The State of High-quality CTE

By Catherine Imperatore & Cece Hohman

This article presents findings from the *ACTE Quality CTE Program of Study Framework™* online self-evaluation instrument.

ACTE SUPPORTS HIGH-QUALITY CAREER AND TECHNICAL EDUCATION (CTE) WITH RESOURCES that include publications, webinars, the online High-quality CTE Library and the evidence-based *ACTE Quality CTE Program of Study Framework*, which was released

in fall 2018. The Framework includes 12 elements and 92 criteria that describe the key components of a high-quality CTE program of study. It is accompanied by a self-evaluation tool that can be used to evaluate progress in implementation.

As the fifth anniversary of the release of the Framework and the self-evaluation instrument nears, ACTE has analyzed users' scores to identify strengths and areas for improvement in delivering high-quality CTE.

Using the self-evaluation instrument

The Framework self-evaluation, which is available in hard copy and online, uses a simple rating scale from zero to three — from "not at all achieved" to "substantially achieved" — to evaluate progress on each criterion. Then it generates an overall score and scores for each of the 12 elements. The online and print versions of the self-evaluation feature the same content, but only

the online self-evaluation calculates scores and provides ACTE with data for analysis. ACTE does not have access to self-evaluations completed in hard copy.

Educators can fill out the self-evaluation for their own knowledge and benefit. Or administrators may ask CTE faculty to complete the self-evaluation to assess progress at implementing high-quality CTE across multiple program areas.

While ACTE encourages users to complete the self-evaluation as part of a collaborative process among the secondary and postsecondary partners in a program of study, industry representatives and other stakeholders, the tool is still useful when completed by one portion of the program of study or even by an individual instructor.

Characteristics of programs completing the self-evaluation

Between November 2018 and September 2022, the online version of the self-evaluation was completed around 4,000 times for programs at more than 600 middle

schools, comprehensive high schools, CTE-focused high schools and high school academies; more than 100 area technical center campuses; approximately 100 school districts; and more than 30 technical and community college campuses. In addition, adult education programs; programs at elementary schools, universities and correctional facilities; state departments of education; and other organizations that support CTE delivery have completed the self-evaluation.

Across the nation, educators from 44 states and territories have taken the self-evaluation, including the U.S. Virgin Islands and the Department of Defense Education Activity, with the most completions in Florida and Colorado. The tool has been used for CTE programs of study across all 16 career clusters, with the highest number of responses occurring in Health Science; Arts, A/V Technology and Communications; and Science, Technology, Engineering and Mathematics.

Strengths

The average score, including all 12 elements, was 77%. Respondents gave themselves the highest scores for the elements **Engaging Instruction** and **Access and Equity**, both with a score of 85%.

For **Engaging Instruction**, CTE educators rated their programs highly on criteria about providing instruction driven by relevant content standards and learning objectives as well as managing the educational environment to build a culture of learning and respect. They were slightly less confident that program instruction emphasizes the connection between academic and technical knowledge and skills, including through cross-disciplinary collaboration.

For the **Access and Equity** element, respondents perceived themselves as doing particularly well in promoting their programs and in providing curricula, instruction, materials and assessments in an unbiased, inclusive and nondiscriminatory manner. They rated their programs marginally lower at actively recruiting traditionally underrepresented students and at providing supportive services, such as transportation assistance and tutoring, to help all students achieve success.

The **Prepared and Effective Staff** element also generated a high average score of 84%. Respondents reported that staff demonstrate leadership and commitment to the profession and that staff meet certification and licensure requirements. They gave their programs lower

marks for regular collaboration among CTE and academic staff to coordinate curricula, instruction, assessments, and extended learning activities, such as work-based learning, and to analyze data for program improvement.

Scores were also higher than average in the following areas:

- **Student Assessment** (83%)
- **Facilities, Equipment, Technology and Materials** (82%)
- **Standards-aligned and Integrated Curriculum** (81%)

Areas for improvement

Average scores were lowest for the **Business and Community Partnerships** element at 68%. CTE educators rated their programs lower on criteria about partners supporting the program of study in tangible ways, such as funding and in-kind donations, and partners supporting sustainability by advocating for and promoting the program of study. In contrast, respondents gave their programs higher marks for having a formalized approach to partnerships, such as an advisory board.

At 71%, the **Student Career Development** element had the next lowest average score. Respondents reported lower scores for providing information about occupational trends and high-demand, high-wage career opportunities to students and families, as well as students completing a personalized, multiyear education and career plan. They were more confident that career development activ-

ities are aligned with relevant national, state and/or local standards.

The third-lowest score belonged to the **Data and Program Improvement** element at 72%. CTE educators rated their programs lowest on data sharing in easy-to-understand formats with students, families, partners and the public. They also reported lower scores on using labor market information to inform program decision-making and on having a formal process for using data for program improvement and to close equity gaps. Within this element, respondents gave their programs higher scores for data privacy and security protections.

Other elements scored below the overall average.

- **Work-based Learning** (73%)
- **Sequencing and Articulation** (73%)
- **Career and Technical Student Organizations** (74%)

While the **Sequencing and Articulation** element was not in the bottom three elements, it did include two of the lowest-scoring criteria across the entire Framework. Respondents rated their programs low on secondary and postsecondary CTE staff collaborating regularly on course sequencing, vertical alignment, and opportunities for credit transfer and on the existence of multiple entry and exit points within programs of study that incorporate recognized postsecondary credentials.

Takeaways

On average, respondents completing the self-evaluation rated their programs of study highly on the classroom- and lab-based elements of high-quality CTE, such as instruction, curriculum and assessment, and on delivering these elements in an equitable manner with qualified staff. Programs of study face more challenges in engaging partners, such as industry representatives, and in collaborating across secondary and postsecondary levels and with academic instructors. Other areas for improvement include better integrating labor market data into program decision-making and career development and formalizing processes for using data for continuous improvement and to close equity gaps.

These findings align with other sources of research and data as well as feedback from the field about bright spots and challenges within CTE. The knowledge gleaned from these self-evaluation results will help ACTE shape its professional development offerings to address these challenges through in-person events, webinars, publications and tools like the online High-quality CTE Library. ◼

Catherine Imperatore is research and content director at ACTE.

Cece Hohman contributed to this article in her previous work as ACTE's research and policy associate.

ACTE encourages CTE educators to use the Framework and self-evaluation to learn how their CTE programs of study compare and apply findings to guide CTE educator preparation, new instructor support, professional development, awards and recognition activities, Perkins comprehensive local needs assessment, and continuous improvement processes.

Learn more about the *ACTE Quality CTE Program of Study Framework* and its associated tools and how to use them.
acteonline.org/high-quality-CTE

Data Analysis and Limitations

Performance on the online self-evaluation was self-reported and may differ from how an independent evaluator would score a CTE program of study. Program of study names, institution names and career cluster affiliations were also self-reported by respondents and may include errors. In addition, CTE educators who completed the online self-evaluation may differ in unknown ways from CTE educators who did not complete the online self-evaluation or CTE educators who completed the self-evaluation in print.

The steps ACTE took to clean the data included fixing obvious mistakes manually entered by respondents and deleting responses with a 0% score. Additionally, if a user completed the self-evaluation for the same program more than once in a month, only the first recorded score for that month was included.