

2015

# Career and Technical Education (CTE) Tool for Evaluating Programs of Study

The purpose of this document is to measure the effectiveness of Carl D. Perkins Programs of Study. The objective is to gauge Program of Study components needing assistance and/ or technical support in order to strengthen CTE Programs of Study.



# Career and Technical Education (CTE) Program of Study Evaluation Tool

## Acknowledgements

The Public Education Department (PED) College and Career Readiness Bureau (CCRB), appreciates the contributions of the Program of Study Evaluation Tool Taskforce members and colleagues who provided input into the finalization of this document.

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## Evaluating the Quality of Career and Technical Education (CTE) Programs

Program of Study Quality Indicators		Level of Implementation 1 2 3 4 (-)Low High (+)	Challenges to Implementation	Actions to Overcome Challenges	Artifacts, Evidence, and Comments
1.	<b>Course Sequences-</b> Program of Study includes a sequence of academic and at least three CTE courses to prepare for both further study and careers in the broad career field.				
2.	<b>CTE Syllabus</b> – Each course in the sequence of CTE courses has a syllabus that meets guidelines that includes coursework relevant to the career field, industry standards, and formative and summative assessments. Course syllabi elements include: <ul style="list-style-type: none"> <li>• Course description</li> <li>• Learning objectives</li> <li>• Instructional philosophy</li> <li>• Course goals</li> <li>• Major course projects</li> <li>• Project outlines</li> <li>• Instructional delivery plan</li> <li>• Course exams</li> </ul>				
3.	<b>Worked-Based Learning</b> – A structured program linked to the CTE program of study and approved by the institution (work-based experiences, apprenticeships, cooperative learning, internships, job shadowing, and/or community service).				
4.	<b>Student Organizations</b> – Provide students opportunities for leadership development, competitive events, professional development, and community service.				
5.	<b>Embedded Literacy</b> – Each course in the CTE program integrates reading and writing strategies into all aspects of learning in the CTE classroom. Assignments frequently require students to read, write, and make presentations related to the CTE field of study.				

Program of Study Quality Indicators		Level of Implementation 1 2 3 4 (-)Low High (+)	Challenges to Implementation	Actions to Overcome Challenges	Artifacts, Evidence, and Comments
6.	<b>Embedded Numeracy</b> – Mathematics and numeracy strategies are incorporated into CTE assignments and all aspects of learning in the CTE classroom, with frequent assignments that require students to apply mathematics skills to authentic problems found in the CTE field of study.				
7.	<b>Use of Technology</b> – Technology used in instructional programs which includes computers, software, hardware and technology specific to the broad career area.				
8.	<b>Professional Development</b> – CTE instructors must hold relevant credentials and be prepared to develop curriculum and deliver curriculum & instruction reflecting the needs of the modern workplace and leading to academics and CTE success for all students.  Professional development helps instructors gain new skills and knowledge in: <ul style="list-style-type: none"> <li>• Academic and technical content</li> <li>• Classroom management</li> <li>• Pedagogy/Andragogy</li> <li>• Classroom assessment</li> <li>• Project-based learning</li> <li>• Academics are embedded into CTE content</li> <li>• Problem-based learning</li> <li>• Case studies</li> <li>• Simulation Learning</li> </ul>				
9.	<b>Professional Organizations</b> – A professional organization may be any group formed on the basis of the professional interest of its members (e.g., career and technical professional organizations, industry groups, occupational, or industry recognized organizations).				
10.	<b>Guidance and Advisement</b> – Guidance and advisement systems provide CTE students with opportunities to explore career and educational options, including preparing a plan of study such as the Next Step Plan, advisement, case-management, and/or providing extra-help and follow-up sessions.				

<b>Program of Study Quality Indicators</b>		<b>Level of Implementation</b> 1 2 3 4 (-)Low High (+)	<b>Challenges to Implementation</b>	<b>Actions to Overcome Challenges</b>	<b>Artifacts, Evidence, and Comments</b>
11.	<b>Parental Involvement – (Secondary only)</b> Parental involvement includes parents being a part of the decision-making process in helping students choose a CTE program of study and supporting students in ways that help them succeed in the program.				
12.	<b>Articulation and/or Dual Enrollment Agreements between Secondary and Postsecondary Institutions–</b> Course work alignment between secondary and postsecondary education reduces redundancy. Dual enrollment adds depth to the CTE program. Articulation between 2 year and 4 year institutions should also be established. This agreement establishes policies and procedures for academic and technical content alignment, student eligibility for dual credit courses, criteria for awarding postsecondary credit for dual credit courses, criteria for dual credit instructors, etc.				
13.	<b>Advisory Committees/Partnerships</b> – An advisory committee represents stakeholders in the CTE program and provides input for the program’s continuous improvement. Advisory committees meet at least twice a year and minutes are available for review. Advisory committees should be gender balanced.				
14.	<b>Marketing, Public Relations and Community Outreach-</b> School / institution and CTE leaders market the program to students and community stakeholders to ensure everyone involved is familiar with the program & its curriculum and understand how it links to further study and workforce needs.				
15.	<b>Enrollment</b> – Enrollment in program is based on the students’ interests, advisors’ guidance, and labor market needs.				

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16.	<p><b>Retention and Completion -</b></p> <p><i>Retention</i> measures the staying power of a program in attracting and keeping students.</p> <p><i>Completion</i> indicates the percentage of students successfully completing all requirements prescribed for the program.</p>				
17.	<p><b>Post Program Positive Placement –</b> Program completers who take a job in the program area or who continue postsecondary training in the program area and have a positive placement.</p>				
18.	<p><b>State Assessments – (Secondary only)</b></p> <p>Students in the CTE program meet benchmarks denoting mastery of standards in English/Language Arts and Mathematics.</p>				
19.	<p><b>Industry Credentialing and Technical Assessments –</b></p> <p>The CTE programs lead to industry certification that has value in the workplace. A certification exam can serve as an end-of-program and /or end-of-course exam and provides students the opportunity to earn an industry credential.</p>				
20.	<p><b>Equipment and Supplies –</b> Equipment and supplies support the instructional plan at a level to assure quality education. Equipment is representative of the grade and type used by business and industry to meet or exceed all appropriate safety standards. Equipment is inventoried and records are updated regularly. Procedures are established for replacement and/or repair of malfunctioning equipment and tools.</p>				
21.	<p><b>Program Administration –</b> Administration is responsible for the cohesive and seamless implementation of CTE programs.</p>				

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22.	<b>Financial Responsibility</b> – The institution’s business office / fiscal office / program managers ensure proper revenue and expenditure processes and guidelines are followed.				
23.	<b>Continuous Program Improvement</b> - Involves a commitment to improving performance using a team approach to decision-making and a systematic collection and analysis of performance data.				
24.	<b>Instructional Delivery</b> –Instructors use a variety of instructional tools and methods to maximize student acquisition of knowledge and skills and development in personal and professional abilities.				
25.	<p><b>Program Awareness &amp; Accessibility</b> – All students including special populations are made aware of and have full access to CTE programs.</p> <p>Special populations are defined as:</p> <ul style="list-style-type: none"> <li>• Individuals with disabilities</li> <li>• Economically disadvantaged individuals including foster children</li> <li>• Individuals preparing for nontraditional training and employment</li> <li>• Single parents, including pregnant women</li> <li>• Displaced homemakers</li> <li>• Individuals with limited English proficiency</li> </ul>				
<b>Program of Study Quality Indicators</b>		<b>Level of Implementation</b> 1 2 3 4	<b>Challenges to Implementation</b>	<b>Actions to Overcome Challenges</b>	<b>Artifacts, Evidence, and Comments</b>

	(-)Low	High (+)		
<p>26. <b>Size, Scope, and Quality</b></p> <p><u>Size</u> means the quantifiable evidence, physical parameters, and limitations of each program- such as courses within the approved sequence, amount of available resources, number of staff involved, and the average number of students served each year- that relate to the ability of the program to address all student learning outcomes.</p> <p><u>Scope</u> means the curricular parameters and limitations of each program- such as the ability of a curriculum to cover the full breadth of its subject and maintain continuous relevance to the modern workplace. Qualifiers include course content, range of offerings within each sequence, ability to fully simulate the appropriate workplace environment, number of work skills and competencies taught, etc.</p> <p><u>Quality</u> is the measure of how successfully each program is able to teach all enrolled students all workplace standards, competencies, and skills necessary for them to practice careers within their chosen field after graduation, while at the same time supporting a high level of student performance in core academic areas and skills. Mechanisms are in place to ensure high quality programs align with current workplace standards, practices and competencies.</p>				

## Evaluating the Quality of Career and Technical Education (CTE) Programs



<b>Program of Study Quality Indicators</b>		<b>Level 1 Little or No Development and Implementation</b>	<b>Level 2 Limited Development or Partial Implementation</b>	<b>Level 3 Operational Level of Development and Implementation</b>	<b>Level 4 Exemplary Level of Development and Implementation</b>
<b>1.</b>	<p><b>Course Sequence</b></p> <p>Program of Study includes a sequence of academic and at least three CTE courses to prepare for both further study and careers in the broad career field.</p> <p>The sequence of CTE courses is aligned with academic standards required for graduation, technical standards essential to the career field, and successful transitions to additional education.</p>	<p>The program of study courses are not aligned with standards required for graduation.</p> <p>The program of study courses are not aligned with NM Career &amp; Technical Education Standards.</p> <p>The programs of study courses do not include a sequence of at least three courses to meet CTE completer requirements.</p>	<p>The program of study courses are aligned to standards for reading required for graduation.</p> <p>At least 50% of the program of study courses are aligned NM Career &amp; Technical Education Standards for reading and mathematics.</p> <p>The program of study includes a sequence of three or more courses.</p> <p>There is no evidence that the program of study courses addresses the soft skills that employers desire of employees.</p>	<p>The program of study courses are aligned to standards for reading and mathematics required for high school graduation.</p> <p>At least 75% of the program of study courses are aligned NM Career &amp; Technical Education Standards for reading and mathematics.</p> <p>The program of study requires CTE students to take advanced academic or CT courses that supplement their career focus.</p> <p>Evidence demonstrates industry involvement in the planning / design of course sequences.</p>	<p>The program of study courses are fully aligned with standards for reading, mathematics, and science required for high school graduation.</p> <p>The program of study courses are fully aligned with current NM Career &amp; Technical Education Standards and students complete at least three sequenced CTE courses.</p> <p>The program of study course sequence creates a career pathway to prepare students for work-based experiences and employment.</p> <p>CTE courses are articulated to build depth of knowledge and skills without redundancy and they integrate opportunities for students to gain firsthand experience in the career field.</p> <p>Reporting of course sequences align with data collection systems.</p>
<b>2.</b>	<p><b>CTE Syllabus</b></p> <p>Each course in the sequence of CTE courses has a syllabus that meets guidelines and includes</p>	<p>Course syllabi do not exist for all CTE courses.</p>	<p>At least 50% of the CTE courses have a syllabus meeting the guidelines.</p>	<p>All CTE courses have a course syllabus that meets the guidelines.</p>	<p>All CTE courses meet all requirements of Level 3, and each syllabus is aligned to the</p>

	<p>coursework relevant to the career field, industry standards, as well as formative and summative assessments. Course syllabi elements include:</p> <ul style="list-style-type: none"> <li>• Course description</li> <li>• Learning objectives</li> <li>• Instructional philosophy</li> <li>• Course goals</li> <li>• Major course projects</li> <li>• Project outlines</li> <li>• Instructional delivery plan</li> <li>• Course exams</li> </ul>	Existing course syllabi do not meet course syllabi guidelines.	All syllabi are designed to the level of learning needed to meet standards for graduation.	All syllabi are designed to the level of learning needed to meet NM Career and Technical Education Standards.	<p>NM Career &amp; Technical Education standards.</p> <p>The syllabus includes details on assessment and grading; rework policies (redoing substandard work); and standards-based assignments and project outlines using real-world problems.</p>
3.	<p><b>Work-Based Learning</b></p> <p>A structured program linked to the CTE program of study and approved by the institution (work-based experiences, apprenticeships, cooperative learning, internships, job shadowing, and community service).</p>	<p>No work-based learning opportunity is established.</p> <p>The CTE program does not actively solicit local businesses in the career area to provide work-based learning opportunities.</p>	<p>Work-based learning opportunities are limited to fieldtrips and job shadowing.</p> <p>There is no evidence of a link between course assignments and work-based learning experiences.</p>	<p>Work-based learning opportunities may include field trips, job shadowing, internships, cooperative work experiences, community service and / or service learning.</p> <p>There is a documented training plan for internships.</p> <p>The institution's program of study coordinator actively solicits local businesses to provide work-based learning opportunities for CTE students to gain firsthand experience in the career area.</p> <p>Some follow-up on work-based experience is done with employers and students.</p>	<p>Work-based learning opportunities may include field trips, job shadowing, internships, cooperative work experiences, mentorships, and apprenticeships, community service and / or service learning.</p> <p>There is a documented training plan, and work-based opportunities that are linked directly to school studies.</p> <p>There is ongoing communication between the institution and the business providing the work-based learning to ensure quality experiences for students and employers.</p> <p>Students are expected to complete course assignments related to the work-site activities (daily logs, logs of</p>

					work activities, weekly summaries, portfolios, etc.) CTE leadership takes action to resolve issues identified during follow-up.
4.	<p><b>Student Organizations</b></p> <p>Provide students opportunities for leadership development, competitive events, professional development, and community service.</p>	There is no participation in student organizations and no plan for participation.	<p>Student organizations are organized in name only.</p> <p>Students have few opportunities to enhance their occupational, employability and leadership skills or participate in service learning through student organizations</p> <p>Plans are being made to increase participation.</p>	<p>Student organizations are an integral part of the instructional program and provide opportunities for service learning and occupational employability and leadership development.</p> <p>Students participate in at least one local competitive event specific to the program.</p>	<p>Student organizations meet all requirements of Level 3 and are highly visible and successful, as evidenced by the number of students receiving awards and recognition in local, regional, state, regional and national competitive events, as well as participation in community service activities.</p> <p>Program participants take part in regional, state, and national competitive events.</p>
5.	<p><b>Embedded Literacy</b></p> <p>Each course in the CTE program integrates reading and writing strategies into all aspects of learning in the CTE classroom. Assignments frequently require</p>	No evidence exists in course syllabi of assignments that require reading and writing about technical content	Evidence exists that the course uses at least one anchor assignment embedded with reading and writing.	At least two or three examples of anchor assignments embedded with reading and writing are found in each CTE course.	A major anchor assignment is found in every course.

	students to read, write, and make presentations related to the CTE field of study.	relevant to the career field.  There is no evidence of literacy strategies being used in the CTE courses.	Technical reading and writing are evident.	Academic and CTE teachers collaborate to embed academics.  CTE instructors use instructional strategies that improve students' literacy skills. Strategies include reading for content and citing evidence in written assignments.	Instructors embed reading readiness strategies by having students summarize, paraphrase, categorize, infer, predict, use vocabulary, research and write about the technical field.  Course assignments are administered by CTE instructors to validate students' mastery of reading standards/or industry aligned curriculum in context of career field.
6.	<b>Embedded Numeracy</b>  Mathematics and numeracy strategies are incorporated into all aspects of learning in the CTE classroom, with frequent assignments that require students to apply mathematics skills to authentic problems found in the CTE field of study.	No evidence exists in the course syllabi of assignments that require mathematics to solve problems relevant to the career field.  There is no evidence of numeracy strategies being used in the CTE classroom.	The course has at least one example of an anchor assignment that requires mathematical skills.  Instructors use mathematics vocabulary for mathematics related to CTE courses.	At least two to three examples of anchor assignments embedded with mathematics are found in each CTE course.  Academic and CTE instructors collaborate to embed mathematics into CTE courses.	A major anchor assignment is found in every course.  CTE instructors use strategies that improve students' numeracy skills. Strategies include the development of arguments and the collection and organization of data.  Classroom assessments are administered by CTE instructors to validate students' mastery of mathematics standards in the context of career fields.
7.	<b>Use of Technology</b>  Technology used in instructional programs includes computers, software, hardware, and technology specific to the broad career area.	Information technology and career-related software are not available to students or not used.	Information technology and career-related software are used in a limited way.	The instructional program uses information technology and career-related software, but not up to date based on industry standards.	The instructional program uses information technology and career-related software in every class when appropriate.

		<p>Technology is not available to students or not used.</p>	<p>Career-related software and hardware are outdated.</p> <p>Evidence exists of instructors using technology for instruction, but there is little or no evidence of students using it.</p>	<p>Not all students are required to use technology and hardware to master career skills.</p> <p>Observational data show evidence of students using career-related software, presentation software, hardware, and program appropriate technology.</p>	<p>Career-related software and hardware are high-tech and current based on industry standards.</p> <p>All students are required to use technology to master career skills.</p> <p>Students' information and technological skills are assessed both in terms of their ability to use software and hardware to make judgments about information, organize it, synthesize it, and paraphrase it in the context of the occupation field.</p>
<p><b>8.</b></p>	<p><b>Professional Development</b></p> <p>CTE instructors must be prepared to develop and deliver curriculum and instruction reflecting the needs of the modern workplace and leading to academic and CTE success for all students.</p>	<p>There is little or no evidence of professional development to strengthen CTE instructors' content knowledge and skills.</p>	<p>Professional development is planned with little, if any, input from CTE leaders and instructors.</p>	<p>CTE leaders and instructors use data to identify gaps and target professional development to eliminate gaps.</p>	<p>Professional development is focused on both institution and CTE program needs, and evidence suggests a positive impact on student learning.</p>

	<p>Professional development helps teachers gain new skills and knowledge in multi-modality presentation and learning:</p> <ul style="list-style-type: none"> <li>• Academic and technical content</li> <li>• Classroom management</li> <li>• Pedagogy/Andragogy</li> <li>• Classroom assessment</li> <li>• Project-based learning</li> <li>• Academics are embedded into CT content</li> <li>• Problem-based learning</li> <li>• Case studies</li> <li>• Simulation learning</li> </ul>	<p>Professional development provided has no connection to key practices proven to engage students and improve academic achievement.</p> <p>Professional development provided has no connection to the identified needs of the program.</p> <p>There is no evidence that CTE instructors in this program collaborate with academic teachers in the school or district.</p>	<p>CTE instructors in this program have received professional development on best practices to engage students:</p> <ul style="list-style-type: none"> <li>• Adapt teaching to different learning styles</li> <li>• Teach through cooperative learning strategies</li> <li>• Use student – centered instruction to motivate and deepen student learning</li> <li>• Help students make connections between course and the real world.</li> </ul> <p>CTE instructors in this program have had little, if any, opportunity to update their content knowledge and skills.</p> <p>There is limited evidence that CTE instructors participate in CTE related trainings and workshops.</p>	<p>CTE instructors have received professional development on best practices listed in Level 2 and on further practices:</p> <ul style="list-style-type: none"> <li>• Embedded literacy skills into technical content</li> <li>• Embed high-level mathematics into technical content</li> <li>• Use project-based learning to deepen understanding</li> <li>• Align course assessments to challenging academic and technical standards</li> </ul> <p>There is evidence that CTE instructors work with academic instructors to embed literacy and numeracy into the technical content.</p> <p>CT instructors are provided opportunities to update their technical knowledge and skills through workshops, formal classes, externships, etc.</p>	<p>CTE instructors receive continuing professional development with coaching to become proficient in best practices identified in Levels 2 and 3.</p> <p>There is evidence that CTE instructors participate in a larger professional learning community.</p> <p>All CTE instructors in the program complete and induction program for new instructors and continue with targeted training at least every two years to update their content knowledge and skills.</p> <p>There is evidence that nearly all of the best practices in Levels 2 and 3 are incorporated into unit planning and daily lessons.</p> <p>There is evidence that CTE instructors are using best practices to engage students.</p>
9.	<b>Professional Organizations</b>	CTE instructors, administrators and	CTE instructors, administrators, and	CTE instructors, administrators and	CTE instructors, administrators, and support

	<p>A professional organization may be any group formed on the basis of the professional interest of its members (e.g., career and technical professional organization, industry groups, occupational, or industry recognized organizations).</p>	<p>support staff are aware of professional, industry, occupational or other organizations and are familiar with the benefits of professional development opportunities made through these organizations. However, there is no evidence of participation in these organizations.</p>	<p>support staff are encouraged and supported to participate in professional, industry, occupational or other organizations and their conferences.</p>	<p>support staff are active in professional organizations and participate in conferences, workshops, meetings, and activities.</p> <p>CTE instructors, administrators and staff actively pursue opportunities for continued learning, credential advancement, and expanding contact with industry leaders.</p>	<p>staff participate professional organizations that may include serving as officers or in attending state/national conferences.</p> <p>CTE programs benefit from staff administration participation in professional organizations (e.g., sharing information with staff, incorporating new techniques in the classroom, etc.)</p>
<p><b>10.</b></p>	<p><b>Guidance and Advisement</b></p> <p>Guidance and advisement systems provide CTE students with opportunities to explore career and educational options, including the preparation of a plan of study such as the Next Step Plan, advisement, case-management, and/or attending extra help sessions as well as follow up sessions.</p>	<p>Students do not prepare a plan of study (Next Step Plan).</p> <p>There is no evidence of students having opportunities to explore career and educational options.</p> <p>Students do not complete a career-interest inventory or inventories are incomplete with no follow through.</p>	<p>Students prepare a multi-year plan of study with assistance from advisors but with no professional input.</p> <p>The plan of study is focused only on the program implementation years and does not link to further education options.</p> <p>Students are not made aware of dual credit opportunities to expand their CTE studies.</p> <p>Students partially complete a career interest inventory.</p>	<p>Students set career goals and prepare a multi-year plan of study linked to further education options to achieve those goals.</p> <p>Students are made aware of dual credit opportunities.</p> <p>Students are aware of the requirements for various career options and the effort needed to meet those requirements.</p> <p>Students use program advisement at least annually to review</p>	<p>Students are assigned to an advisor who works with them throughout their enrollment to help them stay on track. Plans of Study are complete and consistently reviewed and updated.</p> <p>Students are encouraged to enroll in dual credit courses relevant to the CTE program.</p> <p>Secondary schools provide information and assistance to parents on topics such as college entrance requirements and financial aid.</p> <p>Secondary schools collaborate with feeder middle grade schools to make students and</p>

				<p>progress made toward completing the plan and, if needed, adjust the plan to reflect changes in career goals.</p>	<p>parents aware of career and educational outcomes.</p> <p>Career exploration experience / and exposure for students is provided through different activities such as field trips, guest speakers, etc.</p> <p>At-risk students are identified and provided intervention and support to meet course standards.</p>
<p><b>11. Parental Involvement (Secondary Only)</b></p> <p>Parental involvement includes being a part of the decision-making process in helping students choose a CTE program of study and supporting students in ways that help them succeed in the program.</p>	<p>Parents have little or no involvement in the CTE program and were not involved in their student choosing the program.</p>	<p>Parents are involved in a limited way through student/parent/instructor meetings and annual open houses in the CTE classroom each year to look at student work.</p>	<p>Parents meet with the student, a CTE instructor and a guidance counselor / advisor prior to student enrollment in the program to understand the program's expectations.</p> <p>Parents and their students meet at least annually with the CTE instructor and guidance counselor/advisor to map out a plan, review progress made, and revise the plan as needed.</p>	<p>Parents have the opportunity to participate in the CTE program. They participate in planning their student's complete program of study and approve the sequences of academic and CTE courses that prepare the student for transition to postsecondary education. They endorse their student's program of study and goals and monitor progress made toward completing the program and reaching goals.</p> <p>Parents communicate frequently with the school, actively support learning at home, volunteer and collaborate with community groups in support of the program.</p>	
<p><b>12. Articulation and/or Dual Credit Enrollment Agreements between Secondary and Postsecondary (2 year &amp; 4 year) Institutions</b></p>	<p>No articulation agreement exists for the CTE program.</p>	<p>The CTE program is supported by an articulation / agency agreement with a</p>	<p>The CTE program is supported by articulation / agency agreements with</p>	<p>The CTE program is supported by articulation / agency agreements with multiple postsecondary institutions</p>	



	<p>Articulation matches course work between secondary and post-secondary education to reduce redundancy. Dual enrollment adds depth to the CTE program. Articulation between 2 year institutions to 4 year institutions should also be established. The agreement establishes policies and procedures for academic and technical content alignment, student eligibility for dual credit courses, criteria for awarding postsecondary credit for dual credit courses, criteria for dual credit instructors, etc.</p>	<p>No dual enrollment policy is in effect for the CTE program.</p>	<p>nearby technical or two year college.</p> <p>Eligibility criteria for enrollment in dual credit CTE courses address the required technical skills but not college placement standards for reading, writing, and mathematics.</p> <p>There is no evidence that articulation/dual enrollment agreements establish the same requirements for faculty, course syllabi and end-of-course exams, whether taught to high school or college students.</p> <p>There is no evidence that articulation / dual enrollment agreements are reviewed annually.</p>	<p>postsecondary institutions within the region.</p> <p>Eligibility criteria for enrollment in dual credit CTE courses address the required technical skills and college placement standards in reading, writing and mathematics required for this CTE program, but they may differ from the college-placement standards for academic dual credit courses.</p> <p>Articulation / dual enrollment agreements have established the same requirement for faculty teaching dual credit courses, whether to high school or college students. There is no evidence of common course syllabi and end-of-course exams for dual credit courses, whether taught at the high school or college.</p> <p>Articulation / dual enrollment agreements are reviewed annually.</p>	<p>statewide. Agreements are viewed as essential in creating maximum educational opportunities.</p> <p>Eligibility criteria for enrollment in dual credit CTE courses address the required technical skills and set the same college placement standards in reading, writing, and mathematics for CTE and academic dual credit courses.</p> <p>Articulation / dual enrollment agreements have established the same requirements for faculty, course syllabi, and end-of-course exams whether taught to high school or college students.</p> <p>Articulation / dual enrollment agreements are reviewed annually.</p> <p>Criteria are established for awarding postsecondary credit and credit earned is immediately added to the high</p>
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					school and postsecondary transcripts.
<b>13.</b>	<b>Advisory Committee / Partnerships</b>  An advisory committee represents stakeholders in the CTE program and provides input for the program's continuous improvement. Advisory committees meet at least twice a year and minutes are available for review. Advisory committees should be gender balanced.	No advisory committee is established or the committee exists only on paper.	An advisory committee is established representing a limited number of stakeholders and employers.  The committee hears reports and gives limited input, but does not make recommendations for future actions.  The committee meets at least once a year, but has minimal influence on issues affecting the program of study.	An advisory committee meets at least twice a year and represents most stakeholders, including business / industry, secondary and postsecondary leaders, teachers, parents and students.  The committee hears progress reports and makes recommendations.  Meetings have an established agenda, attendance is taken and minutes recorded.	The advisory committee-balanced with a variety of stakeholders and persons who can influence policy decisions – meets at least twice a year to consider actions requiring input from stakeholders and employers.  The committee hears progress reports, makes recommendations and receives feedback on actions taken.  The advisory committee drives of the program and works with school and district leadership to ensure program quality by:  *Reviewing and providing input on major assignments  *Providing feedback on course sequences and value-add credentials  *Work to expand work-based learning opportunities  *Engage in lesson/project design based on common tasks / problems from the workplace

					*Provide input on new equipment to support the program
<b>14.</b>	<p><b>Marketing, Public Relations and Community Outreach</b></p> <p>Schools/institutions and CTE leaders market the program to students and to community stakeholders to ensure everyone involved is familiar with the program &amp; its curriculum and understands how it links to further study and workforce needs.</p>	There is little evidence of program marketing or outreach efforts.	<p>Passive, limited marketing activities reflect the value of the program.</p> <p>The program is described in the school's printed literature and/or on its website.</p> <p>Counselors /advisors and instructors have limited knowledge of the program or opportunities for students who complete the program.</p>	<p>The value of the program is reflected in active marketing efforts that reach students and the community.</p> <p>Students in career promotion events and other informational events to showcase program and build interest in it.</p> <p>Instructors and counselors/advisors know about the program, its course requirements, level of academic and technical knowledge needed and career options.</p>	<p>The program is aggressively marketed to all students, and community stakeholders.</p> <p>The marketing effort reflects the program's value and alignment to workplace standards and labor market needs.</p> <p>Instructors and counselors/advisors are knowledgeable about the program, its course requirements, the level of academic and technical knowledge needed and career options. They encourage students to consider the program.</p> <p>The program encourages local media to cover program events.</p> <p>Program information is distributed to students early in the student's educational experience.</p>
<b>15.</b>	<p><b>Enrollment</b></p> <p>Enrollment in a program is a function of students' interests, advisors' guidance, and labor market needs.</p>	<p>Enrollment is less than 50% of the program capacity.</p> <p>There is no plan for growing enrollment to program capacity.</p>	<p>Enrollment is approximately 65% of the program capacity.</p> <p>There is a plan for growing enrollment to program capacity.</p>	<p>Enrollment is more than 75% of program capacity.</p> <p>There is a plan for growing enrollment to program capacity and the plan is regularly revisited.</p>	<p>Enrollment is 85% or above of program capacity.</p> <p>There is a plan for how to reach program capacity, and current enrollment has met or exceeded the plan.</p>

16.	<p><b>Retention and Completion</b></p> <p><i>Retention</i> measures the staying power of a program in attracting and keeping students.</p> <p><i>Completion</i> indicates percentage of students successfully completing all requirements prescribed for the program.</p>	<p>Retention: Less than 50% of the students entering the CTE program continue past the foundation course.</p> <p>Completion: Less than 50% of the students completing all requirements of the program as defined by PED CCRB performance measures target methodology.</p>	<p>Retention: Approximately 60% of the students entering the CTE program continue past the foundation course.</p> <p>Completion: Approximately 60% of the students completing all requirements of the program as defined by PED CCRB performance measures target methodology.</p>	<p>Retention: Approximately 70% of the students entering the CTE program continue past the foundation course.</p> <p>Completion: Approximately 70% of the students completing all requirements of the program as defined by PED CCRB performance measures target methodology.</p>	<p>Retention: Approximately 80% or more of the students entering the CTE program continue past the foundation course.</p> <p>Completion: Approximately 80% of the students completing all requirements of the program as defined by PED CCRB performance measures target methodology.</p>
17.	<p><b>Post Program Positive Placement</b></p> <p>Program completers who take a job in the program area or who continue postsecondary training in the program area have a positive placement.</p>	<p>Less than 50% of graduates from the program are working in the career field or related field, operating entrepreneurial businesses, completing a formal apprenticeship in the career field, enrolled in postsecondary education in the career field, or serving in the military one year after graduation.</p>	<p>Approximately 75% of graduates from the program are working in the career field or related field, operating entrepreneurial businesses, completing a formal apprenticeship in the career field, enrolled in postsecondary education in the career field, or serving in the military one year after graduation.</p>	<p>More than 75% of graduates from the program are working in the career field or related field, operating entrepreneurial businesses, completing a formal apprenticeship in the career field, enrolled in postsecondary education in the career field, or serving in the military one year after graduation.</p>	<p>More than 90% of graduates from the program are working in the career field or related field, operating entrepreneurial businesses, completing a formal apprenticeship in the career field, enrolled in further postsecondary education in the career field, or serving in the military one year after graduation.</p>
18.	<p><b>State Assessments (Secondary only)</b></p> <p>Students in the CTE program meet benchmarks denoting mastery of standards in English / Language Arts and Mathematics.</p>	<p>Less than 25% of students enrolled in the program meet state standards by the end of the year.</p> <p>Less than 25% of students meet</p>	<p>25-49% of students enrolled in the program meet state standards by the end of the year.</p> <p>25-49% of students meet placement</p>	<p>50-74% of students enrolled in the program meet state standards by the end of the year.</p> <p>50-74% of students meet placement standards in</p>	<p>75-100% of students enrolled in the program meet state standards by the end of the year.</p> <p>75-100% of students meet placement standards in</p>

		placement standards in English / language arts and mathematics for the postsecondary college.	standards in English / language arts and mathematics for the postsecondary college.	English / language arts and mathematics for the postsecondary college.	English / language arts and mathematics for the postsecondary college.
<b>19.</b>	<p><b>Industry Credentialing and Technical Assessments</b></p> <p>The CTE program leads to industry certification that has value in the workplace. A certification exam can serve as an end-of-program exam and provides students the opportunity to earn an industry credential.</p>	<p>The program does not pursue available industry credentialing.</p> <p>Less than 25% of students in the program take a certification exam.</p> <p>Pass rates on certification exams are below 60%</p>	<p>The program offers one industry credential and encourages students to take the certification exam.</p> <p>25-49% of students in the program take a certification exam.</p> <p>Pass rates on certification exams are 60-74%.</p>	<p>All students in the program take an industry certification exam.</p> <p>50% or more of students in the program take a certification exam.</p> <p>Pass rates on certification exams are 75-89%.</p>	<p>All students taking the industry certification exam successfully attained.</p> <p>90% or more of students in the program take a certification exam. School / institution provides and /or coordinates financial assistance for the costs of the certifications.</p> <p>Pass rates on certification exams exceed 90%.</p> <p>Technical assessment is nationally benchmarked and includes a skills based component.</p> <p>Certifications are industry recognized and portable across geographic boundaries.</p>
<b>20.</b>	<p><b>Equipment and Supplies</b></p> <p>Equipment and supplies support the instructional plan at a level to assure quality education. Equipment is representative of the grade and type used by business and industry to meet or exceed all appropriate safety standards. Equipment is inventoried and records are updated regularly. Procedures are established for replacement and / or repair of malfunctioning equipment and tools.</p>	<p>Equipment, supplies and related technology are non-existent.</p>	<p>Equipment, supplies and related technology are used in a limited way.</p> <p>Career related equipment is outdated.</p>	<p>Equipment, supplies and related technology are available for students.</p> <p>Equipment, supplies and related technology are adequate, but not state of the art.</p>	<p>Students are required to use career related equipment and technology.</p> <p>Equipment and related technology is state of the art based on industry standards.</p>

			Inventory records, procedures and relevant records are limited.  Equipment, supplies and related technology is used by the instructor, but few, if any students use have access.	Inventory records, procedures and relevant records are in place.  Instructional strategies are adapted so that students are required to use equipment, supplies, and related technology.	Inventory records, procedures, and replacement plans are updated yearly.  Students' skills are assessed on use of equipment and related technology.
<b>21.</b>	<b>Program Administration</b>  Administration is responsible for the cohesive and seamless implementation of the CTE programs.	Administration exhibits an understanding of Perkins Law including the Required Uses of Funds.  Administration supports procedures to assure equal access and full participation of special populations in CTE programs.  Administration maintains records required for internal and external audits, following record retention rules.	Administration develops and periodically reviews policies and procedures that ensure compliance with Perkins Law.  Administration implements procedures to assure equal access and full participation of special populations in CTE programs.  Administration submits required reports in a timely manner (e.g., student data, program data, program approval, staffing, etc.)	Administration exhibits an understanding of federal/state legislation rules and regulations, school law, and finances including the Nine Required Uses of Funds and the Permissible Uses of Funds to assure quality and continual program improvement.  Administration assists in the development of policies and procedures to assure equal access and full participation of special populations in CTE programs including the smooth transition from secondary to postsecondary institutions.  Through the use of program related data, administration coordinates annual program evaluations leading to continuous program improvement.	Administration assures CTE program compliance as per federal / state legislation rules and regulations, school law, and finances including the Nine Required Uses of Funds and the Permissible Uses of Funds.  Administration ensures compliance with policies and procedures to assure equal access and full participation of special populations in CTE programs including the smooth transition from secondary to postsecondary institutions.  Through the use of CTE program data, continuous program improvement plans are promoted, annually reviewed and updated.

			Administration monitors partnerships and grant development.	Administration is responsible for the development and implementation of CTE program plans and collaborates with advisory committees and staff in the development and implementation of those plans.	Administration keeps current with up-to-date changes in the field of CTE and is instrumental in establishing working relationships between secondary, postsecondary and advisory committees to ensure a smooth transition.  Administration ensures that staff meets qualifications and oversees the retention, replacement and recruitment of staff.
<b>22.</b>	<b>Financial Responsibility</b>  The school's / institution's business / fiscal office ensures proper revenue and expenditure processes and guidelines are followed.	Federal EDGAR regulations and OMNI Circular regulations are followed for the most part.	Administration verifies that program budget expenditures are aligned with local CTE program plans.  Administration includes input from business / fiscal office staff prior to the development of program budgets.	Administration supports CTE programs through a budget process that considers curriculum, program needs and number of students.  Administration uses a process to determine appropriate purchase and replacement of equipment and instructional materials.	Program budget is clearly appropriate for the curriculum. Long range goals are considered.  Administration regularly keeps business / fiscal office staff involved in the budget management process.
<b>23.</b>	<b>Continuous Improvement Plan</b>  Involves a commitment to improving performance using a team approach to decision-making and a systematic collection and analysis of performance data.	The CTE continuous program improvement process is described in writing and has been partially implemented.  The continuous program improvement process is	The continuous program improvement process uses selected student and performance data to make program improvement.  Assessment of CTE program design	The continuous program improvement process is fully implemented and regularly utilizes student and performance data to make program improvement.  The continuous program improvement process	An integral part of the continuous program improvement process is the use of all data and written feedback gathered from the advisory committees, teachers, students, and community partners.  The continuous program improvement process is

		used to identify emerging industries and changes in industries for addition and revision of CTE course offerings.	components is used for program improvement.	involves external and internal support to assure CTE programs are relevant to meet the needs of students.  The continuous program improvement process includes a long-term professional development plan that addresses areas of need and individual professional growth.  The continuous program improvement process reflects changes in technology, employment and educational reform.	viewed as critical for program sustainability and appropriate funding is targeted to assure completion of the process.  The continuous improvement process views a comprehensive professional development process as fundamental to program improvement.  The continuous program improvement process incorporates effective practices and current research.
<b>24.</b>	<b>Instructional Delivery</b>  The use of a variety of instructional tools and methods that instructors use in an effort to maximize student acquisition of knowledge and skills and development of personal and professional abilities.	CTE instructional strategies are somewhat varied based on limited knowledge of student's learning styles.  CTE instruction consists of limited access to and use of technology.  CTE staff provides and documents safety to students prior to use of equipment and makes certain students operate equipment in a safe manner.	CTE instructional strategies include contextual instruction.  CTE instruction incorporates a balance of technology and laboratory experiences.  CTE program models and reinforces safe practices on an ongoing basis.	CTE instructional strategies include competency-based contextual instruction and differentiated instruction.  CTE instructional strategies are adapted to maximize student's experiences.  CTE instruction consists of providing all students SAFETY equitable access to technology.	CTE instruction is routinely modified to maximize student attainment of assessed skills.  CTE instructional strategies are based on current research and best practices.  CTE instruction consists of access to SAFETY state-of-the-art technology based on industry trends.



		CTE instructional strategies are minimally adapted to increase success for students.	CTE instruction consists of limited access and use of current technology.	CTE instruction is linked to learning theory and design.	CTE instruction uses innovative methods whose success is indicated by student achievement data.  CTE instruction uses a variety of people from the community, businesses, industry, organizations, and government.
25.	<p><b>Program Awareness &amp; Accessibility</b></p> <p>All students including special populations are made aware of and have full access to CTE programs.</p> <p>Special populations are defined as:</p> <ul style="list-style-type: none"> <li>• Individuals with disabilities</li> <li>• Economically disadvantaged individuals including foster children</li> <li>• Individuals preparing for nontraditional training and employment</li> <li>• Single parents, including pregnant women</li> <li>• Displaced homemakers</li> <li>• Individuals with limited English proficiency</li> </ul>	<p>The institution has written recommended policies and procedures in place to ensure the learning environment is barrier free.</p> <p>When appropriate, the institution makes basic accommodations that allow participation of all students.</p>	<p>The institution encourages all students to participate in a content area based on the student's interest level.</p> <p>The institution ensures accessibility through reasonable modifications or accommodations to equipment, laboratory stations, and facilities.</p> <p>There is some evidence that CTE program offerings are</p>	<p>The institution and educational environment honors diversity and respects all students.</p> <p>CTE program promotional curricula and instructional materials are delivered in a non-discriminatory manner.</p> <p>Awareness of CTE program offerings occurs through</p>	<p>The institution adapts, modifies and supports accessibility by all students.</p> <p>The institution presents a broad range of career options to all students regardless of race, national origin, religion, age, disability or gender.</p> <p>Awareness of CTE program offerings occurs through opportunities for students to</p>

			promoted to all students through the registration process.	presentations by enrolled students and staff.	observe or participate in CTE programs prior to course registration.
<b>26.</b>	<p><b>Size, Scope, and Sequence</b></p> <p><u>Size</u> means the quantifiable evidence, physical parameters, and limitations of each program- such as courses within the approved sequence, amount of available resources, number of staff involved, and the average number of students served each year- that relate to the ability of the program to address all student learning outcomes.</p> <p><u>Scope</u> means the curricular parameter and limitations of each program- such as the ability of a program curriculum to cover the full breadth of its subject and maintain continuous relevance to the modern workplace. Qualifiers include course content, range of offerings within each sequence, ability to fully simulate the appropriate workplace environment, number of work skills and competencies taught, etc.</p> <p><u>Quality</u> is the measure of how successfully each program is able to teach all enrolled students workplace standards, competencies, and skills necessary for them to practice careers within their chosen field after graduation, while at the same time supporting a high level of student performance in core academic areas and skills. Mechanisms are in place to ensure high quality programs align with current workplace standards, practices and competencies.</p>	<p>Evidence of size, scope and sequence is minimal to non-existent.</p> <p>CTE classrooms do not reflect industry standard setting.</p>	<p>Evidence of size, scope and sequence exists in a limited manner.</p> <p>CTE classrooms represent some level of industry standard criteria.</p> <p>Curricula and accessibility to equipment is limited and not state of the art.</p>	<p>Evidence of size, scope and sequence is at operational level.</p> <p>Evidence represents simulation to industry/workplace environment.</p> <p>There is evidence of alignment to industry/workplace standards and practices.</p>	<p>Evidence of size, scope and sequence demonstrates students simulate appropriate workplace skills, competencies and practices.</p> <p>Program demonstrates robust curricula and instructional practices leading to high level student performance.</p> <p>There is evidence that all key practices are incorporated into CTE programs.</p>

### **Sample Guiding Questions**

- How do you ensure that CTE students have access to a sequential technical course sequence within a program of study aligned to the current industry standards?
- How are you integrating work-based learning experiences into the CTE curriculum? How do you track student progress and skill acquisition throughout the CTE program sequence?
- How have you articulated clear postsecondary pathways to all CTE program stakeholders?
- How have industry and educational partners participated in the review of your program's curriculum, course sequence, technical assessment, facility, equipment, and alignment to workforce needs?
- How have you approached providing access to the program / curricula to ensure that special population student needs are being met?

- How has your self-study team, advisory board, and school community been involved in the development of the mission and vision of the CTE program of study?
- How are special education teachers involved in the planning and development of the CTE curriculum to ensure that all students with disabilities have access to career and technical education curriculum and the technical assessments and/or industry credentials?
- How do you know your decisions are improving instruction and engaging students in challenging academic tasks?
- What factors do you consider when creating staff and student schedules?
- What specific interventions are in place to meet the needs of targeted students and close the achievement gap?
- What roles do your CTE instructors and guidance counselors play in monitoring the progress and of a student's work skills employability profile, assisting students in developing a career plan and providing a work-based learning sequence for all CTE students?
- How have you defined a clear pathway for entry into additional education and careers through your CTE program of study?
- What is your approach to the use of assessments in your school? Can you discuss the rationale behind your approach?
- How are stakeholders (advisory committee members, self-study team members, program administrators, teachers, students and parents) involved in the annual evaluation of the CTE program?
- What do practices connected to academic competencies look like across classrooms?
- How are professional development opportunities provided for CTE teachers to stay current with changes and emerging trends in the industry?
- Are CTE end of program technical skills assessments in place and used where available and appropriate?

- What strategies are in place for recruitment and retention of nontraditional students?
- How are students encouraged to participate in nontraditional occupational experiences?
- What fiscal management procedures do you have in place for ensuring proper expenditure of Perkins funds?