outcomes data disaggregated by these special population groups to help identify barriers that may exist and help close achievement gaps.

Standard 6: The curriculum is current and relevant.

Previous Standard: *Currency of curriculum is addressed during the program review.*

The program curriculum and sequence of courses should be evaluated during the program review process to ensure that it is current, relevant and aligns with industry needs. A current and relevant CTE curriculum is crucial because it ensures students are equipped with the skills and knowledge needed for the modern workforce. This alignment with industry needs helps students find employment in high-demand fields and also keeps them engaged in their education, leading to increased graduation rates.

The program review process should include a thorough review of the courses in all of the awards offered by the CTE program. Additionally, program faculty should reflect upon the stackability/"laddering" of awards in the program and examine "entry points" into the program (i.e., through credit for prior learning) and "exit points" where students can enter the workforce with a community college credential. Additionally, program faculty should take into consideration advisory council feedback in program design during the program review process.

Standard 7: There is continued professional development of instructors.

Previous Standard: *Professional development is addressed during the program review.*

Continued professional development is vital for CTE faculty members because it ensures they stay current with industry standards and technology, which directly impacts student preparedness for the workforce. Continued professional development helps CTE faculty members bridge the gap between theory and practice, equipping them to deliver relevant and effective instruction. Additionally, through professional development, instructors can learn how to integrate academic skills into their technical instruction, manage diverse student populations and effectively engage students in learning activities. Professional development also gives instructors opportunities for leadership development, which can empower them to take on other roles within their institution, contribute to the broader field of education, connect with peers, learn from experienced professionals and build professional networks.

During state accreditation, the Department team will primarily be looking for how the community college uses the [Quality Faculty Plan \(QFP\)](#) to ensure the continued professional development of instructors. Additionally, colleges should include questions in the program review template that ask program faculty to reflect upon how professional development impacts the quality of the CTE program.

Standard 8: The equipment and facilities are adequate.

Previous Standard: *There was no change from previous standard.*

It is essential that CTE programs have adequate facilities and equipment because they directly impact the quality of instruction, student safety and the realism of the learning environment. These elements allow students to develop practical, hands-on skills that align with industry standards and prepare them for the workforce.

The program review template should include questions related to the adequacy of equipment, facilities and technology. Additionally, evidence should be included that shows that program faculty can submit equipment requests in alignment with the mission of the CTE program and of the community college.

Standard 9: Student outcomes, including, at a minimum, program enrollment rates, retention rates, completion rates and employment rates and wages, are disaggregated, at a minimum, by gender, race and ethnicity and other special populations defined by Perkins V and addressed by the program.

Previous Standards:

- *Student outcomes, in terms of student demographics to include gender, race and ethnicity, national origin, and disability, are addressed during the program review.*
- *Enrollment retention, completion, and replacement rates are addressed during the program review.*
- *Employment rates and wages are addressed during the program review.*

Reviewing student outcomes in CTE programs is crucial for improving program effectiveness, allowing for data-driven decision-making and identification of areas of improvement. Regularly assessing student outcomes helps identify what's working well and what needs to be adjusted. This information can be used to refine curriculum, teaching methods and resources, leading to more effective and engaging learning experiences. Tracking student progress and outcomes also allows educators to provide targeted support and interventions to struggling students. This can include providing additional tutoring, counseling or adjustments to learning activities.

During the program review process, it is expected that program faculty and staff examine these student outcomes and have meaningful conversations about the data. It is also important that data is disaggregated by the [special populations defined by Perkins V](#). Program faculty should reflect upon the data and implement any changes that need to be made to the program based on the data.

Standard 10: The program aligns to additional education and training opportunities.

Previous Standard: *Articulation is addressed during the program review.*

Program faculty should discuss the different types of education and training opportunities that exist *after* program completion. These opportunities include transfer to another institution, apprenticeship or other types of training.

During state accreditation, the Department will be looking for questions related to education and training opportunities in the program review template and articulation agreements included in the evidence file.

Standard 11: The program has implemented prior cycle goals and has developed additional plans for improvement.

Previous Standard: *This is a new standard.*

The most important aspect of the program review process is the identification of strengths and areas of improvement. Program faculty should outline goals and action steps to accomplish in the time period from the current program review to the next program review. Additionally, there should be periodic check-in meetings to ensure that progress is being made on the action steps.

During community college accreditation, the Department team will be looking at program review documentation from five randomly selected programs. Community colleges will need to provide program review documentation from the previous cycle for two out of the five requested programs. Department staff will be examining these documents to ensure that goals and action steps were completed in between program review cycles.

Additional Standards

Additional Standard: Industry or Professional Standards

Previous Standard: *There was no change from previous standard.*

Community colleges should utilize program standards established and recognized by industry or professional organizations when available and appropriate. In lieu of these standards, community colleges should develop program standards through a structured group interview process, which involves committees of incumbent workers within an occupational cluster analyzing standards that include new and emerging technologies, and job-seeking, leadership, entrepreneurial and occupational competencies. This analysis should include identifying standards that ensure program participants have access to instruction that leads to employment and further training. All standards should be analyzed for the reinforcement of academic skills.

Additional Standard: Advisory Councils

Previous Standard: *There was no change from previous standard.*

Iowa Code chapter 258.9 and 281 IAC chapter 46.8 require community colleges to appoint and maintain a program-oriented and program-specific advisory council for CTE programs. The local advisory council, which is required to meet at least twice annually, shall give advice and assistance to the board of trustees, administrators and instructors in the establishment and maintenance of the CTE program. These program advisory councils should be integrated into the institutional review process as they play a critical role in providing feedback to ensure program content meets industry standards. These councils should be comprised of a diverse group of people skilled and current in fields related to the program they will help develop and assess. For more information about advisory councils, see the [CTE Advisory Council Manual](#) on the Department's website.

The community college should document how the program engages with the business community to recruit members for the advisory council under each program. The membership of each advisory council should consist of public members from multiple businesses within the occupation or occupational field related to the CTE program and of other stakeholders with expertise in the occupation or occupational field related to the CTE program.

Program review documentation should include:

- a current member list with titles and employers
- advisory council meeting logistics, including, but not limited to, meeting frequency, agendas and minutes
- advice that the advisory council has suggested for the program
- any actions or results taken by the program that stem from this advice

Additional Standard: Pathways with Secondary Institutions

Previous Standard: *This is the same as the previous standard except that the phrase “agreements of articulation” was replaced with “pathways.”*

Teachers and administrators from both secondary and postsecondary instructional levels should meet to identify competencies required at each level and to jointly develop pathways between secondary and postsecondary levels for specific occupational areas. Such collaborative efforts will facilitate the secondary-postsecondary transition and help reduce duplication between the two levels.

Evidence to Demonstrate that Standards are Being Met

Key Evidence That Applies to All Standards

- Program review policies, processes, schedule and guidelines (e.g., academic rigor, curricular currency, financial viability, cost, market analysis, etc.)
- Sample program review reports
- Reflective questions in program review template
- Action plans with goals addressing the standards (if two reviews are provided, documentation demonstrating completion of goals)
- Advisory council minutes with discussions related to the standards (e.g., articulating/integrating the program to other educational offerings, demonstration of proficiency of competencies, etc.)
- Curriculum committee minutes with discussions related to the standards (e.g., articulating/integrating the program to other educational offerings, demonstration of proficiency of competencies, etc.)
- List of current programmatic accreditations and statuses
- Documentation for the process for reviewing, approving and implementing new programs
- Documentation of engagement of faculty, academic administration and the governing board in the review process
- Documentation showing how the program review process connects to the institutional strategic plan

Additional Examples of Evidence for Specific Standards

Standard 1: Students are proficient in the knowledge and skills aligned with industry expectations.

- Course and program learning outcomes that are related to this standard
- Assessment of student learning data that ties to course/program learning outcomes
- Curriculum maps showing the connection between courses and programs and program and general education outcomes
- Documentation demonstrating that the program meets programmatic accreditation requirements
- Data related to this standard
- Licensure or certification exam results

Standard 2: The program yields a positive return on investment for students.

- Calculations showing the cost/benefit ratio
- Documentation showing the linkage between planning, budgeting and evaluation/assessment
- Documentation showing the laddering of awards within a program and cost/benefit ratio for each award
- Surveys from students and/or employers demonstrating benefits in relation to costs

Standard 3: The general education curriculum in the program is aligned with the program outcomes.

- Curriculum maps showing the connection between courses and programs and program and general education outcomes
- Documentation showing the linkage between planning, budgeting and evaluation/assessment

Standard 4: The program provides opportunities for students to pursue other educational opportunities, other co-curricular opportunities, or both at the community college.

- Documentation showing that career exploration, WBL and/or types of educational opportunities are provided to students in the program
- CTSO projects and/or experiences demonstrating that these skills are discussed and/or taught

- A list of other co-curricular opportunities available to students that align with the CTE program

Standard 5: The program removes barriers for all students, including special populations defined by Perkins V to access educational and employment opportunities.

- Institutional policies that affect CTE programs
- Documentation on advising processes
- List of student support services, such as academic advising, disability support services, Veterans' services, career services, learning assistance and academic support services, financial aid, campus childcare, cocurricular activities, health services and/or TRIO.
- Information about writing and math assistance, tutoring programs and other support provided to students
- Analysis of graduation and retention rates by distinctive student populations

Standard 6: The curriculum is current and relevant.

- Advisory council minutes with discussions related to the curriculum
- Curriculum committee minutes with discussions related to the curriculum
- Data related to this standard
- Student exit surveys and alumni surveys and action taken related to this standard
- CTSO projects and/or experiences demonstrating that these aspects of the curriculum are discussed and/or taught
- Course and program learning outcomes that are related to this standard
- Assessment of student learning data that ties to course/program learning outcomes
- Documentation related to the **Developing a Curriculum (DACUM)** process (if applicable)

Standard 7: There is continued professional development of instructors.

- Quality Faculty Plan containing verbiage related to the continued professional development of instructors
- Documentation demonstrating CTE-specific professional development provided to instructors

Standard 8: The equipment and facilities are adequate.

- Advisory council minutes with discussions related to equipment, facilities and technology
- Documentation showing that the program review process includes a review of equipment, facilities and technology
- Minutes from academic affairs and/or board of trustees meetings discussing equipment costs, replacement, etc.
- Completed equipment request forms
- List of recent equipment and technology purchases for program and funding source (e.g., Perkins)

Standard 9: Student outcomes, including, at a minimum, program enrollment rates, retention rates, completion rates, and employment rates and wages, are disaggregated, at a minimum, by gender, race and ethnicity, and other special populations defined by Perkins V and addressed by the program.

- Analysis of outcomes data by distinctive student populations (i.e., special populations defined by Perkins V)

Standard 10: The program aligns to additional education and training opportunities.

- Articulation agreements between community college CTE programs and other postsecondary institutions
- Documentation on advising processes

- Transfer credit policies, course equivalency guides and credit validation for prior learning and third-party providers
- Transfer student resources
- Contracts or other documentation with employers for post-program trainings, such as apprenticeships

Standard 11: The program has implemented a prior cycle goals and has developed additional plans for improvement.

- Action plans with goals addressing the standards
- Documentation demonstrating completion or “closing the loop” of goals

Additional Standard: Industry or Professional Standards

- Course and program learning outcomes that are related to this standard
- Assessment of student learning data that ties to course/program learning outcomes
- Curriculum maps showing connection between courses and standards

Additional Standard: Advisory Councils

- Advisory council members and their representation as it relates to the CTE content area
- Gender and race/ethnicity information on advisory council membership lists
- Minutes from the random selection of programs (the college should submit all minutes over a two-year period of the last five meetings, whichever is less)
- Advisory council meeting minutes showing who attended, meeting dates and identification of issues discussed
- Evidence that the advisory council is meeting at least twice per year
- Evidence from the meeting minutes where the advisory council is approving major changes and new programs
- Any documentation showing how the program review process documents how the program engages with the business community to recruit members for the advisory council

Additional Standard: Pathways with Secondary Institutions

- Meeting minutes from meetings between teachers and administrators from both secondary and postsecondary levels
- Regional Planning Partnership (RPP) meeting minutes
- Listing of concurrent enrollment and career academy courses between the school district and community college
- Evidence demonstrating the existence or planning of regional centers
- Career academy contracts between the college and partnering school districts

Sample Program Review Questions

Below is a list of questions that can be incorporated in the college's program review template. This list is not all-inclusive and these questions are merely suggestions the colleges can use in their program review process. The questions may be used as written or may be altered to reflect the community college's program review process and/or mission/vision. Keep in mind that several questions may need to be used to show enough evidence that a standard is being met.

Sample Questions that Apply to the General CTE Program Review Process

- What is the mission of the CTE program? How does the program's mission connect to the institutional mission?
- What is the vision of the CTE program? How does the program's vision connect to the institutional vision?
- Describe how the review of this program connects to institutional strategic planning.
- Describe how the review of this program connects to institutional budget planning.

Sample Questions for Specific Standards

Standard 1: Students are proficient in the knowledge and skills aligned with industry expectations.

- Explain how student proficiency in industry-recognized skills and knowledge are assessed throughout the program to ensure they meet industry expectations. Include the specific performance benchmarks or industry-aligned standards that are used to assess whether students are proficient in the skills they have learned.
- Describe how student learning outcomes and competencies are evaluated and modified to ensure that they reflect current industry standards and employer needs.
- Describe the types of performance-based assessments (e.g., portfolios, simulations, capstone projects, etc.) used in the program to demonstrate proficiency in real-world tasks and evaluate student readiness for employment.
- List the different types of industry-recognized credentials (IRCs), certifications, and/or licensure requirements embedded in the curriculum. Explain how these credentials prepare students for success upon completion of the program.
- Explain how the program prepares students to sit for relevant industry and/or certification exams. Describe the support provided (e.g., test prep, resources, etc.) to help students succeed on these exams.
- Explain how the progress of students is tracked through the program as they advance through the curriculum to ensure they are proficient in the necessary skills.
- Describe how outcomes data (e.g., student performance, certification rates, employment success, etc.) is used to evaluate whether students are meeting the intended learning outcomes.
- Describe how the results of assessments, surveys or reviews are used to modify and improve the program curriculum to better meet industry expectations.

Standard 2: The program yields a positive return on investment for students.

- What is the average starting salary of graduates, and how does it compare to local or state wage benchmarks?
- What is the average time to completion for the program? What percentage of program graduates secure employment in a field of study related to their training within a specific period (e.g, six months or one year after graduation)? How does this completion rate impact students' return on investment?
- Explain how the total cost of completing the program compares to the entry-level wages in the field. How does the program track starting salaries of graduates, and how do these compare to industry averages for similar roles?

- Does the program provide students with skills, certifications and/or credentials that lead to higher-paying roles in the field? Are these skills, certifications and/or credentials stackable and portable across industries or regions?
- Describe how the total cost of the program (e.g., tuition, fees, textbooks, etc.) compares to the potential earnings that students can expect upon graduation in the related industry. Include any significant costs associated with the program (e.g., required tools, uniforms, certifications, etc.) that may impact students' financial return on investment. How are these significant costs managed or mitigated?
- Describe any disparities in return on investment based on demographics (e.g., gender, race/ethnicity, etc.). What strategies are in place to ensure all student groups benefit equally from the program?
- Describe the long-term career impact of the program and how it affects graduates' economic mobility (e.g., access to middle-skill or high-skill jobs, career ladder opportunities to enter higher-paying roles or industries, etc.).
- Explain how the return on investment is tracked and measured for students who do not complete the program but still gain industry-relevant skills or certifications (e.g., students who drop out but find employment based on skills required).
- Describe the support systems integrated into the program to help students stay on track and avoid delays in completing their education, thereby improving their time-to-degree and return on investment.
- Describe the role of support services (e.g., advising, tutoring, career counseling, certification exam prep, etc.) to help students overcome barriers to completion and maximize their educational return on investment.
- What strategies does the program employ to minimize the financial burden on students while ensuring they gain the skills needed for employment and career advancement? Does the program or college offer financial aid or scholarships to help reduce the cost of education, and how does this affect the students' return on investment?
- Are employers willing to offer tuition reimbursement or hiring incentives due to the program's value?
- How does the program equip students with skills that contribute to career sustainability and long-term return on investment for graduates, such as adaptability, leadership and specialized knowledge that can lead to career advancement or entrepreneurship?
- Describe the alumni tracking systems in place to monitor graduate earnings and career progression over time. What feedback loops are in place with students and alumni to ensure the program remains a valuable investment? Are students and alumni satisfied with the return they received relative to the time and financial investment?

Standard 3: The general education curriculum in the program is aligned with the program outcomes.

- Explain how the general education curriculum (e.g., communication, math, science, humanities, etc.) support the development of the knowledge and skills required for success in the program and occupation and complements and enhances the specific competencies students need in their chosen career field.
- Explain how general education student learning outcomes for general education courses are defined, measured and aligned with the program's technical outcomes and competencies and with industry standards.
- Describe how the general education curriculum fosters essential employment skills (e.g., communication, teamwork, collaboration, writing, speaking, critical thinking, problem-solving, quantitative reasoning, etc.) critical for success in the industry. How do students demonstrate the application of these skills in their CTE coursework, projects, simulations, case studies, WBL experiences and/or other practical, real-world contexts?
- How do general education faculty collaborate with CTE faculty in the program to ensure that course content supports both technical proficiency and broader academic skills?
- Describe any opportunities that exist for students to engage in interdisciplinary projects or activities that combine technical skills with general education learning (e.g., community service, WBL, etc.).

- Describe any gaps in how general education courses are delivered (e.g., course load, pacing, delivery modes, etc.) that may hinder students' ability to achieve both general education and technical learning outcomes.
- How is feedback from industry partners incorporated into both the general education and technical components of the program? Do employers report that graduates effectively use general education skills in the workplace?
- Describe how the program supports students in balancing general education requirements with their technical coursework to ensure they can meet all program outcomes.
- Explain how the assessments of general education outcomes are used to inform continuous improvement efforts in the program. How is data from student performance in general education courses used to refine and strengthen the overall program curriculum and outcomes?

Standard 4: The program provides opportunities for students to pursue other educational opportunities, other co-curricular opportunities or both at the community college.

- Describe the CTSOs or other career-related student organizations (e.g., SkillsUSA, Phi Theta Kappa, National Technical Honor Society, etc.) that students are encouraged to join. What opportunities do these organizations provide for skill development and networking?
- Describe other co-curricular activities (e.g., student clubs, professional activities, industry competitions, etc.) in which students are encouraged to participate.
- Describe any opportunities for students to participate in community service projects that apply their technical skills in real-world contexts (e.g., community-based projects, service learning, etc.).
- Describe how the curriculum includes WBL opportunities that align with industry needs and give students practical experience in the field.
- Describe any structured opportunities that exist for students to pursue other academic credentials or certifications (e.g., a second certificate, diploma, degree or specialization) while completing their CTE program.
- Describe any opportunities for students to participate in interdisciplinary learning opportunities, such as combining technical training with courses in other fields (communication, leadership, entrepreneurship, STEM, humanities, etc.), to complement their CTE focus and expand their academic skill set. Include any opportunities for students to participate in projects, coursework or activities that bridge technical training with these other fields.
- Describe any workshops or seminars that help students improve their professional skills (e.g., communication, teamwork, time management, etc.) in addition to their technical training.
- Describe any experiences offered by the program outside of the classroom that expand students' career-related educational experiences (e.g., career fairs, industry tours, professional networking events, job shadowing, mentoring, mock interviews, etc.).
- How does the program provide opportunities for non-traditional students (e.g., adult learners, working parents, etc.), underrepresented groups and/or individuals with specific needs to engage in further educational opportunities or co-curricular activities?
- Describe how the program promotes campus-wide events and resources that can enhance students' educational experience (e.g., academic workshops, library resources, study abroad programs, etc.).
- Describe any assessments used to evaluate the success of co-curricular opportunities in enhancing student engagement and learning in the CTE program.

Standard 5: The program removes barriers for all students, including special populations defined by Perkins V, to access educational and employment opportunities.

- Describe how the program assesses and identifies the unique challenges that students from special populations encounter when accessing the program.
- How does the program ensure that all students, regardless of background, have equal access to learning materials, equipment and classroom facilities?

- Describe the types of support services in place to ensure that students from special populations can succeed in the program (e.g., academic tutoring, financial aid, career counseling, childcare services, etc.). How does the program provide personalized academic advising and career counseling for students from special populations to ensure they are aware of available opportunities and resources?
- Describe the targeted resources available for students with disabilities (e.g., accommodations, assistive technology, accessible materials, etc.) to ensure they can fully participate in coursework and lab activities in the program. Are the learning environments (e.g., physical classrooms, labs, online platforms, etc.) designed to accommodate students with disabilities?
- How does the program address language barriers for students with limited English proficiency (e.g, ESL support, translated materials, bilingual instructions, etc.)?
- How does the program engage with community organizations or external support services (e.g., social services, housing support, mental health services, etc.) to address barriers students may face outside the classroom?
- Describe the resources (e.g., scholarships, grants, access to free textbooks and supplies, etc.) available to students in the program facing economic hardship.
- Describe the services available for non-traditional students, including single parents, working adults or displaced workers (e.g., flexible scheduling, evening classes, hybrid models, online options, etc.).
- Describe the ways that the program adapts its delivery methods (e.g., hands-on training, lectures, etc.) to meet the needs of all learning styles and experiences.
- Describe any “bridge” programs or other initiatives in place that support underprepared students in successfully transitioning into the program.
- Describe the resources in place to assist students from special populations in their job search and career development (e.g., resume building, mock interviews, job placement services, etc.). What steps are taken to ensure that special populations have equal access to job fairs, employer visits and other networking opportunities?
- Describe any partnerships with employers or community agencies that focus on providing opportunities or support for students from special populations, such as internships, apprenticeships or mentoring programs. Include any relationships with local workforce boards or community organizations that specifically assist students from special populations in finding employment after graduation.
- Explain how the program uses disaggregated data to identify and address any disparities in student success or employment outcomes. What steps are taken based on the data to remove or reduce barriers for students from special populations, particularly in areas where gaps are identified?

Standard 6: The curriculum is current and relevant

- How frequently is the program curriculum reviewed and updated to ensure it aligns with current industry standards and expectations?
- Describe the types mechanisms in place (e.g., feedback from advisory councils, local and regional employers, trade organizations, etc.) to ensure the curriculum aligns with workforce needs, reflects evolving trends and demands in the industry and prepares students for careers in the occupation.
- Explain how feedback from students and alumni is used to evaluate the effectiveness and relevance of the curriculum and improve the program.
- Explain how the program curriculum incorporates current tools, technologies and methodologies used in the field. How are emerging trends (e.g., automation/robotics, AI, sustainability, data analytics, etc.) integrated into the program?
- Describe any industry-validated competencies or frameworks (e.g., AWS, CompTIA, etc.) that are used to guide program curriculum and instruction.
- How flexible is the curriculum in adapting to changes in industry standards and practices, new technologies, certification requirements and workforce needs?
- Describe how the curriculum allows for interdisciplinary learning opportunities, such as collaboration between different departments or fields of study, to reflect the integrated nature of many modern industries.
- Describe how WBL opportunities in the program are evaluated for alignment with industry expectations.

- What data and feedback are used to evaluate curriculum effectiveness, and how often is data reviewed for continuous improvement (e.g., employment outcomes, skills assessments, etc.)? What processes are in place to address data and feedback and make curriculum adjustments when industry trends or student needs change?

Standard 7: There is continued professional development of instructors.

- Describe the types of professional development opportunities available to instructors within the program (e.g., workshops, seminars, conferences, trade shows, online courses, certifications, etc.). Describe the strategies in place to ensure that professional development activities are relevant, engaging and practical for instructors at different stages of their careers.
- Describe how professional development opportunities align with the needs of instructors in terms of industry standards trends, teaching strategies and integration of new technologies in the classroom. How do these opportunities expand professional networks and help instructors stay informed about the latest trends?
- Describe the mechanisms in place to ensure that instructors obtain or maintain industry certifications, licensure and other credentials to stay current in their field.
- Describe the types of professional development opportunities available that are focused specifically on improving teaching and learning practices, such as instructional design, assessment methods and student engagement strategies.
- Describe the support that program faculty receive in adopting new teaching technologies (e.g., online learning platforms, learning management systems, multimedia tools, etc.) that enhance student engagement and learning outcomes.
- Describe the types of training provided on how to accommodate all learning styles and students from special populations and how to effectively support their learning and success. Describe the training available on making reasonable accommodations for students with disabilities or other special needs in the classroom or lab environment.
- Describe opportunities that exist for program faculty to collaborate with colleagues within and outside of their program, participate in professional networks or communities of practice and/or participate in peer teaching observations to share good practices, resources and industry knowledge and enhance their teaching expertise.
- Describe opportunities that exist for formal or informal program-specific mentorship for new instructors. Describe how this mentorship program supports ongoing professional growth.
- How does the program ensure that part-time and adjunct faculty in the program have access to the same professional development opportunities as full-time faculty?
- Describe how the program assesses the impact of professional development activities on student learning outcomes, engagement and overall program effectiveness.

Standard 8: The equipment and facilities are adequate.

- How frequently are the equipment and technological resources in the program assessed for suitability, functionality and industry relevance? Does the program have access to sufficient quantities of equipment or materials required for students to learn and practice the skills outlined in the curriculum?
- How often does the program consult with industry experts or the advisory council to ensure the equipment and technology being used are still relevant to the workforce?
- Describe the mechanisms in place to ensure that equipment is regularly maintained and serviced to ensure it is in good working order. What processes are in place for identifying and addressing equipment malfunctions or repairs?
- How often are facilities and equipment inspected to ensure they meet safety standards?
- Does the program have the necessary specialized equipment, facilities or technology for any niche or advanced areas of study (e.g., CAD workstations, medical simulation mannequins, robotics lab, etc.)?

- Describe the access the program has to modern digital learning tools, such as learning management systems, interactive media and online resources, to enhance student engagement and learning outcomes.
- Describe the procedures in place for requesting new equipment, equipment replacements or upgrades to technology or instructional software when they are outdated and no longer meet industry standards.
- Are the facilities (e.g., classrooms, labs, workshops, etc.) large enough to accommodate the program's enrollment and activities without overcrowding? If not, what types of updates are needed?
- How accessible are the facilities for students with disabilities, including physical access to buildings, equipment and lab spaces?
- Does the program have a clear and sustainable budget for acquiring, replacing and maintaining equipment and facilities? How is funding allocated for equipment upgrades and facility improvements, and how does the program prioritize these expenditures? Describe any external funding sources (e.g., grants, industry partnerships, etc.) that are leveraged to enhance equipment and facility quality.
- Describe any processes in place to collect feedback from students and employers regarding the adequacy of equipment, tools, technology and facilities. How is this data used for continuous improvement?

Standard 9: Student outcomes, including, at a minimum, program enrollment rates, retention rates, completion rates and employment rates and wages, are disaggregated, at a minimum, by gender, race and ethnicity and other special populations defined by Perkins V and addressed by the program.

- Describe how the program collects data on student outcomes, such as enrollment rates, retention rates, completion rates, employment rates and wages. What other program data is collected (e.g., postsecondary enrollment, etc.)?
- How is student outcomes data disaggregated by key demographic factors (e.g., race/ethnicity, gender, disability status, age, socioeconomic status, special populations defined by Perkins, etc.)?
- Describe any disparities in enrollment rates, retention, completion, employment and wage outcomes that exist across demographic groups or special populations.
- Does the program share disaggregated student outcomes data with faculty, staff and stakeholders to foster a collaborative approach to addressing disparities and improving outcomes?
- Explain how the program tracks the success and outcomes of students from special populations, such as program enrollment rates, retention rates, completion rates and employment rates and wages.
- How often is the data reviewed and analyzed to identify trends or gaps in student success?
- Describe the specific actions being taken to address any disparities identified in student enrollment, completion, employment or wages, particularly in underrepresented groups.
- Explain how the program uses disaggregated student outcomes data to inform decisions about curriculum changes, teaching strategies and/or student support services.
- Describe the targeted interventions, programs or support services designed to help students who face barriers to success (e.g., academic tutoring, financial aid, career services, etc.).
- How does the program evaluate the effectiveness or targeted interventions, programs or support services and make adjustments as needed?
- How does the program ensure that all students, regardless of their background, have the same opportunities to succeed in terms of enrollment, completion, employment and wages?
- Does the program track student outcomes over multiple years (e.g., post-graduation outcomes, employment retention, etc.) to assess long-term success? How does the program use longitudinal data to assess trends and program effectiveness and identify areas for improvement? Are there any long-term strategies in place to improve employment rates and wages for graduates, especially those in special populations?
- Explain how the program engages with external stakeholders (e.g., employers, alumni, industry professionals, etc.) to gather feedback on student outcomes such as employment rates and wages?
- Are alumni surveyed about their career progression, job satisfaction and earnings and how is this feedback used to improve program outcomes?

Standard 10: The program aligns to additional education and training opportunities.

- Explain how the program provides clear pathways for students to pursue advanced certifications or degrees or transfer to four-year institutions.
- Describe any formal agreements or partnerships that exist with local employers for post-program training or apprenticeships.
- Describe any formal agreements or partnerships that exist with four-year institutions, other community colleges or trade schools to facilitate credit transfer or seamless transitions for students seeking further education.
- Describe the IRCs or other credentials that students can pursue after completing the program.
- Describe how students are informed about other opportunities for further education, such as articulation agreements or transfer programs, after program completion. What mechanisms are in place to ensure that students are provided clear information about how their credits from the CTE program will transfer?
- Describe how students are informed of additional certification or licensure opportunities after program completion.
- Describe how the program supports students in transitioning to higher levels of education, such as bachelor's degree programs, advanced certifications or specialized training (e.g., advising, counseling, financial aid, scholarships, grants, etc.). What resources or partnerships are in place to help students access advanced training or apprenticeship programs?
- Describe how WBL opportunities in the program connect students to additional education and training opportunities after program completion.
- How does the program collect feedback from employers to understand the skills and qualifications required for advancement within the industry, and how are these needs used to guide the development of additional educational opportunities?
- Describe any mechanisms in place to track alumni who pursue further education or advanced training after graduation. How is this data used to assess the effectiveness of the program in facilitating post-program training opportunities?

Standard 11: The program has implemented prior cycle goals and has developed additional plans for improvement.

- What specific goals were set during the previous program review cycle? How were these goals communicated to faculty, staff and stakeholders?
- How did the program track progress toward achieving the goals in the previous cycle (e.g., through regular reports, meetings, data reviews, etc.)?
- Were the prior cycle goals fully achieved? If not, what barriers or challenges prevented full implementation, and how were those addressed?
- What evidence or data supports the program's progress toward meeting its previous goals (e.g., student outcomes, feedback from stakeholders, program assessment results, employment outcomes, credential attainment, etc.)?
- Which goals from the previous cycle had the most significant positive impact on student success, program quality and/or faculty performance?
- Were there any unintended consequences (positive or negative) of the prior cycle's goals, and how were these addressed or managed?
- Describe new challenges or opportunities identified since the previous cycle that should be addressed in the next improvement plan.
- Explain how the program utilized feedback from students, faculty, staff and industry partners to inform the setting of new goals for the next cycle.
- What new goals or priorities has the program identified for the upcoming review cycle based on the analysis of prior outcomes and emerging needs?
- Describe how these new goals were developed. Include any input sought from faculty, students, alumni, employers or the advisory council to shape the next cycle of improvements. Describe how engagement with external stakeholders ensure that goals align with workforce needs and industry standards.

- How does the program ensure that new goals are actionable, measurable and achievable within the given timeframe and resources?
- Identify any resource gaps that may hinder progress toward achieving the goals and how the program plans to address these gaps.
- Are there any external funding sources (e.g., grants, industry partnerships, philanthropic support, etc.) that can be leveraged to support the implementation of new goals and improvements?
- Describe how the program plans to engage faculty and staff in the new cycle of goals and improvement plans to ensure collective ownership and collaboration.
- Explain how the program plans to monitor progress toward achieving its new goals throughout the cycle (e.g., regular check-ins, progress reports, performance indicators, etc.). Describe the mechanisms in place to hold faculty, staff and administrators accountable for implementing improvements and meeting new goals. How does the program ensure that there is a continuous feedback loop to adjust strategies or interventions if goals are not being met?
- How will student success metrics (e.g., retention, completion, employment, etc.) be used to assess whether the program's goals and improvements are having a positive impact?
- How does the program plan to assess the long-term impact of improvements, especially regarding the overall student experience, program effectiveness and community needs? Describe how the program has a long-term strategic plan that ties together prior and new goals to ensure continuous growth and adaptation to changing educational and workforce demands.

Additional Standard: Industry or Professional Standards

- Describe how the program curriculum is aligned with standards established and recognized by industry or professional organizations.
- If the program does not use standards established and recognized by industry or professional organizations, describe the process that was used to develop standards for the program. Include any stakeholder involvement
- How frequently is the curriculum reviewed and updated to reflect changes in industry or professional standards?

Additional Standard: Advisory Councils

- Explain how the program ensures that the advisory council is composed of multiple types of stakeholders, representing a variety of perspectives, such as industry professionals, employers, faculty, students and other stakeholders. How does the program ensure that there is representation from different sectors, geographic areas, etc.?
- Describe the mechanisms in place to ensure that the advisory council meets at least twice during the academic year. How does the program ensure continuous engagement and communication with the advisory council, even between formal meetings (e.g., newsletters, emails, collaborative platforms, etc.).
- Describe the format of advisory council meetings (e.g., in-person, virtual, hybrid). How do these formats encourage productive feedback and discussion?
- Describe how follow-up actions from meetings are documented and tracked between meetings.
- Describe the role that the advisory council plays in the following:
 - Defining competencies, curriculum and learning outcomes for the program.
 - Ensuring that curriculum and competencies are relevant and up-to-date with industry trends and advancements, technological changes, workforce demands and industry regulations.
 - Identifying and addressing skills gaps between what the program is teaching and what the employers need in the workforce.
 - Providing data or insights about labor market trends, skill shortages or specific occupational areas where there is a significant demand for trained workers.

- Participating in the ongoing evaluation of the CTE program's effectiveness and its outcomes, such as graduation rates, student success, job placement and employment rates and employer satisfaction.
- Reviewing and recommending changes to improve the quality of instruction, student services and other program elements.
- Identifying specific industry certifications or credentials to be incorporated into program offerings.
- Supporting the program in the development or maintenance of industry partnerships (e.g., job placements, employer-sponsored training, facility access, etc.).
- Assisting the program in identifying and facilitating WBL opportunities for students.
- Providing feedback on the success of program graduates in securing employment, advancement in their careers and meeting employer expectations.
- Providing input on the adequacy of program resources, including faculty, equipment, technology and funding, and identifying areas for resource improvement or reallocation to better support student success and industry alignment.
- Describe how advisory council feedback has resulted in an adjustment to the program's curriculum or offerings.
- Describe the methods in place to track the effectiveness of the advisory council's input and ensure that it leads to tangible changes in the program.

Additional Standard: Pathways with Secondary Institutions

- List all of the career academies (and standalone concurrent enrollment CTE courses) that exist between CTE programs at local high schools and the community college.
- Describe how program faculty and staff communicate and collaborate with local high schools to align curriculum, competencies and expectations for students transitioning from high school to college.
- Describe the role that industry partners, employers, the advisory council and the regional planning partnership play in shaping competencies and pathways between secondary and postsecondary education for the occupational area.
- How do high school and community college instructors communicate and collaborate to ensure that the curriculum remains relevant and aligned? Describe any joint training opportunities for high school and community college instructors to collaborate on good practices, curriculum design and competency development in the specific CTE program.
- How does the program ensure that competencies taught at the high school level align with those required at the community college level? Describe the steps that are taken to ensure that competencies covered in the high school CTE curriculum is not repeated at the community college level. How are gaps addressed to support student learning?
- Describe the mechanisms in place to ensure that high school students are aware of and encouraged to take advantage of opportunities that allow them to earn college credit for CTE coursework, including concurrent enrollment and career academy opportunities.
- Describe how the program facilitates the development of clear career pathways that include both high school and community college education, ensuring that students know what to expect at each level. How does the program help students at both the secondary and postsecondary levels understand the various career pathways available in the specific occupational area (e.g., entry-level roles, certificates/diplomas, associate degrees, etc.)?
- Describe any career counseling, guidance and/or workshops for high school students to help them identify postsecondary education opportunities that align with their career interests. Include any career fairs, industry tours or mentorship opportunities that involve both high school and community college students to give them insights into career pathways.
- How does the program assess and prepare students who enter college-level CTE programs with different levels of preparedness or knowledge based on their secondary education? Describe the types of support services available to help students transition from high school education to community college education (e.g., advising, orientation, tutoring, counseling, etc.).
- How does the program support professional development for high school faculty to ensure alignment of teaching practices, assessments and competencies?

- Describe any systems in place for tracking students who enter a community college CTE program after completing a CTE program at the secondary level. What data is used to monitor their success? How is this data shared with secondary institutions to evaluate and adjust curricula and competencies to improve student success?