2017–18 OCTAE Customized Technical Assistance to States

Final Summary Report for the California Department of Education

Prepared under contract to
U.S. Department of Education

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Background and Technical Assistance Strategy

RTI International is the contractor for an initiative sponsored by the U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE), Division of Adult and Technical Education, to provide customized technical assistance (TA) to states. The goal of the TA is to improve the capacity of states to report and collect career and technical education (CTE) data, with a focus on data related to the *Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV)*.

The California Department of Education (CDE) requested TA to support the development of an evaluation system for local CTE programs. The system is intended to be used across the local education agencies (LEAs) in the state, including local school districts and county-operated and joint powers authority regional occupational programs. The purpose of the system is to support local staff in conducting program evaluations, with the results used to improve the quality of their CTE offerings.

RTI conducted the following activities to support the development of a local evaluation system:

1. ***Researched existing local CTE evaluation approaches.*** RTI conducted a scan of local evaluation approaches employed in other states to identify tools and rating procedures that most closely matched the needs described by CDE.
2. ***Gathered input from state and LEA staff on evaluation approaches***. RTI presented the approaches to staff at CDE and two California school districts: San Bernardino City Unified School District and Oakland Unified School District. State and district staff provided feedback on the different approaches, noting which elements matched their needs and aspects that would not be useful for the state.
3. ***Developed initial draft evaluation tool template***. Using the feedback provided by state and district staff, RTI developed three versions of a draft evaluation tool template.
4. ***Gathered feedback from state and LEA staff.*** A two-step process was used to gather feedback on the different versions of the evaluation tool. A first version was sent to CDE staff for review, with a phone conference held to discuss the different

approaches and choose one tool that best fit the state's needs. The tool was then sent to district staff, with feedback collected via email.

5. ***Developed final evaluation tool template.*** Using the feedback from CDE and district staff, RTI developed a final evaluation tool template that California can use in its development of a local CTE evaluation system.

This report presents the results of the TA strategy and summarizes considerations and next steps for California to move forward in developing its approach to the local evaluation of CTE programs.

Research Into Existing Evaluation Approaches

To guide the research into existing state CTE pathway evaluation systems, RTI met with CDE staff via teleconference to discuss California's current approach to the evaluation of local CTE programs and goals for a revised system. CDE staff members indicated that they wanted to develop a local evaluation approach that emphasized program improvement over compliance and was based on California's 11 Elements of High-Quality CTE.

Based on this initial conversation, RTI completed a scan of local evaluation approaches used by other states (see Appendix A for examples from state evaluation tools) and identified two differing approaches to share with CDE. The first approach, developed by the New Mexico Public Education Department, includes a rubric describing aspects of CTE programs at four levels of implementation: (1) Little or No Development and Implementation; (2) Limited Development or Partial Implementation; (3) Operational Level of Development and Implementation; and (4) Exemplary Level of Development and Implementation. The tool also includes a rating sheet that local staff use to indicate the level of implementation based on the rubric and provides space for users to identify challenges to implementation, actions to overcome challenges, links to artifacts and other evidence, and comments.

The second approach, developed by the North Carolina Department of Education, is designed to support local staff in gathering data on indicators aligned to the state's CTE Program Quality Standards. Staff use the data to rate implementation and determine opportunities for growth and program improvement. The results from the evaluation are used to develop a continuous improvement plan that is monitored and updated on a regular basis.

RTI and CDE staff met again to review the approaches from New Mexico and North Carolina. CDE staff members indicated that the New Mexico approach more closely matched their needs. Staff members noted they preferred an evaluation tool that shows CTE at different levels of implementation so that local staff could identify their level and develop actions that would result in program improvement.

RTI then identified more state evaluation approaches that aligned with the California's needs. These included approaches used in Massachusetts and Minnesota. RTI staff used these evaluation tools as examples for district staff to review and to inform further design.

Feedback From District Staff

RTI conducted two 45-minute webinars with district staff. The webinars provided an overview of the TA to States initiative, described the goals and process of the TA for California, and gave examples of other state's approaches to local evaluation of CTE programs. During the webinar, district staff members provided information on their current approaches to CTE evaluation, their views of other states' approaches, and input on how local evaluation could work within California.

The first webinar took place on April 5, 2018, and was attended by the Director of College, Career, and Linked Learning at the San Bernardino City Unified School District. RTI conducted a second webinar on April 10, 2018, with the Director of Linked Learning at the Oakland Unified School District. From the webinars, RTI gathered the following feedback:

- ***Evaluation process***. Staff from both districts were very positive about the evaluation process envisioned by the CDE. They liked the idea of staff rating their programs against California's 11 Elements of High-Quality CTE and identifying challenges to implementation and ways of overcoming them.
- ***Rubric levels.*** District staff liked the approaches developed in other states but had differing opinions on some details. One district preferred that a rubric have three levels (similar to the approach employed in Massachusetts), while the other preferred a rubric with four levels (similar to the approach used in New Mexico and Minnesota).
- ***Differing local contexts.*** There were concerns about how an evaluation tool would work across the different types of CTE programs in the state. For example, CTE in California can be provided as part of a Linked Learning approach, in career programs offered in secondary schools, or at Regional Occupational Centers. District staff noted that the differing contexts should be carefully considered in the development of a local evaluation system.
- ***Contextual Factors.*** Oakland Unified School District allows CTE program staff to identify enabling factors in the internal evaluation process. These are external or contextual factors that could support or hinder program improvement. Director of Linked Learning at the Oakland Unified School District suggested incorporating enabling factors into the development of an evaluation tool.

Development of Draft Evaluation Tools

Based on conversations with district staff and guidance from CDE staff, RTI developed three versions of a local evaluation tool. Each version was built around California's 11 Elements of High-Quality CTE, with each element broken down into subcategories based on the description provided in California's state CTE plan[1] and the California CTE Self Review Tool.[2] These subcategories were developed because the elements themselves were too broad for self-evaluation.

- Version 1 was based on the approaches used in New Mexico and Minnesota. In it, LEA staff use information in a rubric to rate their level of implementation and identify challenges to implementation, actions to overcome the challenges, enabling factors, and evidence. There are four levels of implementation: foundational, emerging, quality, and exemplary. (Exhibit 1)
- Version 2 is very similar to version 1, except that it is organized around three categories: foundational elements, elements of emerging quality, and elements of established quality. In this version, district staff members check off the elements that correspond to their programs' level of implementation; there is no rating sheet. This version is based on Massachusetts' local evaluation tool. The San Bernardino City Unified School District is taking a similar approach in the development of its own evaluation. (Exhibit 2)
- In version 3, LEA staff members rate their implementation against subcategories of the 11 Elements of High-Quality CTE. Then they identify challenges to implementation, actions to overcome the challenges, enabling factors, and evidence. (Exhibit 3)

In versions 1 and 2, RTI staff used information from California's CTE self-evaluation and other state's evaluation tools to provide sample text in the rubric. Full rubric development is beyond the scope of this TA to States project, but recommendations and next steps for rubric development are provided below.

[1] See https://www.wested.org/resources/california-state-plan-for-career-technical-education-56230.
[2] See https://www.cde.ca.gov/ci/ct/pk/documents/ssreview.doc.

Exhibit 1: Example from version 1

Rating Sheet

11 Elements of High-Quality CTE	Level of Implementation 1 2 3 4 (-) Low High (+)	Challenges to Implementation	Actions to Overcome Challenges	Enabling Factors (External or contextual factors that could support improvement)	Artifacts, Evidence, and Comments
1. Leadership at All Levels					
A. Linking Programs to Postsecondary and Industry					
B. Professional Development for Leaders					
C. Investment					

Rubric

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
1. Leadership at All Levels				
A. Linking Programs to Post-secondary and Industry	Administration helps establish and supports effective working relationships with postsecondary institutions (including apprenticeship programs) and industry partners.*	Administration initiates partnership initiatives with postsecondary institutions (including apprenticeship programs) and with industry partners.*	CTE pathways are articulated with post-secondary and industry through programs of study, formal articulation agreements and dual enrollment †	Administration develops and maintains systems and structures to foster positive relationships with postsecondary institutions (including apprenticeship programs) and with industry partners.*

Note: * indicates text is from the Massachusetts CTE Quality Assessment Tool; † indicates text is from the California CTE self-evaluation.

Exhibit 2: Example from version 2

—Leadership at All Levels—

Foundational Elements	Elements of Emerging Quality	Elements of Established Quality
A. Linking Programs to Post-secondary and Industry		
❑ Administration helps establish and supports effective working relationships with postsecondary institutions (including apprenticeship programs) and industry partners.*	❑ Administration initiates partnership initiatives with postsecondary institutions (including apprenticeship programs) and with industry partners.*	❑ CTE pathways are articulated with post-secondary and industry through programs of study, formal articulation agreements and dual enrollment. † ❑ Administration develops and maintains systems and structures to foster positive relationships with postsecondary institutions (including apprenticeship programs) and with industry partners.*

Note: * indicates text is from the Massachusetts CTE Quality Assessment Tool; † indicates text is from the California CTE self-evaluation.

Exhibit 3: Example from version 3

11 Elements of High-Quality CTE	Level of Implementation 1 2 3 4 (-) Low High (+)	Challenges to Implementation	Actions to Overcome Challenges	Enabling Factors	Artifacts, Evidence, and Comments
1. Leadership at All Levels					
D. Linking Programs to Postsecondary and Industry CTE pathways are articulated with post-secondary and industry through programs of study, formal articulation agreements and dual enrollment					

RTI researchers discussed the versions with CDE staff via teleconference. CDE staff preferred version 1 because it most closely aligned with the state's goals for a local evaluation system. The staff also thought using a rating sheet in combination with a rubric was more useful for facilitating review and improvement at the local level and worked best across the variety of CTE programs in the state. CDE staff members thought the inclusion of enabling factors in the rating sheet was unnecessary. They believed it would be best if LEA staff members focused on facets of CTE programs under their control in reviewing and improving programs. Finally, CDE staff requested that RTI focus on developing example elements for level three of the rubric: Quality Implementation. After the TA to States project, the department could use the examples in level three to build out the rest of the rubric.

Based on this feedback RTI staff developed a draft evaluation tool (Appendix B) and provided it to district staff for review. Because of the timing of the request—at the end of the school year—only San Bernardino City Unified School District replied with minimal feedback. The representative was supportive of the overall structure of the tool and expressed a desire to be involved in further development efforts.

Next Steps and Recommendations

The iterative process employed in the TA project has provided a start for the development of a local CTE evaluation system in California. The draft evaluation tool in Appendix B benefited from multiple rounds of feedback from state and district staff. However, more development and review work are needed to develop a local CTE evaluation system.

RTI suggests the following next steps and recommendations:

- ***Form a task force of local program staff.*** Local buy-in for the development and use of an evaluation tool is essential for it to have credibility among practitioners. CDE should convene a task force of local providers that is representative of the field and the various CTE delivery systems in the state to collaborate in building out the final evaluation tool. Local providers can also identify the criteria pertaining to the differing levels of implementation as well as how these criteria might be described to offer information that can inform program improvement.

- ***Finalize evaluation criteria.*** The rating criteria contained within each of the 11 identified elements of a high-quality CTE program will need to be more fully fleshed out by CDE staff and task force members. For example, the first criterion, *Leadership at all levels,* includes three subcategories: (1) linking programs to postsecondary institutions and industry partners; (2) professional development for leaders; and (3) investment. CDE staff and local administrators may want to refine and add to these subcategories. Local review of the criteria and subcategories within each element, including clarification of terminology and identifying possible missing information, will strengthen the framework and encourage field engagement with the tool.

- ***Create a rubric for criteria rating.*** The tool developed in this TA to States project guides CTE program staff in rating themselves on four levels of implementation: Level 1—Foundational Implementation, Level 2—Emerging Implementation, Level 3—Quality Implementation, and Level 4—Exemplary Implementation. In previous work, the state identified some elements for the third level of implementation for most criteria. The next step will be to build out the other levels, using examples of specific policies, action steps, and procedures that should be in place to ensure that the criteria are addressed. CDE can use examples of elements used in other states, which RTI compiled as part of project work, to facilitate the discussion.

- ***Pilot test the draft evaluation tool.*** After the completion of a draft evaluation tool, a sample of sites should test the tool. It could be helpful to conduct structured follow-ups, which may include interviews with site administrators, teachers, or others using the tool. Interviews could include questions about the perceived relevance and utility of the tool, which may be used to help refine elements, subcategories, and rating criteria. The state may also wish to conduct follow-up activities to determine whether the use of the evaluation tool increases the development and use of strategic and continuous improvement plans.

Appendix A: Examples From State Evaluation Tools

Massachusetts Department of Education

—Student Safety & Health—

Foundational Elements	Elements of Emerging Quality	Elements of Established Quality
Safety and Health Planning		
❑ A plan exists outlining policies and procedures for the overall technical program ❑ Each specific program is guided by a shop-specific safety and health plan that outlines procedures and practices for that shop ❑ Emergency evacuation and lockdown plans have been developed and are regularly reviewed	❑ The program-wide safety and health plan is regularly reviewed and updated ❑ Program-specific safety and health plans are regularly reviewed and updated	❑ Program administration regularly reviews safety and health plans against a common rubric or standard to ensure comparability of policy and practice across all programs [see "Program-Specific Safety Plan" in *Application Package for Vocational Technical Education New Program Approval M.G.L.c.74* (revised 2016) for one such rubric].
Safety and Health Practices		
❑ Staff and students routinely adhere to the practices outlined in both the broad program safety and health plan and the shop-specific plan ❑ Shop equipment is properly installed and maintained and is shielded, guarded, and ventilated as necessary ❑ Equipment is in place to address fire safety, materials storage, and waste disposal ❑ Environmental factors (*e.g.,* air quality, temperature, lighting, *etc.*) are maintained at safe and appropriate levels ❑ Environment is clean, orderly, properly maintained, and safe and includes prominently displayed safety signage ❑ Emergency evacuation and lockdown procedures are regularly practiced	❑ Students can communicate the proper practices around any procedures or equipment on which they have been trained and the reasons for those practices ❑ Students routinely remind and correct fellow students who are not adhering to safety and health practices without prompting from the instructor ❑ Safety teams that include staff, students, and other stakeholders regularly review shop facilities and shop equipment to ensure ongoing student and staff safety and health ❑ Prominent signage reminds students and staff of key safety expectations	❑ Program administration designs and implements a comprehensive shop safety and health system, regularly evaluates program practices on key safety and health indicators, and tracks performance within and across shops over time ❑ Program administration and/or program staff routinely examine environmental factors as part of a comprehensive shop safety and health system ❑ Systems and structures exist to assess students and staff regularly on their safety and health practices ❑ Administrators and other stakeholders create a culture where students and staff alike routinely self-assess their safety and health practices against established benchmarks

SOURCE: Retrieved from http://www.doe.mass.edu/cte/resources/CTE-QualityAssessmentTool.docx.

Minnesota Department of Education

Rubric Score Sheet

Directions: Check the box that best represents your district's current state of practice according to the criteria listed in each section of the rubric.

Minimum	Emerging	Quality	Exemplary	COMMUNITY INVOLVEMENT:
				1. Advisory Committee Role
				2. Advisory Committee Membership
				3. Advisory Committee Operations
				4. Community Partnerships/Resources
Minimum	**Emerging**	**Quality**	**Exemplary**	**PERSONNEL:**
				5. Teaching Credentials
				6. Professional Development
				7. Professional Organizations
				8. Paraprofessional/Technical Tutors (if applicable)
Minimum	**Emerging**	**Quality**	**Exemplary**	**PROGRAM ADMINISTRATION:**
				9. Local Career and Technical Education Program Administration
				10. Financial Responsibilities
Minimum	**Emerging**	**Quality**	**Exemplary**	**PROGRAM ASSESSMENT:**
				11. Program Assessment
				12. Continuous Program Improvement Process
Minimum	**Emerging**	**Quality**	**Exemplary**	**PROGRAM DESIGN:**
				13. Career Development
				14. Career Clusters/Pathways
				15. Curriculum Content
				16. Instructional Delivery
				17. Student Assessment
				18. Leadership Development/Student Organizations: List the student organization or identify the alternative co-curricular/leadership development activity to be used.
				19. Work-Based Learning Program
Minimum	**Emerging**	**Quality**	**Exemplary**	**RESOURCES:**
				20. Curriculum/Instructional Resources
				21. Equipment
				22. All Learning Environments
Minimum	**Emerging**	**Quality**	**Exemplary**	**SUPPORT SERVICES:**
				23. Program Awareness/Accessibility
				24. Program Support
				25. Career Guidance and Counseling Program

SOURCE: Retrieved from https://education.mn.gov/mdeprod/idcplg?IdcService=GET_FILE&dDocName=MDE035975&RevisionSelectionMethod=latestReleased&Rendition=primary.

Rubric

Section 1: Community Involvement	**Minimal**	**Emerging**	**Quality**	**Exemplary**
1. Advisory Committee Role* The primary function of an advisory committee is to connect programs with the larger community. **General CTE Advice** – advice on all CTE programs to maintain quality and relevance of CTE education and help strengthen support from the community. **CTE Program Specific Advice** – advice at the individual program level that focuses on curriculum content, equipment and facilities. *A district should have a program-specific advisory committee for each program, and may either have a general advisory committee or may rely on program-specific committees to provide general advice.	A. The advisory committee discusses current industry practices, program issues and needs, and curriculum.	A. The advisory committee provides input on program improvement, curriculum and work-based learning experiences. B. The advisory committee is involved in a process to determine the needs of students and programs. C. The advisory committee is aware of and supports Career and Technical Student Organizations (CTSO).	The advisory committee addresses the following areas: A. Assess/Advise Evaluates current needs and makes recommendations for program improvement. B. Assist Ensures programs reflect current industry standards, assists with student organizations, and informs program staff of workplace needs. C. Support/Advocate Promotes CTE program and CTSO organization throughout the community. D. Education/Transitions Fosters an alliance between secondary and postsecondary education institutions and promotes opportunities for articulation, dual credit, concurrent enrollment, industry certification, etc.	A. The advisory committee uses collected data to support its decisions and recommendations. B. The advisory committee represents the diverse business and industry community and is extensively involved in tangible, meaningful actions regarding program improvement, curriculum and work-based experiences. C. The advisory committee provides the school board, foundations and community with career and technical education program reports/updates

New Mexico Department of Education

Rating Sheet

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
Course Sequences – 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.				
CTE Syllabus – 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: • Course description • Learning objectives • Instructional philosophy • Course goals • Major course projects • Project outlines • Instructional delivery plan • Course exams				
Worked-Based Learning – 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).				
Student Organizations – Provide students opportunities for leadership development, competitive events, professional development, and community service.				
Embedded Literacy – 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.				

SOURCE: Retrieved from https://webnew.ped.state.nm.us/wp-content/uploads/2017/12/CCRB_perkinsmanagement_Program.of_.Study_.Evaluation.Tool_.doc.docx.

Rubric

Program of Study Quality Indicators		Level 1 Little or No Development and Implementation	Level 2 Limited Development or Partial Implementation	Level 3 Operational Level of Development and Implementation	Level 4 Exemplary Level of Development and Implementation
1.	**Course Sequence** 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.	The program of study courses are not aligned with standards required for graduation.	The program of study courses are aligned to standards for reading required for graduation.	The program of study courses are aligned to standards for reading and mathematics required for high school graduation.	The program of study courses are fully aligned with standards for reading, mathematics, and science required for high school graduation.
	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.	The program of study courses are not aligned with NM Career & Technical Education Standards.	At least 50% of the program of study courses are aligned NM Career &Technical Education Standards for reading and mathematics.	At least 75% of the program of study courses are aligned NM Career & Technical Education Standards for reading and mathematics.	The program of study courses are fully aligned with current NM Career & Technical Education Standards and students complete at least three sequenced CTE courses.
		The programs of study courses do not include a sequence of at least three courses to meet CTE completer requirements.	The program of study includes a sequence of three or more courses.	The program of study requires CTE students to take advanced academic or CT courses that supplement their career focus.	The program of study course sequence creates a career pathway to prepare students for work-based experiences and employment.
			There is no evidence that the program of study courses addresses the soft skills that employers desire of employees.	Evidence demonstrates industry involvement in the planning / design of course sequences.	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. Reporting of course sequences align with data collection systems.

North Carolina

Standard 1: Student Engagement

Indicator	Measure	Suggested Data Sources	Local Benchmark	Local Data	Rating	Value	Total
1.1 - CTE enrollments *LEA may consider expanding this section per program area. Each program area would receive an individual rating.*	• Number	• PowerSchool • Local Planning System • FILR			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	
1.2 - CTE concentrators *LEA may consider expanding per Cluster area. Each Cluster area would receive an individual rating.*	• Number	• PowerSchool			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	
1.3 - CTE concentrators among all high school graduates	• Percent (concentrators/ graduates)	• PowerSchool			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	
1.4 - CTE enrollments from underrepresented groups (non-traditional by gender, underrepresented racial/ethnic groups) *LEA may consider expanding per sub-group. Each sub-group would receive an individual rating.*	• Percent (students from under-represented groups/ CTE enrollments)	• PowerSchool • LPS			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	
1.5 - CTE enrollments in Career and Technical Student Organizations (CTSOs) *LEA may consider expanding per CTSO. Each CTSO would receive an individual rating.*	• Percent (CTSO participants/ CTE enrollments)	• CTSO State and National Membership			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	

Indicator	Measure	Suggested Data Sources	Local Benchmark	Local Data	Rating	Value	Total
1.6 - CTE enrollments in work-based learning *LEA may consider expanding per WBL (shadowing, internships, apprenticeships, etc.). Each WBL would receive an individual rating.*	• Percent (WBL students/CTE enrollments)	• PowerSchool • WBL Inventory			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	
1.7 - National Technical Honor Society (NTHS) Enrollments	• Number	• Membership			☐ Increased by _____ ☐ No change ☐ Decreased by _____	2 1 0	
					Standard 1 Total *(max. 14 points)*		

SOURCE: Retrieved from http://schd.ws/hosted_files/2017springmeetingagenda/88/North%20Carolina%20-%20CTE%20Program%20Eval%20Instrument.docx.

Additional comments:

Appendix B: Draft Local Evaluation Tool Template

Rating Sheet

Staff will use this sheet to rate their programs based upon the rubric below.

11 Elements of High-Quality CTE	Level of Implementation 1 2 3 4 (-) Low High (+)	Challenges to Implementation	Actions to Overcome Challenges	Artifacts, Evidence, and Comments
1. Leadership at All Levels				
A. Linking Programs to Postsecondary and Industry				
B. Professional Development for Leaders				
C. Investment				
2. High-Quality Curriculum and Instruction				
A. Curriculum				
B. Alignment to Industry				
C. Career Paths				
D. Technology				
E. Collaboration Between Academic and CTE Instructors				
F. Alignment with Postsecondary Requirements				
G. Work-Based Learning				
3. Career Exploration and Guidance				
A. Career Plans				
B. Counseling				
4. Student Support and Student Leadership Development				
A. Career Technical Student Organizations (CTSOs)				
B. Leadership Activities				
C. Special Populations				
D. Nontraditional CTE Courses and Pathways				
5. Industry Partnerships				
A. Advisory Committees				
B. Business and Industry Involvement				
C. Industry Certifications				

11 Elements of High-Quality CTE	Level of Implementation 1 2 3 4 (-) Low High (+)	Challenges to Implementation	Actions to Overcome Challenges	Artifacts, Evidence, and Comments
6. System Alignment and Coherence				
A. CTE Programs of Study and Pathways				
B. Articulation and Dual Enrollment				
C. Cross-Segment and Cross-Disciplinary Collaboration				
7. Effective Organizational Design				
A. After-School, Extended Day, and Out-of-School Time				
B. Open-Entry/Open-Exit Opportunities				
C. Block or Alternative Scheduling				
8. System Responsiveness to Changing Economic Demands				
A. Labor Market Information				
B. Equipment and Facilities				
9. Skilled Faculty and Professional Development				
A. Teacher Credentials				
B. Professional Development				
C. Collaboration				
10. Evaluation, Accountability, and Continuous Improvement				
A. Program Evaluation				
B. Accountability				
C. Continuous Improvement				
11. CTE Promotion, Outreach, Marketing, and Communication				
A. Recruitment and Outreach				
B. Marketing and Communication				

Rubric

Key
† = Element from California CTE Self-Evaluation
* = RTI-added example

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
1. Leadership at All Levels				
A. Linking Programs to Postsecondary and Industry			CTE pathways are articulated with post-secondary and industry through programs of study, formal articulation agreements and dual enrollment.† Articulation agreements and signed memoranda of understanding are in place with postsecondary institutions.* Administrators develop and maintain strong relationships with postsecondary institutions and industry partners.*	
B. Professional Development for Leaders			Local district administrators participate in CTE professional development regarding the benefits of CTE and the management of CTE within the larger context of educational improvement to serve all students.†	
C. Investment			Investment is made to provide support for CTE leadership at the local level to ensure that CTE administrators, teacher(s), and counseling and instructional leaders have sufficient time and resources to implement system improvements and work with their counterparts in other programs.†	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			Administrators gather input from local staff and advisory committees to develop program budgets.*	
2. High-Quality Curriculum and Instruction				
A. Curriculum			The CTE Model Curriculum Standards are the basis for content of courses offered. Curriculum addresses "Pathway" standards within the program pathway(s) and course sequence.† Curriculum is reviewed and revised regularly to align with labor market needs, changing technologies, industry trends, and new teaching strategies.* Curriculum includes employability skills and knowledge.* Curriculum engages students in higher-order reasoning and problem-solving.*	
B. Alignment to Industry			Students are provided with a strong experience in and understanding of all aspects of industry.† CTE courses are industry certified.† State or local industry advisory boards review and sign off on curriculum.*	
C. Career Paths			Career paths have been identified and can be found on a chart or diagram in the CTE Plan.† The school master schedule allows students to follow the recommended sequence of CTE courses to complete the selected career path(s).†	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			Career paths are aligned with state, regional, or local needs.*	
D. Technology			Technology is incorporated into program instruction.† Technology has been vetted by industry representatives to ensure instruction is relevant to current standards.* Equipment is reviewed annually to ensure relevance to industry standards.*	
E. Collaboration Between Academic and CTE Instructors			There is collaboration between academic and CTE teachers.† Time is scheduled for academic and technical instructors to do joint professional development.* Academic and technical instructors develop one or more joint projects per year.*	
F. Alignment With Postsecondary Requirements			CTE courses have been submitted to meet high school graduation requirements, University of California a-g (UC a-g) credit, or articulated with a community college.† CTE courses are reviewed annually for alignment to postsecondary requirements.*	
G. Work-Based Learning			The CTE program has classroom-linked work-based learning and work experience education opportunities through strengthened industry partnerships, effective coordination with Regional Occupation Center/Program (ROC/P), adult	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			schools, Work Experience Education, and Cooperative Work Experience Education programs, and a systematic review of policies and practices addressing barriers to access, including insurance, liability, and other issues.† Work-based learning experiences are evaluated by faculty and students.* All students can engage in at least one work-based learning experience in high school.*	
3. Career Exploration and Guidance				
A. Career Plans			All students have a completed a four-year career plan that is updated annually.†	
B. Counseling			Students are counseled regarding: • CTE career opportunities. • CTE and academic courses necessary to complete career pathway offerings. • Post-secondary education and training options.† Counselors are informed of CTE options to provide guidance services to students.*	
4. Student Support and Student Leadership Development				
A. Career Technical Student Organizations			An official Career Technical Student Organization (CTSO) has been chartered (or in application process) by the State Association.† A local CTSO work plan is developed annually and a copy is furnished to local administration.†	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			All students enrolled in CTSO's are affiliated with the State Association. † Students participate in local, state, or national CTSO competitions.*	
B. Leadership Activities			Leadership activities are embedded in the CTE curriculum.†	
C. Special Populations			Program meets the needs of special population students (including special education, English learners, non-traditional students, and the general student population).† District staff develop annual reports on the engagement of special populations in CTE programs.* CTE staff are trained on working with special populations.*	
D. Nontraditional CTE Courses and Pathways			Students are made aware of non-traditional CTE offerings and pathways that lead to high skill, high wage, or high demand careers.† District sets and meets annual targets for participation in CTE courses and pathways by nontraditional students.*	
5. Industry Partnerships				
A. Advisory Committees			The Local CTE Advisory Committee is operational and reflects the committee membership as outlined in the California Education Code §8070 and meets at least once a year.† Advisory Committees use labor market information to support	

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			program changes and improvement.*	
B. Business and Industry Involvement			Business/industry is involved in student learning activities.† Business/industry is involved in the development and validation of the curriculum.† Teachers participate in externships.*	
C. Industry Certifications			There are industry certification standards and certificates for students who achieve industry recognized skill and knowledge requirements.† Industry certifications are reviewed and updated annually.*	
6. System Alignment and Coherence				
A. CTE Programs of Study and Pathways			Each CTE program sequence will include at least one district-funded CTE course in the industry sector.† At least one CTE program of study exists in each cluster.*	
B. Articulation and Dual Enrollment			A Program of Study, with a post-secondary institution, has been developed.† Students are offered options to earn postsecondary credit.*	
C. Cross-Segment and Cross-Disciplinary Collaboration			Sufficient time is provided for faculty to build cross-segmental and cross-disciplinary collaborations aimed at aligning curricula and programs, as well as models, tools, and professional development to facilitate pathway development.†	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			CTE and academic instructors have sufficient resources and time available to collaborate on program design, curriculum development, and instruction.*	
7. Effective Organizational Design				
A. After-School, Extended Day, and Out-of-School Time			Opportunities provide for better use of after-school, extended-day, and out-of-school time for career exploration, projects, and WBL connected to in-class curricula.† School schedules allow students to participate in after-school activities.*	
B. Open-Entry/Open-Exit Opportunities			There are open-entry/open-exit strategies where feasible, in ways that maintain the integrity of CTE courses and course sequences and comply with industry requirements; structure and sequence curriculum in modules or "chunks" tied to jobs with multiple entry and exit points, and with multiple levels of industry-recognized credentials built into the sequencing of the pathway.†	
C. Block or Alternative Scheduling			Provides education and training for students and incumbent workers at times and locations convenient to students and employers, including non-traditional time or methods.†	
8. System Responsiveness to Changing Economic Demands				
A. Labor Market Information			There is a partnership among local businesses and local workforce development and educational organizations to provide consistent and reliable data about the regional	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			economic and labor markets for planning programs.† Mechanisms are in place that systematically track labor market demands, maintain the currency of occupational classifications, and ensure that teachers and counselors are informed of new developments in their fields.†	
B. Equipment and Facilities			There is sufficient funding to cover costs of necessary equipment and facilities.† An inventory of equipment is conducted on an annual basis to ensure that equipment is appropriate.*	
9. Skilled Faculty and Professional Development				
A. Teacher Credentials			Every CTE teacher has the appropriate credential for teaching the subject(s) assigned as well as documented employment experience outside of education in the program area taught.† Teachers have opportunities to obtain professional skill certifications and licenses.*	
B. Professional Development			Based on the previous year's records, every CTE teacher, teaching at least half time CTE, attends a minimum of four professional development activities.† Professional development opportunities are aligned to program and district goals.*	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
C. Collaboration			The CTE staff meets a minimum of twice a month. (This criterion does not apply to single person departments.)† Mentoring and peer support opportunities are available to CTE teachers.*	
10. Evaluation, Accountability, and Continuous Improvement				
A. Program Evaluation			A follow-up system (including membership in California Partnership for Achieving Student Success [CALPASS]) is used which gathers the following information from program completers: • Student placement status in postsecondary education or advanced training, in military service, or in employment. • Opinion regarding the value and relevance of the CTE program. • Suggestions for improving the CTE program.† Performance targets for programs are developed based on data.*	

B. Accountability			Enrollment report (CDE 101-E1)
			• All CTE courses are properly identified in data system (including new courses).
			• Enrollment figures and reports are reviewed by:
			  ○ Site Staff and district CTE staff
			  ○ Site and district advisory committees.†
			• Completed and submitted by October 15 to the CDE.†	

11 Elements of High-Quality CTE	Level 1 Foundational Implementation	Level 2 Emerging Implementation	Level 3 Quality Implementation	Level 4 Exemplary Implementation
			Graduate Follow Up/Placement Report (CDE 101-E2) The Graduate Follow Up data collected and presented to the CDE.† The Expenditure Reports (CDE 101-A and VE-5) are received by the CDE by September 30.†	
C. Continuous Improvement			The CTE Department analyzes their student retention numbers each year and develops strategies to help increase retention within the program.† Advisory councils and business and industry partners are involved in program improvement efforts.*	
11. CTE Promotion, Outreach, Marketing, and Communication				
A. Recruitment and Outreach			The CTE Department(s) conduct recruitment activities.† The CTE program has a recruitment brochure or similar document used to promote the program.†	
B. Marketing and Communications			The local education agency has developed a marketing and communications plan.*	