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Defining Quality: Business and Community Partnerships

High-quality CTE Series

Business and community partnerships have long been fundamental to CTE program quality. Federal, state and local policies, as well as standards and frameworks that consider CTE quality, have all recognized that partnerships are integral to delivering high-quality CTE.

For this reason, ACTE has identified Business and Community Partnerships as one of the 12 elements of high-quality CTE. But what do quality partnerships look like? Which organizations make effective partners, how are quality partnerships structured and how can partners best support CTE programs?

Criteria in the ACTE *Quality CTE Program of Study Framework* address partnership recruitment and structure and describe how partners can help ensure programs are aligned with workforce and community needs. This publication will share the *Quality CTE Program of Study Framework* criteria within the Business and Community Partnerships element, recommend types of evidence that programs should consider when assessing their performance on these quality criteria, and describe exemplary CTE partnerships. The criteria listed are from the 2018 version of the ACTE *Quality CTE Program of Study Framework*.

The ACTE Quality CTE Program of Study Framework

Business and Community Partnerships is one of 12 elements in the ACTE *Quality CTE Program of Study Framework*, a comprehensive, evidence-based set of quality standards for CTE programs. The framework defines 92 criteria across 12 elements of a high-quality CTE program of study:

- · Standards-aligned and Integrated Curriculum
- Sequencing and Articulation
- Student Assessment
- Prepared and Effective Program Staff
- Engaging Instruction
- Access and Equity
- · Facilities, Equipment, Technology and Materials

- Business and Community Partnerships
- Student Career Development
- Career and Technical Student Organizations
- Work-based Learning
- Data and Program Improvement

In addition to serving as a guide for ACTE's professional development, recognition and dissemination activities, the framework is a voluntary tool for local self-assessment and program improvement. It is accompanied by a program self-evaluation instrument, which can be completed in print or online. If filled out online, users can receive automatically calculated scores, save and print their results, and be connected to ACTE's High-quality CTE Tools online library for areas identified as needing improvement.

The program self-evaluation is designed for use by individual, local CTE programs of study spanning secondary and postsecondary education, although it can be adapted to other units of analysis such as schools, districts or career academies. Using the tool to its fullest necessitates a collaborative effort among local secondary and postsecondary CTE educators, staff and stakeholders, such as career development professionals and advisory group members. The program self-evaluation can also contribute to the comprehensive local needs assessment required in the Strengthening Career and Technical Education for the 21st Century Act (Perkins V).

Developing the ACTE Quality CTE Program of Study Framework

"High-quality CTE" is a phrase heard with increasing frequency in the national dialogue around ensuring that individuals and employers have the skills needed for success. But what is high-quality CTE, and how can it be used to evaluate programs, determine areas for targeted improvement and recognize successful elements that should be scaled?



To develop a rigorous definition of high-quality CTE, ACTE staff began by examining existing frameworks and standards developed by national education and workforce organizations and government agencies that describe quality for CTE programs and schools, career academies, career pathways and related initiatives. We analyzed standards and frameworks from the U.S. Department of Education Office of Career, Technical and Adult Education; National Career Academy Coalition; National Academy Foundation; Southern Regional Education Board; Council on Occupational Education; National Center for College and Career Transitions; and ConnectEd California, among others.

This review concluded that, while there were many commonalities among these frameworks, there was content missing with relevance to CTE, and generally, few sets of quality standards directed at individual, local programs of study (Imperatore & Hyslop, 2015).

We supplemented our initial analysis with more in-depth content coding of these national-level quality materials. In addition, we reviewed supplementary national tools, state quality documents and standards that address quality in relation to a specific topic, such as project-based learning or advisory committees. We also partnered with Regional Educational Laboratory-Central for assistance in analyzing state CTE standards and sought stakeholder feedback through focus groups, surveys and review by subject matter experts.

Through this analysis and content coding, we identified how frequently content areas were included in these materials and specific terminology used across various documents. This helped us ensure, when developing the ACTE framework, that our criteria reflected areas of consensus within the CTE community, while addressing some of the gaps noted earlier.

Pilot testing in 2018 helped us identify final revisions to the framework and provided insights on how ACTE can best use the framework and make it available to CTE educators. Data from the self-evaluation instrument was correlated with program-level Perkins performance data to determine if programs with high scores on the framework also perform well on select Perkins accountability indicators. Results show a significant positive relationship between scores on the self-evaluation rubric and performance on the Perkins accountability indicators for technical skills attainment and for completion/credential attainment. In addition, the majority of participants reported finding the evaluation instrument easy to use and gaining new knowledge about their programs.

Following pilot testing, ACTE released the 2018 Quality CTE Program of Study Framework and the accompanying print and online program self-evaluation instrument in fall 2018.

The History of Partnerships in CTE

CTE has long incorporated employer partnerships, but in the past few decades, national, state and local CTE leaders have increasingly made it a goal to build more systemic and diverse partnerships with business and the community.

This goal has been supported by federal policy, including various iterations of Perkins legislation and other policies. For instance, the School-to-Work Opportunities Act of 1994 directed that all students have access to work-based learning tied

to school-based learning, supported by business-education partnerships (Gordon, 2014; School-to-Work Opportunities Act of 1994). The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) introduced the concept of programs of study and directed the inclusion of a wide variety of participants in the "development, implementation, and evaluation" of CTE programs (Carl D. Perkins Career and Technical Education Act of 2006).

Perkins V has continued a push toward more systemic partnership, particularly with business and industry, incorporating labor market alignment into the definition of programs of study and requiring extensive stakeholder engagement on the local level. Enhanced coordination with the workforce system, through the Workforce Innovation and Opportunity Act, and the recognition of the value of career readiness within the Every Student Succeeds Act, have also fostered cross-agency cooperation on the federal, state and local levels.

In addition, states have increasingly encouraged, incentivized and required partnerships with industry, education stakeholders and the community. ACTE and Advance CTE have been tracking and categorizing state CTE policies for the past several years, and the policy category "industry partnerships and work-based learning" is frequently high on the list of topics addressed in state legislation, state board of education actions and executive orders (ACTE & Advance CTE, 2018). State sources of funding for CTE are often predicated on the ability to substantively engage stakeholders.

These policy levers, and local education leaders' own perceptions of the value of partnerships, have resulted in business and community partnerships assuming a primary role in the development and implementation of quality CTE programs of study.

Business and Community Partnerships: A High-quality CTE Element

The central role of partnerships in CTE programs became evident to ACTE staff as we analyzed national- and state-level standards, frameworks and quality documents related to CTE. Across the national frameworks we reviewed, the topic that appeared most frequently was the involvement of business partners, followed by the involvement of education partners.

Based on this evidence and other research on the value of business and community partnerships to CTE programs, we defined business and community partnerships as one of ACTE's 12 elements of high-quality CTE. Criteria within this element address business and community partner recruitment, partnership structure and the wide variety of activities partners should be engaged in to support the program of study and ensure programs are aligned with workforce and community needs.

Recruiting Partners

a. Representatives of the program of study actively conduct outreach activities to develop partnerships to ensure the program of study is informed by employer and community needs. Below you will find further details on each of the eight criteria. High-quality CTE Series

Active outreach and recruitment strategies can ensure that programs of study are making connections that meet the diverse needs of their students and their community. Employers, particularly smaller businesses, and other potential partners often lack the time, capacity or knowledge to reach out to education programs to learn how they can collaborate to mutual benefit.

Best practices for recruitment exist in CTE, organizational development and even sales that can be harnessed by programs of study to meet this criteria (DiMattina, n.d.). These include developing a target list, tapping into personal networks and networking organizations, and steps for moving from first contact to active partnership (Pawlowski, 2016). Alternately, some CTE programs of study have outsourced recruitment to organizations that specialize in harnessing community resources to help education programs, as described in the Academies of Nashville case study in this publication.

To evaluate your program of study's performance on this criterion, look at your program's participation in community and business events, such as Chamber of Commerce meetings; elevator speeches; templates for recruitment emails or scripts for phone calls; recruitment incentives offered to program of study stakeholders; and metrics that show numbers of potential partners contacted and percentage of contacts who eventually became full-fledged partners.

Diversity in Partnerships

b. Partnerships are formed with a diverse range of stakeholders who represent differing perspectives, including employers from small, medium and large businesses; industry representatives; community, workforce and economic development agencies; and other education stakeholders.

While much of the emphasis on partnerships within CTE programs is directed toward the role of employers, these are far from the only partners who can and should be engaged with your CTE program of study (Pawlowski & Meeder, 2012). For instance, by engaging industry associations, programs of study can gain a more comprehensive perspective on workforce needs in the region, while representatives from community organizations and other education systems can share wisdom from their position in the talent development pipeline.

Sustained engagement with a breadth of partners is highlighted in Perkins V, which requires initial and ongoing consultation among the following stakeholders for the comprehensive local needs assessment and local application (Hyslop, 2018). This requirement gives CTE programs of study an opportunity to enhance their partnerships with stakeholders with whom they already engage, and forge relationships with new partners:

- CTE program representatives at the secondary and postsecondary levels, including teachers, faculty, administrators, career guidance and advisement professionals, and other staff
- State or local workforce development board representatives
- Representatives from a range of local businesses and industries
- Parents and students
- Representatives of special populations
- Representatives from agencies serving at-risk, homeless and out-of-school youth
- Representatives from Indian Tribes or Tribal organizations, where applicable

In addition, CTE programs are increasingly aware of the need to show students diverse examples of success, particularly for young women, students of color and students with disabilities. Research has demonstrated the benefits of student exposure to and relationships with adults who reflect their demographic characteristics (Blake-Beard, Bayne, Crosby & Muller, 2011; Frost, 2017; Karunanayake & Nauta, 2011).

When assessing program performance for this criterion, information about the demographic diversity of your partnerships could form part of the evidence base you consult, in addition to lists of past and current partners, their organizational affiliations, and their particular goals and areas of expertise.

Pikes Peak Business & Education Alliance

The Colorado Springs area hosts 17 school districts, each of which must call on the same employer base to support CTE programs and work-based learning. To better coordinate education and business partnerships, CTE leaders in the area are turning an informal network of district CTE directors into the Pikes Peak Business & Education Alliance, an initiative that will address shared challenges and engage regional employers in a consistent and unified way.

The emerging Pikes Peak Business & Education Alliance is anchored by District 49 and its Workplace Learning Manager, who has identified a plethora of employer engagement opportunities—too many for District 49 alone. The district agreed to share these with the other area districts through an online hub, where users can search for job shadowing and internship experiences. The resource started with opportunities in advanced manufacturing, health care and construction, and is expanding coverage to other key economic drivers in the region.

The Alliance has plans to create its own independent website with a searchable engine of area partnership opportunities. The group is also establishing a staffing structure and developing a standardized set of partnership documents, including partner agreements, internship descriptions and evaluation tools, that will ensure that work-based learning and employer engagement across districts is high quality, consistent and easy for area businesses. The Alliance has received an initial grant of \$65,000 from TalentFOUND, the Colorado Talent Development Network, as administered by the Colorado Advanced Manufacturing Association; is identifying other funding sources; and will be seeking 501(c)(3) nonprofit status.

Alliance participants are also considering how the group can support regional advisory boards and building awareness of the effort with administrators and teachers.

This profile is adapted from Case Study: Pikes Peak Business Education Alliance: Colorado Springs-area districts demonstrate the power of working together, written by Brett Pawlowski of the National Center for College and Career Transitions and shared with permission from the Colorado Community College System.

Structuring Partnerships

c. The program of study has a formalized, structured approach to coordinating partnerships, such as an advisory board or sector partnership.

For many years, the advisory board or committee has been the primary mode of engagement and collaboration among CTE programs and business and community partners. This group of representa-





However, CTE programs can also explore other structures for coordinating partners. Sector partnerships, for instance, take a more regional approach and consider student needs and the workforce pipeline across multiple programs of study within an industry cluster. Some CTE systems have convened groups to focus on specific needs and activities, such as CTE advocacy or work-based learning opportunities, and still others have a close, multi-faceted relationship with a single large employer. The case studies in this document look at some of these innovative ways of structuring partnerships.

No matter what you call your CTE partnerships, policies and procedures enable those partnerships to stand the test of time, despite changes in personnel, and ensure that each member of the partnership understands their roles, responsibilities and shared goals. These policies and procedures may include memoranda of understanding or partnership agreements, bylaws, meeting agendas and minutes, requirements for meeting frequency and attendance, and descriptions of roles and responsibilities (McIntyre, 2015; Pawlowski & Meeder, 2012). National organizations and several states have produced toolkits with templates that can foster partnership operations, such as sample invitation letters, bylaws, meeting agendas, certificates of recognition and event scripts (McIntyre, 2015; Suddreth, 2015; ACTE High-quality Tools: Business and Community Partnerships: Guides and Toolkits, n.d.). Similar documents within your program of study can form the evidence base for evaluating your program against this criterion.

Academies of Nashville

Partnership is embedded into the foundation of the Academies of Nashville, which were developed through a collaborative effort of Metro Nashville Public Schools (MNPS); PENCIL (Public Education Needs Community Involvement and Leadership); Alignment Nashville; Ford Next Generation Learning; and the Nashville Area Chamber of Commerce. In addition to this central partnership, the Academies of Nashville have a tiered structure for engaging businesses and organizations:

- Advisory boards for each academy evaluate curriculum alignment to industry standards and provide experiential learning on the Academies of Nashville model, which progresses from field trips to job shadowing to capstone projects, with summer internships coordinated through Opportunity NOW, an initiative of the Nashville Mayor's Office. Advisory boards are co-chaired by a business representative and an educator.
- Industry-specific partnership councils take a district-wide perspective on alignment between education and workforce needs and resources. These councils work with the founding partners to ensure that the academy experience is consistent and equitable across the district and that academies have a diverse range of partners.
- CEO Champions, including local executives, the Mayor and the MNPS Director of Schools, advocate for the Academies of Nashville across the region.

PENCIL, a local organization dedicated to connecting MNPS with community resources, recruits new academy partners, primarily through referrals. After an initial informational meeting with PENCIL staff, potential partners typically tour several academies before committing to working with one. The onboarding

process includes signing a partnership agreement and discussing specific engagement activities with an academy coach. At that point, the responsibility for nurturing the relationship passes from PENCIL to the individual academy. As of November 2018, there were about 365 academy partners with signed partnership agreements.

The Academies of Nashville seek investments of human capital—time and engagement—more than financial support from their partners, although some partners do support the academies with monetary contributions. Partners report their time volunteered, along with any in-kind donations and direct financial support, through an online portal. When a business or organization has invested \$100,000 within one year to an academy, and promises to commit \$50,000 each year thereafter, it has the opportunity to brand that academy with its name.

Partnership Activities

- d. Partners ensure that the program of study meets current and future workforce demand and skill needs by:
 - · identifying, validating and reviewing curriculum
 - identifying appropriate assessments and recognized postsecondary credentials
 - evaluating facilities, equipment, technology and materials to ensure consistency with industry standards
- e. Partners support students' and teachers' extended learning by:
 - identifying, providing and evaluating work-based learning experiences for students
 - participating in CTSO activities; for example, by serving as mentors and judges
 - offering opportunities, such as externships, for educators to stay current with industry-relevant knowledge and skills
- f. Partners support the program of study in tangible ways, such as by investing funds, providing in-kind support and/or helping raise external funds to meet program of study goals.
- g. Partners support program of study sustainability by advocating for and promoting the program of study.
- Partners help to evaluate the effectiveness of the program of study in preparing students for further education and careers.

The ultimate goal of recruiting a diverse group of partners and supporting them with formalized structures is to maximize partners' ability to contribute to a quality program of study, for the benefit of students and the workforce. Few partners will be able to provide assistance with all the projects included in criteria D-H; rather, the program of study should involve multiple partners whose combined capacity and talents can meet these needs.

The first criterion addresses validating curriculum, assessments, credentials and the physical/material components of the program. This is fundamental to ensuring CTE programs of study are aligned with workforce needs. This criterion represents what many consider the primary purpose of partnership, particularly of partnership with business and industry.

Business partners are also critical to criterion E, which addresses experiential learning for students and teachers. Student work-based learning and activities that keep educators up-to-date with industry requirements are vital to program quality and student success (Alfeld, Charner, Johnson & Watts, 2013; Kantrov,



2014). Community partners can also assist with these tasks; for instance, representatives from organizations supporting special populations can help the program of study overcome barriers to experiential learning for these groups. In addition, business leaders can help students in career and technical student organizations (CTSOs) develop technical skills through mentoring and judging competitive events, while community organizations and local elementary and middle schools can help these students develop leadership skills through service learning activities.

Program of study growth and sustainability are supported by the next two criteria, which consider investments of money and time as well as program promotion and advocacy. These topics are valuable ways in which partners from industry, education and the community can contribute to the program of study. As noted earlier, most partners will not be able to engage in all the activities described in these criteria, and this caveat applies particularly to financial support. On the other hand, program advocacy and promotion can be much less time- and resource-intensive.

The last criterion addresses the importance of partners engaging in program evaluation and improvement activities, including considering how to close access and equity gaps. This serves not only to help programs improve, but also lets partners see the results of their investment of time, effort and/or money. A wide range of partners can contribute to program evaluation and improvement, including partners who represent the needs of special populations. The organizations you engage in this process will also be important for the Perkins V comprehensive local needs assessment.

The activities outlined in these criteria are not the only ones in which program of study partners can engage, but they are fundamental to ensuring the program of study sustains, improves and grows. Partners who are part of a broader career pathway system may work with CTE programs in other ways not described in the ACTE framework.

The evidence base to consult when evaluating performance on these criteria will be diverse and specific to your particular program of study, but could include:

- Industry-validated curriculum
- Industry credentials recommended by partners
- · Reviews of facilities, equipment, technology and materials
- · Equipment donated by partners
- Work-based learning provided by partners
- · Teacher externships offered by partners
- Mentorship and judging for CTSO competitive events
- CTSO service learning activities organized with partners
- Metrics on time and money contributed by partners
- Op-eds and presentations by partners about the program of study
- Participation in career fairs
- Participation in community events that educate the public about the program of study
- Participation in surveys, interviews and focus groups for program evaluation

West-MEC Southwest Energy Partners Campus

The Western Maricopa Education Center (West-MEC) Southwest Energy Partners Campus is home to a unique partnership between this joint technical education district in the Phoenix metro area, Estrella Mountain Community College (EMCC) and the Palo Verde Generating Station to develop the talent pipeline in energy, production and manufacturing. Within this space, West-MEC offers its two-year Energy and Industrial Technologies Program, EMCC teaches postsecondary classes in energy and Palo Verde provides employee training.

This campus partnership built off a prior relationship between EMCC and Palo Verde, which had already collaborated on an energy program leading to an associate in applied science degree suited for Palo Verde employees and others in the community. The program works in tandem with Palo Verde's internship program, a year-long commitment in which interns work during the day at the generating facility and take courses at EMCC at night, with tuition covered by Palo Verde.

While the relationship between these two partners was effective, EMCC and Palo Verde determined over time that the college lacked the appropriate space for student lab experiences. This presented an opportunity for Palo Verde, West-MEC and EMCC to come together to design a learning environment at West-MEC's Southwest Campus that would meet the needs of students and employees in various stages of their education and career pathways.

The Southwest Campus partnership had challenges to overcome, including an initial curriculum design that was overly packed with content as well as communication challenges owing to changes in personnel. Partners collaborated to scale back the breadth of curriculum, choose the most relevant industry certifications to integrate into the program and develop a systematic approach to partnering.

Palo Verde has donated more than \$1 million in equipment, as well as many hours of staff expertise, to:

- identify, evaluate and review curriculum for technical and employability knowledge and skills that meet the needs of a variety of industrial settings;
- evaluate equipment, materials and facilities to ensure that they meet industry standards;
- · provide feedback on current and future workforce needs;
- participate in career presentations, community events and tours for high school counselors to better understand the industry and program; and
- recruit additional industry partners.

In addition, Palo Verde has provided a full-time individual on the campus who supports curriculum, instruction and training.

The Southwest Campus opened in 2016, and is already beginning to reap results. Articulation agreements enable West-MEC students to earn up to 24 college credits, and students also receive NCCER certifications and quality for internships. EMCC students are also benefiting from the enhanced facilities and access to Palo Verde staff. The initiative is incorporating additional partners, including the Salt River Project Electric Company, Southwest Gas, Day and Zimmerman, Rosendin Electric, Cardinal Glass and Modis.

Additional Criteria Relevant to Business and Community Partnerships

These eight criteria within the Business and Community Partnerships element speak directly to the structure of partnerships in the program



of study and the activities in which partners engage. However, other elements in the framework contain criteria relevant to partnerships:

- Criteria within the Prepared and Effective Program Staff element consider the access to professional development and collaborative planning time that educators need in order to best engage partners.
- Criteria within the Facilities, Equipment, Technology and Materials and the Work-based Learning elements address how the program of study can maximize student access to industry equipment and industry partners through innovative delivery methods.
- Other criteria in the framework address the data and information that the program of study shares with partners as part of transparency.

Users of the framework should not confine themselves to this particular element when considering partnerships as part of a quality program of study self-evaluation.

Conclusion

Partnerships with employers, industry groups, economic and workforce agencies, community organizations and others are fundamental to CTE program quality and student success. Strong business and community partnerships are characterized by active, intentional outreach; a diverse range of stakeholders who represent different local perspectives and needs; a formal structure, with processes that help each participant understand their roles and responsibilities; and a range of activities and opportunities for partners to contribute to the program of study and realize the success of their efforts.

ACTE's *Quality CTE Program of Study Framework* can help programs of study assess the quality of their business and community partnerships, and program quality overall, and identify areas for improvement in order to better inspire and prepare students for fulfilling careers and further education.

Using the ACTE Quality CTE Program of Study Framework Self-evaluation

ACTE's *Quality CTE Program of Study Framework* can help programs of study assess and improve by demonstrating how they measure against a relevant, evidence-based set of standards. To most effectively use the ACTE *Quality CTE Program of Study Framework* and *Self-evaluation Instrument* to assess the quality of your program partnerships, and your program of study quality overall, ACTE recommends the following steps:

1. Identify stakeholders

Consider carefully who to bring to the table to complete the self-evaluation instrument. While the self-evaluation instrument can be filled out by a single program representative, it is most effective when completed as part of a collaborative effort among program stakeholders, including the partners described in this document.

2. Gather materials

Compile information and data to help you evaluate your program of study against the framework criteria. A wide variety of materials will be helpful, including student data, curriculum and lesson plans, program policies and procedures, and findings from surveys and focus groups.

3. Discuss and complete

Convene a meeting with stakeholders to discuss and evaluate your program of study. Assign a program representative to fill in the rubric (in print or online) and another to record insights gleaned from the discussion. While you do not need to submit your evidence base for the self-evaluation, you can use these materials to guide your conversation.

4. Address elements identified as needing improvement

If you fill out the program self-evaluation online, you will receive automatically calculated scores overall and for each of the 12 elements. In addition, you will be connected to resources that can help you with elements identified as needing improvement, based on your scores. Use these scores, and the insights you gain from your stakeholder discussion, to craft a plan for improving the quality of areas in need of improvement, while maintaining quality for your higher-scoring elements.

In addition to program improvement, programs of study can use this tool to determine where to direct resources for technical assistance and professional development, to recognize quality programs and for program approval.

The ACTE Quality CTE Program of Study Framework and Self-evaluation Instrument can be found at http://www.acteonline.org/high-quality-CTE.

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