

National Evaluation of Career and Technical Education Under Perkins V

NCEE 2026-0071
U.S. DEPARTMENT OF EDUCATION

A Publication of the National Center for Education Evaluation at IES



U.S. Department of Education

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September 2026

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Linkow, T., Hurlburt, S., Austin, M., & Parsad, A. (2026). *National Evaluation of Career and Technical Education Under Perkins V: Evaluation Report* (NCEE 2026–007r). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from <http://ies.ed.gov/ncee>

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National Evaluation of Career and Technical Education Under Perkins V

September 2026

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Amid the rapidly changing economy and shifting workforce demands, the courses and programs students choose will shape their future careers, earnings, and long-term success. Career and technical education (CTE) aims to equip secondary and postsecondary students with skills valued in the workplace. Congress has supported CTE for more than a century, most recently through the reauthorization of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V). Many provisions from the prior act remain, but Perkins V introduced changes designed to: (1) expand exposure to and participation in CTE for all students, (2) enhance CTE program quality through new mechanisms for program improvement and labor market alignment, and (3) increase flexibility in Perkins funding and accountability. This report examines how states and districts carried out these priorities during the 2022–23 school year, providing a descriptive picture of CTE implementation under Perkins V nationwide.

KEY FINDINGS

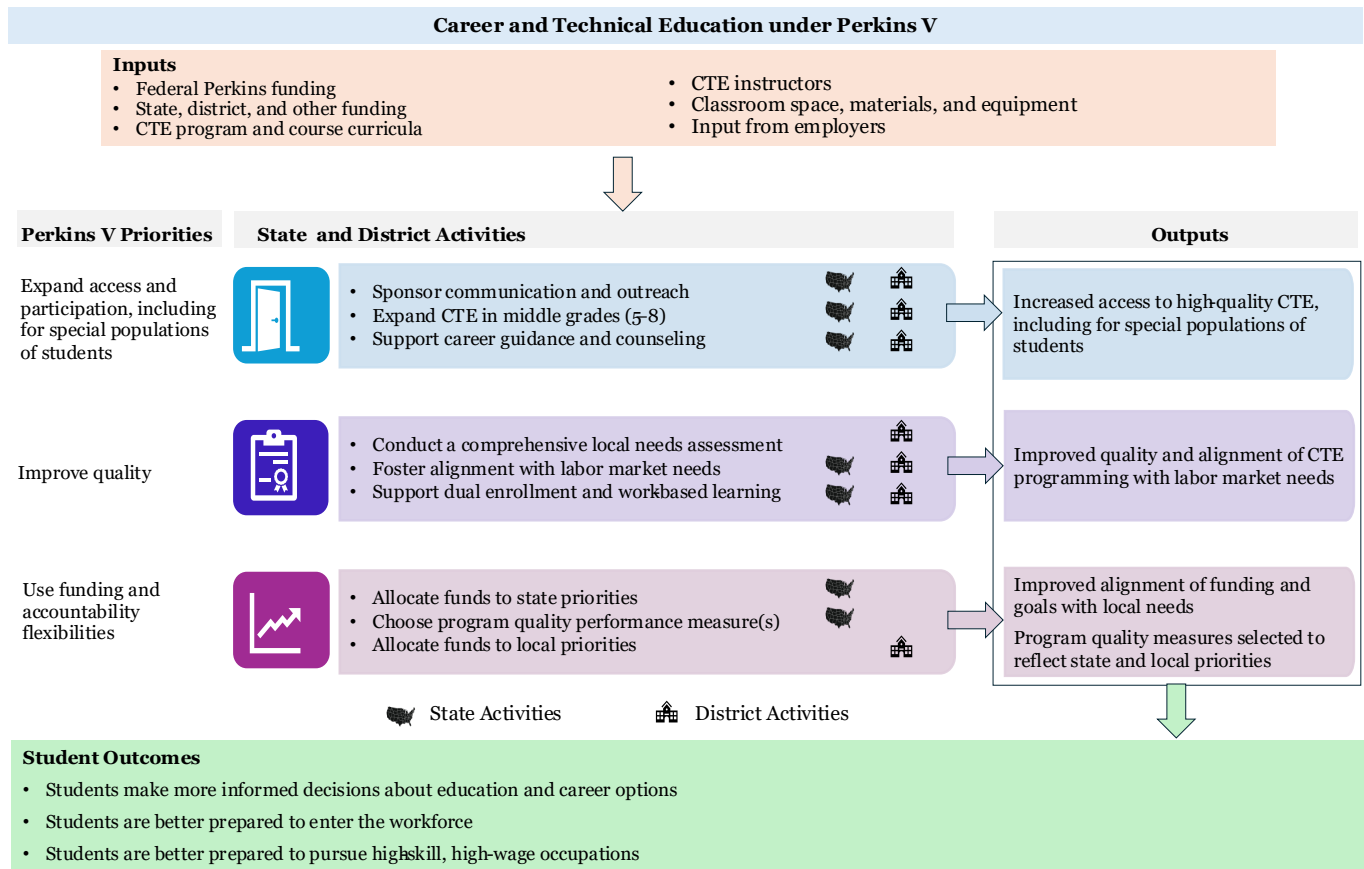
- Most states and districts sponsored activities to expand CTE access and participation, but these efforts were typically not among their highest priorities for CTE.
 - States and districts widely implemented Perkins V mechanisms to improve CTE program quality and strengthen alignment with labor market needs, but Comprehensive Local Needs Assessment (CLNA) requirements sometimes limited district implementation.
 - Most states used funding flexibilities to support local priorities, but fewer used accountability flexibilities, such as adopting multiple program quality indicators.
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A successful transition to adulthood depends on giving young people opportunities to build the education and work experience needed to enter and advance in the labor market. Access to these opportunities can reduce unemployment, improve earnings, and strengthen the U.S. economy.¹ National high school graduation rates have steadily increased, but large disparities persist by race and ethnicity,² and a high school diploma alone no longer guarantees access to a living-wage job. At the same time, fewer youths are getting the work exposure needed to develop technical and employability skills: Youth workforce participation fell from 66 percent to 56 percent from 2000 to 2017.³ Workforce participation and employment rates also differ across groups—generally lower for Hispanic and Black youths than for their White peers⁴—and youth with disabilities face lower workforce participation and higher unemployment than youth without disabilities.⁵

For more than a century, Congress has supported career and technical education (CTE) to develop an educated, skilled workforce by equipping students with the knowledge, skills, and experiences needed to succeed in a range of careers, especially high-skill, high-wage fields. In 2018, Congress passed the Strengthening Career and Technical Education for the 21st Century Act (Perkins V). Many provisions from the prior act remain, but Perkins V introduced changes that reflect three key priorities: (1) **expanding access to and participation in CTE** for all students, including those identified in Perkins V as special populations,⁶ (2) **improving CTE program quality** through new mechanisms for program improvement and labor market alignment, and (3) **increasing flexibility** in Perkins funding and accountability designed to allow states and districts to customize CTE to reflect their own priorities and contexts.

To implement these priorities, Perkins V specifies both required and allowable uses of funds (Exhibit 1). In Program Year 2022–23, \$1.38 billion in Perkins funding was distributed to states based on a formula set by Congress, which in turn awarded funds to districts that applied for funding based on federal and state criteria.^{7,8} States and districts may use Perkins funding alongside other resources to carry out activities—summarized in the middle box of Exhibit 1—intended to broaden access to high-quality CTE for all students, strengthen the delivery of programs aligned with labor market needs, and build a performance and accountability system tailored to state and local contexts. These resulting outputs, in turn, can help students make informed education and career decisions and prepare them to enter the workforce and pursue high-skill, high-wage occupations.

Exhibit 1. Key Priorities for Career and Technical Education Under Perkins V



NOTE: CTE is career and technical education.

Little is known about how states and districts are implementing Perkins V to advance the law's priorities. Understanding how the law is being carried out is important for policymakers, educators, and the public, as it provides insight into whether federal investments in CTE are translating into expanded access, improved program quality, and stronger alignment with workforce needs. This information could help inform ongoing implementation, identify areas where additional support may be needed, and guide future policy decisions.

As such, this report provides a nationwide descriptive picture of the law's implementation at the state and district level.⁹ The study focuses on implementation of Perkins V rather than directly examining student outcomes. It examines how states and districts¹⁰ sought to expand access (with attention to special populations), strengthen program quality and alignment (including conducting the comprehensive local needs assessment to align CTE programs with local labor market needs, and increasing dual enrollment and work-based learning opportunities), and use funding and accountability flexibilities. It also highlights common barriers to and variation in implementation across states and districts, as well as activities that were top CTE priorities for states and districts.

OVERVIEW OF THE REPORT'S STUDY DESIGN

WHAT QUESTIONS DID THE STUDY ADDRESS?

- To what extent are Perkins grantees taking steps to expand access to and encourage greater participation in CTE as intended by Perkins V, including for students in special populations?
- To what extent are Perkins grantees using the new mechanisms for improvement and alignment emphasized in Perkins V to improve CTE program quality?
- To what extent are Perkins grantees taking advantage of the funding and accountability flexibilities in Perkins V that are intended to address grantees' specific needs and priorities?

WHAT DATA DID THE STUDY COLLECT AND FROM WHOM?

This study collected data from state CTE agencies and a nationally representative sample of districts to describe how states and districts implemented key priorities of Perkins V during the 2022–23 program year. Three sources informed the study:

State Director Survey

A web-based survey collected information on statewide CTE activities, funding uses, program alignment to labor market needs, and implementation challenges. The survey was administered to all 50 states, the District of Columbia (D.C.), Puerto Rico, and five outlying areas from September 2023 to May 2024. After data collection, the outlying areas were deemed ineligible because CTE in these jurisdictions is typically administered through centralized, territory-wide programs with different funding, governance, and delivery structures than those used in states, D.C., and Puerto Rico.¹¹ As a result, their responses were excluded from analysis. This left a target sample of 52 jurisdictions (the 50 states, D.C., and Puerto Rico), with 51 responding, yielding a 98 percent response rate. See Appendix Section B.2.2, for details on the state survey development and sample.

District Survey

A web-based survey gathered information on local CTE activities, funding uses, program offerings, alignment with local labor market needs, middle-grades CTE, dual enrollment, work-based learning, data reporting, priorities, and challenges. The survey was administered to a nationally representative sample of 850 Perkins-funded districts and independent area CTE schools from August 2023 to May 2024. After data collection, we determined that 15 districts had not received Perkins funding in 2022–23 and excluded them from the sample. Of the remaining 835 eligible districts, 651 responded, yielding a 78 percent response rate. See Appendix Section B.2.1, for further details on the district survey development and sample.

Administrative Data

The study also used four existing data sets to construct the survey samples and provide context:

- The 2020–21 Common Core of Data for district size, locale, and Census region.
- U.S. Census Bureau's 2020–21 Small Area Income and Poverty Estimates for district poverty rates.
- State Consolidated Annual Reports from the 2020–21 program year to identify whether a district or an independent area CTE school received Perkins funding in program year 2020–21.¹²
- Secondary Program Quality Indicators Report (2022) for state-selected program quality indicators.¹³

HOW WERE DATA ANALYZED?

Descriptive statistics (counts and percentages) were calculated based on survey responses. Because analyses included the full population of CTE state directors in jurisdictions eligible for Perkins funding and the state survey response rate was 98 percent, it was not necessary to use weights to correct for the state survey sample design or for nonresponse. Therefore, all state estimates presented in the report are unweighted. District survey data were weighted to produce nationally representative estimates and adjust for survey nonresponse. To support consistent interpretation, the study team applied standardized qualitative terms, *almost all*, *most*, *many*, *about half*, *some*, and *a few*, aligned with specific percentage ranges. See Appendix Section B.5, for further details on how the data were analyzed and definitions of the qualitative terms. Findings are based on self-reported data from state and district administrators and, as with all self-reported data, should be interpreted accordingly.

MOST STATES SPONSORED OUTREACH AND SUPPORT ACTIVITIES TO EXPAND CTE ACCESS AND PARTICIPATION, BUT THESE EFFORTS WERE OFTEN NOT TOP 3 PRIORITIES

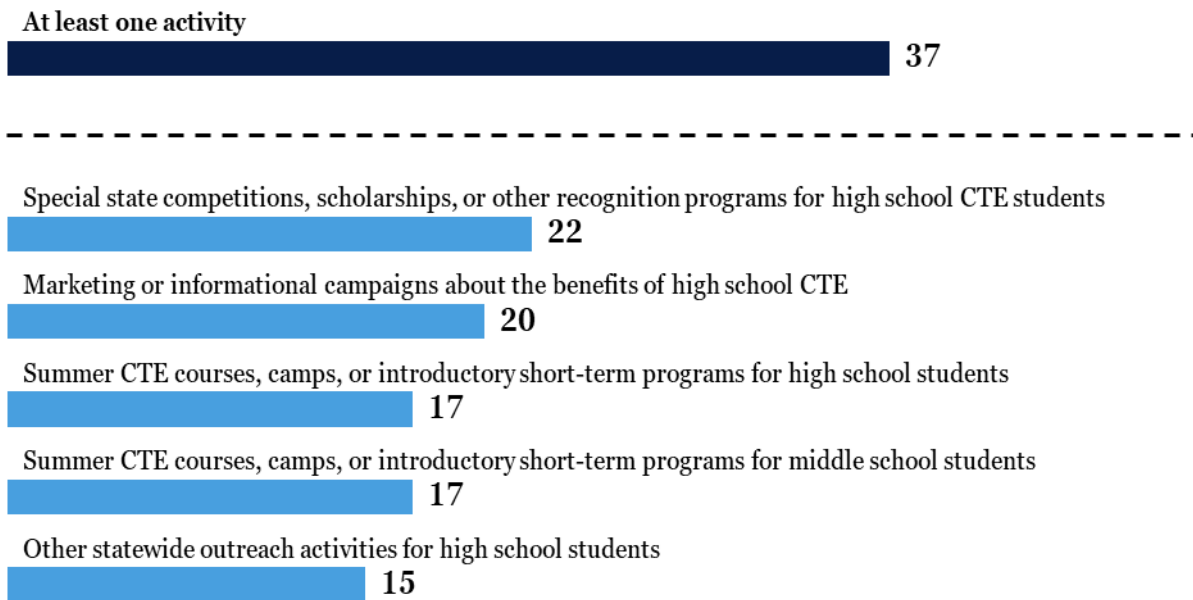
Expanding who can access and participate in CTE is a central aim of Perkins V. Doing so is intended to provide more students with opportunities to learn about education and career options and to develop skills that will help them succeed on the paths they choose. A growing body of research finds that participation in CTE is associated with improved high school completion, postsecondary enrollment, and labor market outcomes.¹⁴ It may also help close CTE participation gaps across student groups, allowing those who have traditionally had lower rates of participation to share more fully in the benefits of CTE. Although most high school graduates nationwide take at least one CTE course, only about one-third of students become CTE concentrators, taking at least two courses in a single CTE field.¹⁵ In addition, participation rates vary across student groups, with lower rates reported for several groups, including Black, Hispanic, and English learner students.¹⁶ Participation may differ because of limited awareness of available programs, few programs or course offerings, or uncertainty about how programs align with college and career expectations.

Within the requirements and flexibilities of Perkins V, states and districts have several ways to broaden access to and participation in CTE. First, states and districts may work to generate greater awareness of and interest in CTE. Perkins V allows the use of funds for outreach to students and families through activities such as marketing campaigns or summer camps. Second, states and districts may make opportunities available earlier by offering CTE in the middle grades (grades 5–8).¹⁷ Third, states and districts may support career guidance and academic counseling, which Perkins emphasizes as an important mechanism to help students make more informed decisions about their education and career paths, both before enrolling and while participating in a CTE program.¹⁸ Understanding the extent and emphasis of these three levers—and the barriers that states and districts may encounter when using them—provides insight into how the access and participation priority of Perkins V is being put into practice and where additional support may be needed.

MOST STATES ACTIVELY SPONSORED OUTREACH AND SUPPORT ACTIVITIES TO EXPAND CTE ACCESS AND PARTICIPATION, BUT ONLY SOME STATES FOCUSED EFFORTS ON SPECIAL POPULATIONS OF STUDENTS.

Thirty-seven states reported sponsoring at least one statewide outreach activity to encourage participation in CTE. Of these states, 22 reported sponsoring special state competitions, scholarships, or other recognition programs specifically for high school CTE students (see Exhibit 2 and Appendix Exhibit C.1). Twenty states reported sponsoring marketing or informational campaigns about the benefits of high school CTE overall. Seventeen states reported sponsoring summer CTE courses, camps, or programs for middle school students and high school students. Fifteen states reported sponsoring other types of statewide outreach activities for high school students. Overall, most states and districts promoted CTE participation, though the types of outreach varied.

- Similarly, most districts sponsored at least one activity intended to encourage access to and participation in CTE. About 84 percent of districts sponsored at least one activity, and the most common activities were similar to those reported by states (see Appendix Exhibit C.2). Sixty-one percent of districts reported sponsoring special competitions, scholarships, or other recognition programs specifically for high school CTE students. About half of districts (52 percent) reported sponsoring marketing or informational campaigns about the benefits of CTE, and 52 percent reported sponsoring campaigns promoting CTE programs. Just over one quarter of districts reported sponsoring summer CTE courses, camps, or programs for middle school students, and a similar proportion reported sponsoring these activities for high school students.

Exhibit 2. Number of states that reported sponsoring statewide CTE outreach, by activity

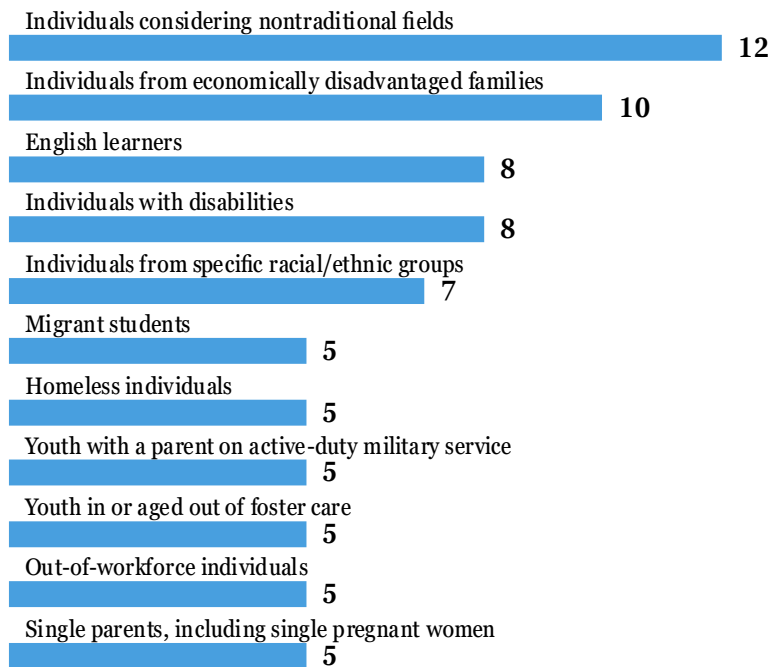
NOTE: CTE is career and technical education. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico (n=51). For the activity “marketing or informational campaigns about the benefits of secondary CTE”, one state did not respond (n=50).
SOURCE: NECTEP state director survey, Items 2.1.1a–2.1.1e.

Among the 37 states that sponsored at least one outreach activity, some usually customized at least one activity for specific student groups. Fifteen states reported always or often customizing at least one of the statewide outreach activities included in Exhibit 2 to specific groups (see Appendix Exhibit C.3). Of these, more states reported always or often customizing their marketing or informational campaigns about CTE opportunities (nine states) than always or often customizing the other statewide outreach activities (five to six states), possibly because of fewer practical and cost barriers to customizing informational materials than programmatic offerings.

States that reported focusing outreach on specific groups of students or families most often customized activities to students interested in nontraditional occupations and students from low-income families. Of the 15 states that reported always or often customizing outreach to at least one specific group, many tailored their activities to more than one group. Twelve states reported always or often customizing at least one outreach activity to individuals who are or might be interested in preparing for nontraditional occupational fields (see Exhibit 3 and Appendix Exhibit C.4). Ten states reported always or often customizing activities to students from low-income families. Eight states reported always or often tailoring activities to students who are English learners and students with disabilities.

- Similarly, districts most often customized activities for students interested in nontraditional occupations and students from low-income families. The student groups that were most commonly the focus of state outreach activities were also most commonly the focus of district outreach activities. Ninety-eight percent of districts that reported always or often customizing at least one activity reported tailoring activities to students interested in nontraditional occupations and for students from low-income families. In addition, 93 percent of these districts reported tailoring activities to individuals with disabilities, and 84 percent reported tailoring activities to students who are English learners (see Appendix Exhibit C.5).

Exhibit 3. Number of states that reported customizing at least one statewide CTE outreach activity to specific groups of students



NOTE: The five outreach activities measured include: marketing or informational campaigns about the benefits of secondary CTE overall; special state competitions, scholarships, or other recognition programs specifically for secondary CTE students; summer CTE courses, camps, or introductory short-term programs for middle school students; summer CTE courses, camps, or introductory short-term programs for high school students; and other statewide outreach activities for secondary students.

This exhibit includes CTE directors who answered that they always or often tailored at least one outreach activity in Item 2.1.4 (n=15). However, the number of responding states varied across student groups because some items had nonresponse, the groups are: individuals considering nontraditional fields (n=13); individuals from economically disadvantaged families (n=13); English learners (n=13); individuals with disabilities (n=12); individuals from specific racial/ethnic groups (n=12); migrant students (n=12); homeless individuals (n=13); youth with a parent on active-duty military service (n=12); youth in or aged out of foster care (n=12); out-of-workforce individuals (n=11); and single parents, including single pregnant women (n=11).

SOURCE: NECTEP state director survey, Item 2.1.5a–2.1.5e and 2.1.4a–2.1.4e.

MOST STATES SUPPORTED CTE IN THE MIDDLE GRADES, TYPICALLY THROUGH FUNDING CTE COURSES IN MIDDLE SCHOOLS.

Forty-six states supported CTE in the middle grades, and 45 states did so through funding CTE courses in middle schools. About half of states (27) used requirements or specifications—or both—to increase middle-grades CTE, with 16 states requiring districts to offer CTE to middle school students and 21 states specifying middle school courses or activities in state-developed CTE programs of study (see Exhibit 4 and Appendix Exhibit C.6).

- Similarly, most districts (86 percent) reported supporting CTE in the middle grades through either funding or participation requirements or a combination of both. Sixty-eight percent of districts used funding to support career guidance or exploration in the middle grades, while 74 percent of districts required middle school students to participate in CTE offerings (see Appendix Exhibit C.8).

MOST STATES SUPPORTED DISTRICTS TO PROVIDE CAREER GUIDANCE AND COUNSELING ACROSS MIDDLE AND HIGH SCHOOL GRADE LEVELS.

Forty-four states reported encouraging districts to incorporate career guidance into CTE, with 36 states using funding to support career guidance and counseling and 30 states requiring districts applying for funds to provide career guidance and counseling to at least one student group (see Exhibit 4 and Appendix Exhibit C.10).

- And almost all districts reported using funding or student requirements to incorporate career guidance into CTE. Most districts (85 percent) required all high school students to participate in career guidance and exploration offerings (see Appendix Exhibit C.11). Most districts (77 percent) also used funding to support career guidance and academic counseling for students in middle grades or high school grades or a combination of both.

Exhibit 4. Number of states that reported supporting middle-grades CTE and the incorporation of career guidance into CTE through requirements, specifications, or funding

Supporting middle grades CTE

At least one support



Using funding for CTE courses or activities in the middle grades



Specifying middle school courses or activities as part of state-developed programs of study



Requiring districts to provide or offer CTE to middle school students



Supporting incorporation of career guidance into CTE

At least one support



Using funding for supports for career guidance and counseling



Requiring districts to provide career guidance and counseling to at least one student group



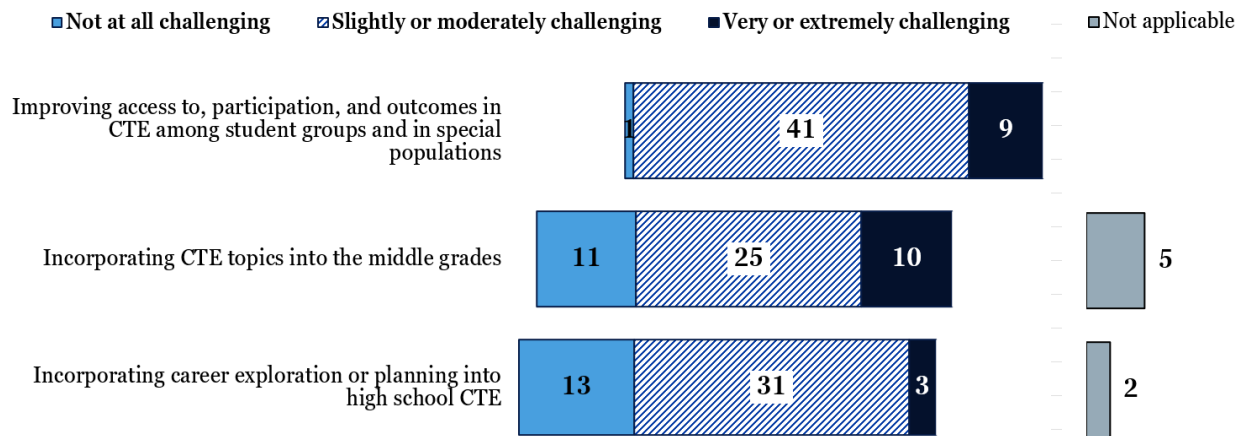
NOTE: CTE is career and technical education. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico (n=51).

SOURCE: NECTEP state director survey, Items 1.3.5a–h, 1.4.1a–h, 2.2.1a–c, 2.2.1g, 4.1.7h., 4.1.7f., and 4.6.1a

MOST STATES REPORTED THEY EXPERIENCED SOME CHALLENGES MEETING THE INTENT OF PERKINS V, BUT ONLY A FEW STATES REPORTED LARGE CHALLENGES.

Forty-one states reported that improving access to, participation in, and outcomes in high school CTE was slightly or moderately challenging, and only nine states reported this was very or extremely challenging (see Exhibit 5 and Appendix Exhibit C.12). In addition, 25 states reported that incorporating CTE topics into the middle grades was slightly or moderately challenging, and 10 reported this was very or extremely challenging. Thirty-one states reported that incorporating career exploration or planning into CTE was slightly or moderately challenging, and only three reported this was very or extremely challenging. Most states reported experiencing some challenges implementing each of these efforts, with challenges typically characterized as slight or moderate.

Exhibit 5. Number of states reporting varying levels of challenge in implementing specific efforts to improve CTE



NOTE: CTE is career and technical education. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$). Counts across levels of challenges for each effort sum to 51. There was no item nonresponse except for the effort “Incorporating career exploration or planning into CTE at the secondary level” ($n = 49$, with two states not responding).

SOURCE: NECTEP state director survey, Item 2.5.1.

IMPROVING ACCESS TO, PARTICIPATION, AND OUTCOMES IN HIGH SCHOOL CTE WAS A TOP 3 PRIORITY FOR MANY STATES, BUT KEY STRATEGIES TO SUPPORT THIS GOAL WERE NOT TOP 3 PRIORITIES FOR MOST STATES OR DISTRICTS

Twenty-seven (of 49) states reported improving access to, participation, and outcomes in secondary-level CTE among student groups and special populations as one of their Top 3 priorities—selected from a predefined list of activities—and 21 states reported this was an active priority in 2022–23 (see Appendix Exhibit C.7).

- Improving access and participation were less frequently reported by districts as Top 3 priorities. Sixteen percent of districts reported increasing access to CTE programming was a Top 3 priority, although an additional 47 percent reported it was an active priority. Similarly, 13 percent of districts reported recruiting student groups and special populations into CTE was a Top 3 priority, although an additional 38 percent of districts reported it was an active priority.

Although most states supported middle-grades CTE, it was not a Top 3 priority for most states. Eight (of 46) states reported that supporting middle-grades CTE was one of their Top 3 priorities in 2022–23, indicating states’ encouragement of expanding CTE to middle grades did not necessarily reflect strategic emphasis on middle-grades CTE (see Appendix Exhibit C.7). An additional sixteen states reported that supporting middle-grades CTE was an active priority.

- Only 10 percent of districts reported that incorporating CTE into the middle grades was one of their Top 3 priorities in 2022–23 (see Appendix Exhibit C.9). Similar to states, an additional 34 percent of districts reported this was an active priority.

Encouraging the incorporation of career guidance into high school CTE was also not a Top 3 priority for most states. Although most states incentivized districts to provide career guidance and counseling to high school students, only 10 (of 45) states reported this was a Top 3 priority at the secondary level in 2022–23. An additional 21 states reported this was an active priority (see Appendix Exhibit C.7).

- Incorporating career guidance into high school CTE also was not a Top 3 priority for most districts. Only some districts (18 percent) reported that promoting access to career exploration during high school was a Top 3 priority in 2022–23 (see Appendix Exhibit C.9).

STATES AND DISTRICTS WIDELY IMPLEMENTED NEW PERKINS V MECHANISMS TO IMPROVE CTE QUALITY, BUT COMPREHENSIVE LOCAL NEEDS ASSESSMENT (CLNA) REQUIREMENTS SOMETIMES LIMITED DISTRICT ACTION

CTE programs can differ in the experiences they offer and in how closely those experiences reflect the education and skill requirements of different occupations. Programs that are not well aligned to labor market needs are unlikely to benefit students or contribute to their employability. To support program quality, Perkins V continues a long-standing requirement that funds be used to support CTE programs “of sufficient size, scope, and quality to be effective”¹⁹ and it also introduces new mechanisms for assessing local labor market needs and improving program alignment. In addition, Perkins V gives grantees flexibility to implement strategies to improve program quality.²⁰

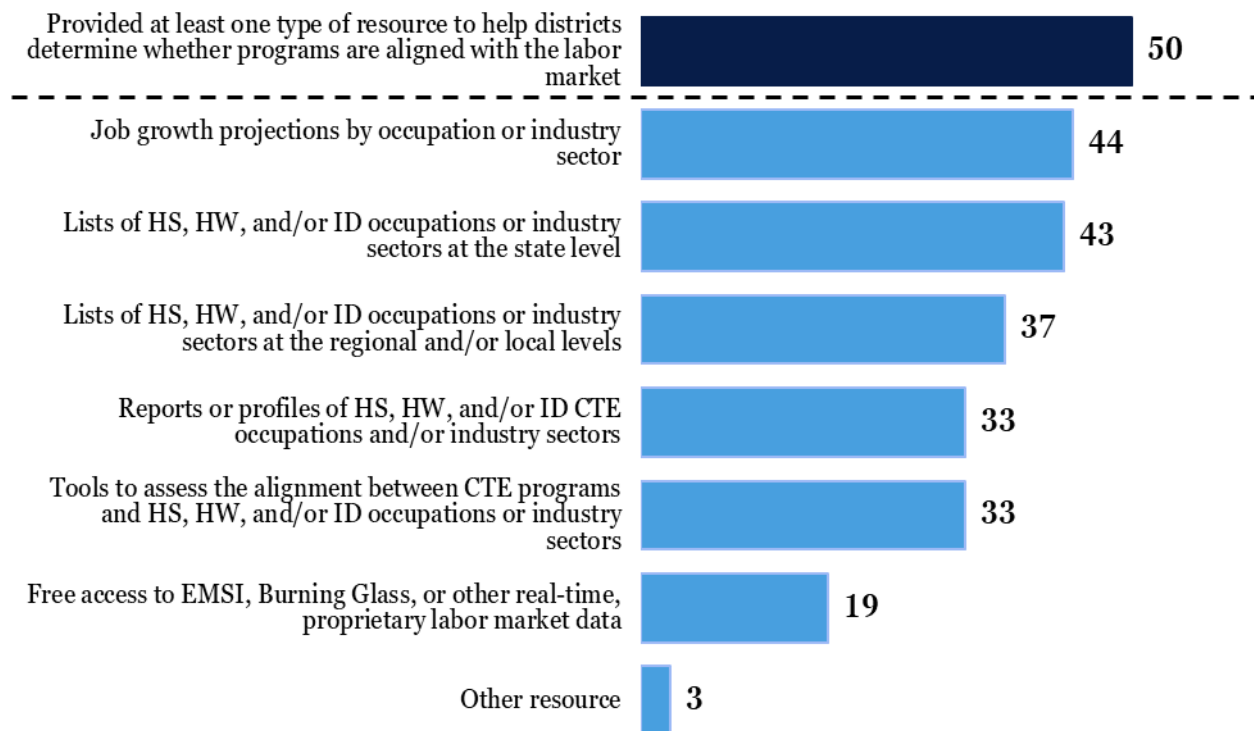
Within this framework, three features are central to program quality under Perkins V. First, districts are required to complete the CLNA every two years. The CLNA is a new requirement introduced in Perkins V that requires districts to conduct a local needs assessment and update it at least every two years, in an effort to better align CTE program offerings with local labor market needs. The CLNA requires districts to consult with stakeholders from a variety of groups to document student needs, assess how well CTE programs meet those needs, and identify actions to strengthen implementation. Consulting with stakeholders such as employers or employer groups, workforce development boards, postsecondary institutions, students, parents, representatives of special populations, and local social service agencies helps ensure Perkins-funded programs are relevant to the local job market, are responsive to community needs, are enhanced by community resources, and serve all students effectively. Second, the CLNA requires districts to use relevant, current data to identify ways to strengthen alignment between CTE programs and local labor market needs, so that CTE programs reflect high-skill, high-wage, or in-demand occupations.²¹ Third, the Perkins V legislation names specific strategies districts may implement to improve CTE quality and places special emphasis on two strategies identified as innovative or promising based on prior research: dual enrollment and work-based learning.²² The legislation requires district applicants to describe how each strategy would be provided and lists them as explicit allowable uses of funds.²³ Perkins V also established two new program-quality measures that states could use as indicators of performance, one tied to each strategy.²⁴

Examining the extent to which states and districts implemented and emphasized these three features—and the barriers grantees encounter when using them—provides insight into how Perkins V’s program-quality priority is taking shape in practice and where additional support may be needed to sustain high-quality, labor market-aligned CTE. Because districts—not states—carry out the CLNA process and implement dual enrollment and work-based learning programs, the results described in this section provide an overview of state supports for these efforts and then emphasize district experiences implementing these efforts.

ALMOST ALL STATES REPORTED PROVIDING AT LEAST ONE TYPE OF SUPPORT FOR THE CLNA PROCESS.

Fifty states (of 51) reported providing at least one type of resource to help districts improve alignment. Commonly provided resources included lists of high-skill, high-wage, and in-demand occupations or industry sectors at the state level (43 states) or the regional or local level (37 states) (see Exhibit 6 and Appendix Exhibit C.13). Most states also provided job growth projections by occupation or industry sector (44 states), tools to assess the alignment between CTE programs and high-skill, high-wage, and in-demand occupations or industry sectors (33 states), and reports or profiles of these occupations or industry sectors (33 states).

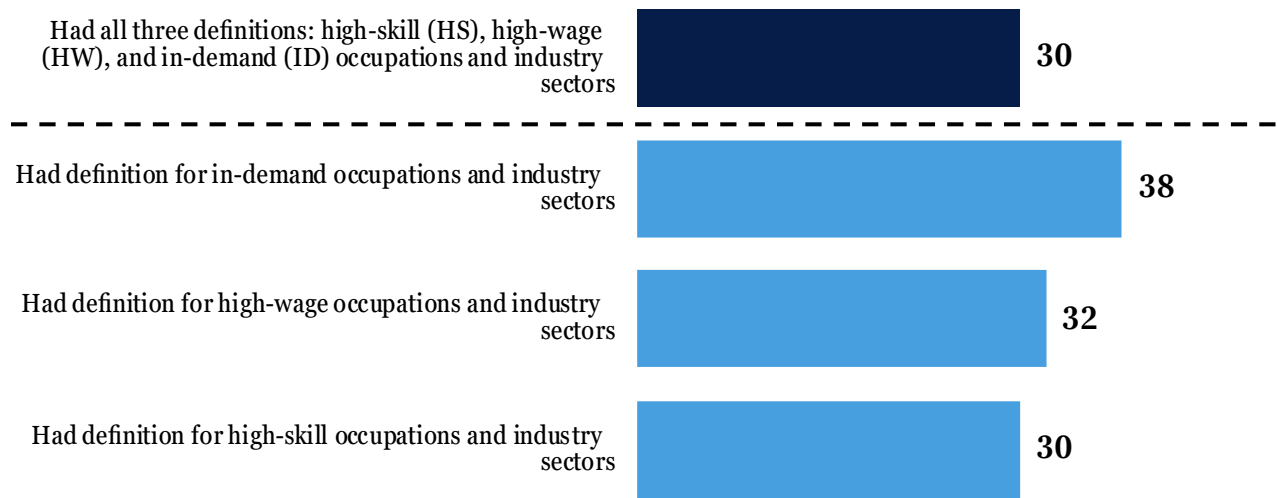
Exhibit 6. Number of states that reported supporting the CLNA through various activities



NOTE: HS is high-skill; HW is high-wage; ID is in-demand; CTE is career and technical education; EMSI is Economic Modeling Specialists International. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$). The number of responding states varied across activities because some items had non-response: provided at least one type of resource to help districts to determine whether programs are aligned with the labor market ($n = 50$); job growth projections by occupation or industry sector ($n = 50$); lists of high-skill, high-wage, and/or in-demand occupations or industry sectors at the state level ($n = 49$); lists of high-skill, high-wage, and/or in-demand occupations or industry sectors at the regional or local level ($n = 49$); reports or profiles of high-skill, high-wage, and/or industry sectors ($n = 50$); tools to assess alignment between CTE programs and high-skill, high-wage, and/or in-demand occupations or industry sectors ($n = 45$); free access to EMSI, Burning Glass, or other real-time, proprietary labor market data ($n = 49$); and other resources ($n = 50$).
SOURCE: NECTEP state director survey, Items 1.2.1a-1.2.1c, 1.2.2a and 2.2.1d, 1.27a-1-1.2.7g1, 1.2.3a.a-1.2.3a.e, and 2.2.1.I.1.

Many states had definitions for high-skill, high-wage, and in-demand occupations and industry sectors, but some were missing at least one of the three definitions. Thirty states reported having definitions for all three terms: high-skill, high-wage, and in-demand. Thirty-eight states defined in-demand occupations and industry sectors, 32 states defined high-wage, and 30 states defined high-skill occupations or industry sectors. Twenty states did not have a definition for all three terms, suggesting a need for state capacity building to create definitions to support program alignment (see Exhibit 7 and Appendix Exhibit C.13).

Exhibit 7. Number of states that reported supporting the CLNA through having definitions for high-skill (HS), high-wage (HW), and in-demand (ID) occupations and industry sectors



NOTE: The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$). The number of responding states varied because some items had nonresponse: Had all three definitions: high-skill, high-wage, and in-demand occupations and industry sectors ($n = 48$); had definition for in-demand occupations and industry sectors ($n = 48$); had definition for high-wage occupations and industry sectors ($n = 47$); and had definition for high-skill occupations and industry sectors ($n = 47$).

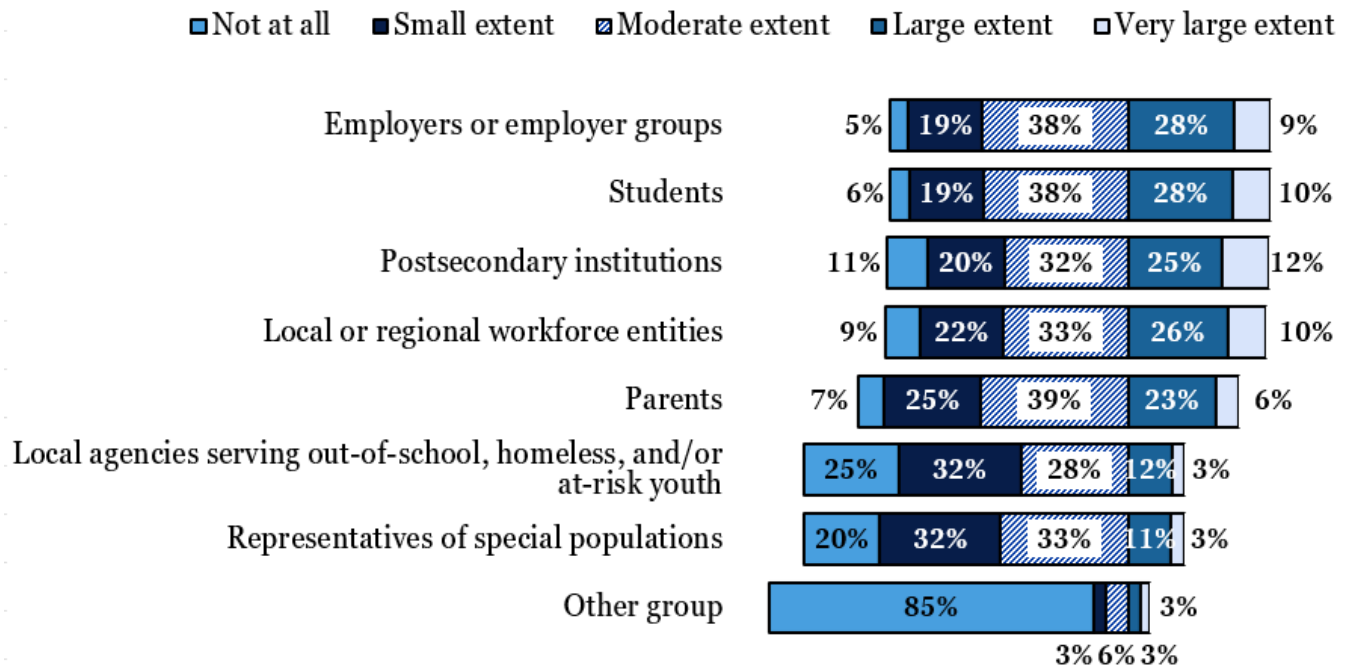
SOURCE: NECTEP state director survey, Items 1.2.1a-1.2.1c, 1.2.2a and 2.2.1d, 1.27a-1-1.2.7g1, 1.2.3a.a-1.2.3a.e, and 2.2.1.I.1.

MANY DISTRICTS COLLABORATED WITH STAKEHOLDER GROUPS TO A LARGE OR VERY LARGE EXTENT TO COMPLETE THEIR CLNA PROCESS, AND ABOUT HALF REPORTED THE CLNA PROCESS WAS A BIG HELP IN IDENTIFYING NEEDS.

Almost all districts collaborated to some extent with at least one stakeholder group about CTE programs or offerings. Of those that did, about half reported that the CLNA process made collaboration substantially easier. Ninety-seven percent of districts reported collaborating with at least one stakeholder group to some extent on CTE programs or offerings, with 92 percent collaborating with employer or industry groups and 91 percent collaborating with postsecondary institutions (see Appendix Exhibit C.14). Of districts that reported at least some collaboration with at least one stakeholder group, about half (51 percent) reported the CLNA process made the collaboration easier to a large or very large extent (see Appendix Exhibit C.15).

Many districts (64 percent) involved at least one stakeholder group in the CLNA process to a large or very large extent, with at least one stakeholder group and about half of districts (51 percent) involved two or more stakeholder groups in the CLNA process to a large or very large extent. But some districts did not closely involve any stakeholder groups. Just over a third of districts reported involving to a large or very large extent employers or employer groups (37 percent), students (37 percent), postsecondary institutions (37 percent), and local or regional workforce entities such as workforce development boards (36 percent) (see Exhibit 8 and Appendix Exhibit C.16A). About one-third (36 percent) of districts reported they did not involve any stakeholder groups in the CLNA process to a large or very large extent (Exhibit C.16B).

Exhibit 8. Extent to which districts collaborated with stakeholders to complete their CLNA process, by stakeholder group



NOTE: The exhibit includes CTE administrators in 835 districts and independent area CTE schools that received Perkins funding in program year 2022–23. Estimates are weighted to account for survey design and nonresponse. For each stakeholder group, percentages may not sum to 100 due to rounding.

SOURCE: NECTEP district survey, Items 7a-h.

Some districts reported identifying needs to make changes to their CTE programs, but the CLNA process was not often reported as the primary driver for identifying needs. About one-third of districts identified each of the following as a need for their district: to develop new programs to offer (32 percent), identify the types of CTE educators to focus on for recruitment (30 percent), change or update existing programs (29 percent), or phase out or remove existing programs (29 percent). Of the districts that identified at least one need, only some (34 percent) indicated that the CLNA process helped them to a large or very large extent in identifying these needs, which indicates that many districts may be identifying changes needed to program offerings based on factors other than the CLNA process (see Appendix Exhibit C.17).

ALMOST ALL STATES TOOK ACTIONS TO INCENTIVIZE CTE PROGRAM ALIGNMENT WITH LOCAL LABOR MARKET NEEDS.

Most states used discretionary leadership funds to increase labor market alignment. States may use up to ten percent of their Perkins funding for leadership activities to develop, improve, and promote participation in CTE programs statewide. Thirty-eight (of 51) states used leadership funds to increase knowledge of the labor market among special populations, and 36 (of 51) used leadership funds to promote statewide CTE programs aligned with high-skill, high-wage, and in-demand occupations or industry sectors (see Appendix Exhibit C.18). This use of leadership funds, which offers states flexibility to strengthen CTE program quality, indicates that most states were actively investing in and elevating labor market alignment beyond what was required for compliance.

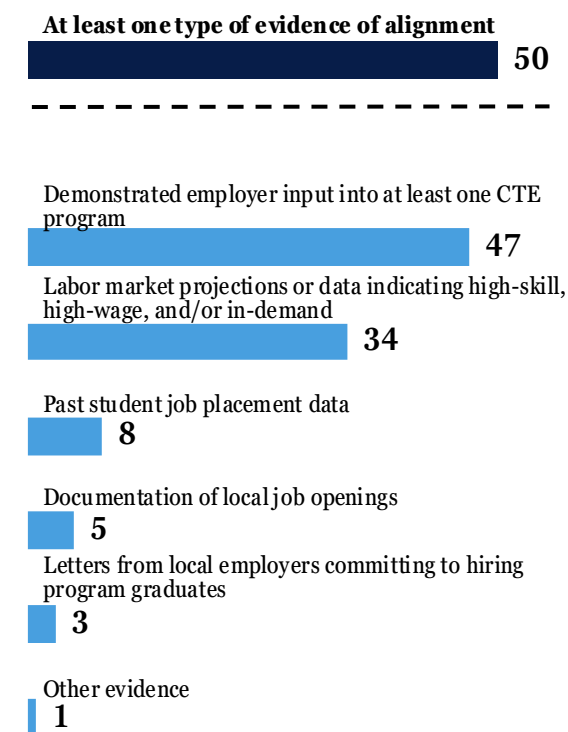
Many states required districts to meet state definitions and criteria for high-skill, high-wage, and in-demand occupations and industry sectors in order to receive funding. Only 30 (of 48) states reported having definitions for all three terms, but 32 (of 49) states reported requiring districts to meet state definitions and criteria for all three terms to receive funding (see Appendix Exhibit C.13). Forty-four (of 51) states required districts applying for CTE funds to offer at least one CTE program consistent with the state's Perkins definitions and criteria for high-skill, high-wage, and in-demand occupations and industries (see Appendix Exhibit C.25).

All but one state required districts to provide evidence of alignment between CTE programs and local labor market needs to qualify for funding. States most commonly required districts to provide evidence of employer involvement in the CLNA or input into at least one CTE program’s activities (47 states) and local or regional labor market projections or data showing jobs or industries to be high-skill, high-wage, and/or in-demand at the local or regional level (34 states). Some states required past student job placement data (eight states) or documentation of local job openings (five states) (see Exhibit 9 and Appendix Exhibit C.19).

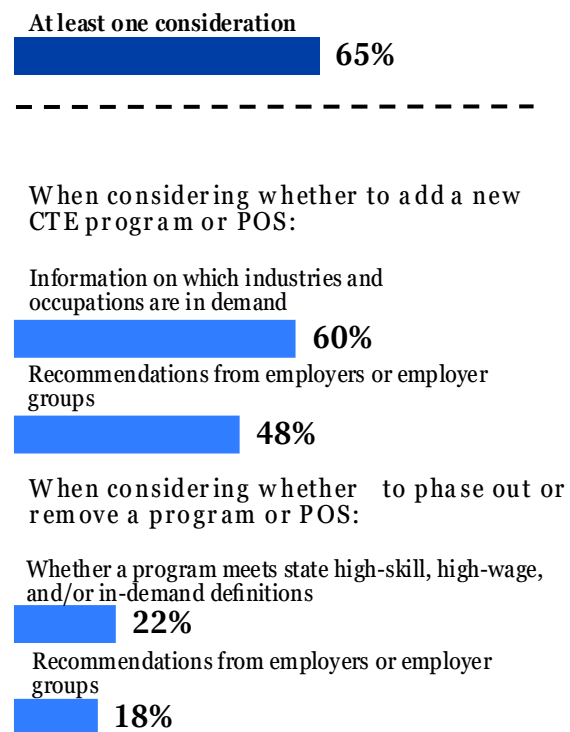
- Many districts also reported aligning their activities and CTE course offerings to local labor market needs. When considering whether to add a new CTE program for high school students, many districts (60 percent) reported using information on which industries and occupations are in demand and about half of districts (48 percent) reported using recommendations from employers or employer groups to a large or very large extent (see Exhibit 9 and Exhibit C.20). When deciding whether to phase out or remove a CTE program or program of study, some districts (22 percent) reported considering their state’s definitions for high-skill, high-wage, and in-demand occupations or industry sectors, and 18 percent of districts reported using recommendations from employers or employer groups to a large or very large extent.

Exhibit 9. Number of states requiring evidence of alignment and the percentage of districts considering evidence of alignment between CTE programs and local labor market needs

Number of states



Percentage of districts (weighted)



NOTE: The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$). The number of responding states varied across evidence type because some items had nonresponse: past student job placement data ($n = 50$); documentation of local job openings ($n = 48$); and letters from local employers committing to hiring program graduates ($n = 47$). District estimates are based on responses from 835 CTE administrators in districts and independent area CTE schools that received Perkins funding in program year 2022–23 and are weighted to account for survey design and nonresponse.

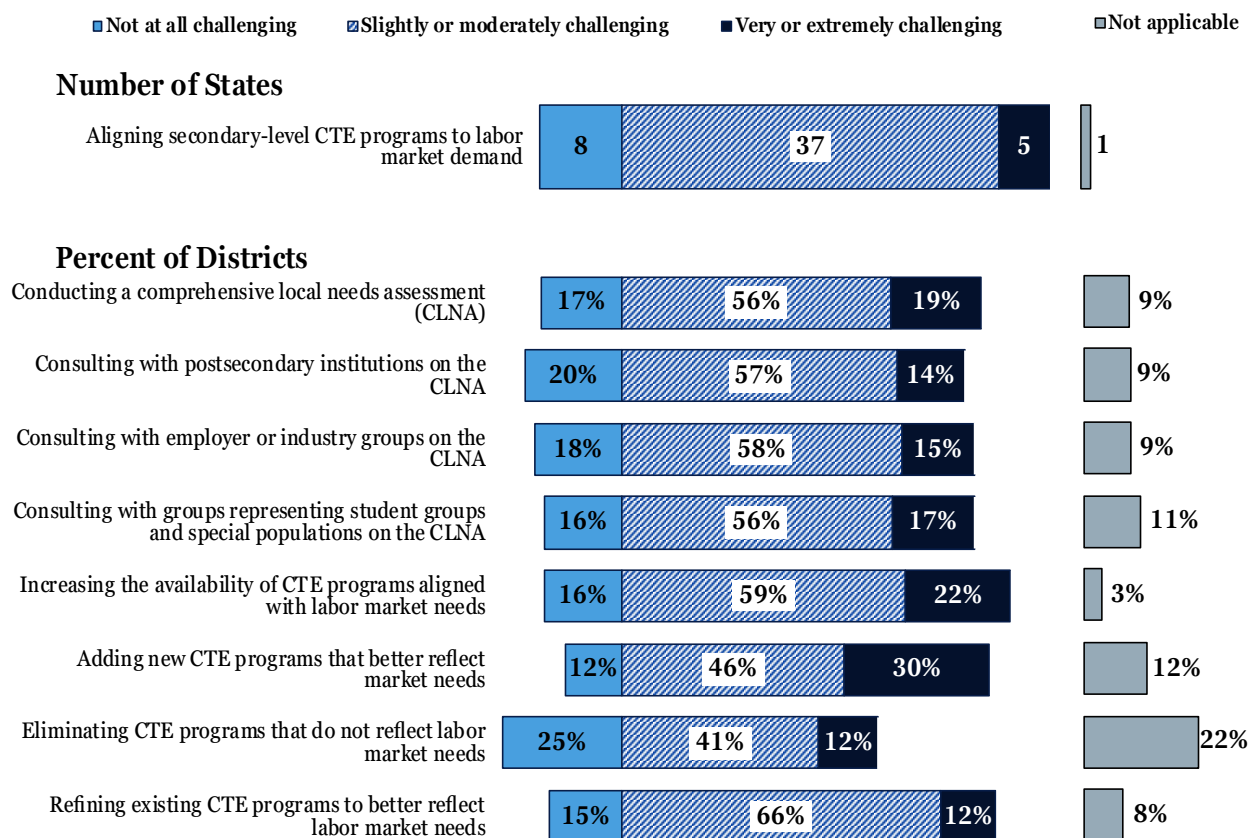
SOURCE: NECTEP state director survey, Items 1.2.3a.a–1.2.3a.e, Item 2.2.1.I; NECTEP district survey, Items 18.f–g and 21.e–f.

SOME STATES REPORTED THAT ALIGNING CTE PROGRAMS WITH LABOR MARKET NEEDS WAS AT LEAST MODERATELY CHALLENGING, AND ABOUT HALF REPORTED THE CLNA PROCESS WAS TOO BURDENSOME FOR DISTRICTS.

Thirteen (of 51) states reported that aligning CTE programs to labor market demand was moderately challenging, and five (of 51) states reported it was very or extremely challenging. In addition, 23 states reported that the required CLNA was too burdensome and was a reason that districts chose not to apply for Perkins funding in 2022–23 (see Appendix Exhibits C.21).

- Similarly, some districts reported that aligning offerings to labor market demand was very or extremely challenging. Conducting the CLNA and engaging different groups on the CLNA was reported as very challenging in 14 to 19 percent of districts. Twenty-two percent of districts reported that increasing the availability of aligned CTE programs was very or extremely challenging (see Exhibit 10 and Appendix Exhibits C.23). Thirty percent of districts reported that adding CTE programs to better reflect labor market needs was very or extremely challenging (see Exhibit 10 and Appendix Exhibit C.23). One contributor to this challenge was the difficulty of finding or keeping teachers for in-demand industries and occupations, which 26 percent of districts reported was a very large barrier to improving access and participation in high school CTE (see Appendix Exhibit C.24). Fewer districts (12 percent) reported that eliminating or refining programs was very or extremely challenging (see Exhibit 10 and Appendix Exhibit C.23).

Exhibit 10. The number of states reporting challenges aligning CTE programs to labor market demand and the percentage of districts reporting challenges with activities to align CTE programs to labor market demand



NOTE: The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico (n=51). Counts across levels of challenges sum to 51. District estimates are based on responses from CTE administrators in 835 districts and independent area CTE schools that received Perkins funding in program year 2022–23. District estimates are weighted to account for survey design and nonresponse. For each challenge, percentages may not sum to 100 due to rounding.

SOURCE: NECTEP state director survey, Items 46 and 47.

STATES MORE OFTEN REQUIRED DISTRICTS TO OFFER WORK-BASED LEARNING THAN DUAL CREDIT CTE OPPORTUNITIES.

Fourteen (of 51) states reported requiring districts applying for Perkins funds to offer at least one CTE program that includes a dual or concurrent enrollment or dual credit course option. About half of states (25 of 51) reported allocating leadership funds to support accelerated learning programs such as dual/concurrent enrollment (see Appendix Exhibits C.25 and C.26).

About half (25 of 50) of states required district grantees to offer at least one CTE program that includes a work-based learning opportunity for participating students, such as worksite visits, job shadowing, or internships (see Appendix C.25).²⁵ Of the 25 states with this requirement, about two-thirds (13 states) reported requiring that all CTE programs include one or more work-based learning experiences (see Appendix Exhibit C.27).

MOST STATES AND DISTRICTS PRIORITIZED ALIGNING CTE PROGRAMS WITH LABOR MARKET DEMANDS, BUT IT WAS A TOP 3 PRIORITY FOR ONLY SOME.

Most states prioritized CTE program alignment to labor market needs, but it was a Top 3 priority for only about half of those states. Forty (of 49) states reported that aligning CTE programs to local labor market needs was a Top 3 or an active priority—selected from a predefined list of activities. Nineteen states reported it as one of their Top 3 priorities in 2022–23 and 21 reported it was a priority they were actively working on. An additional three states reported it was an emerging priority, meaning they were making plans to work on this activity (see Appendix Exhibit C.7).

- Similarly, 63 percent of districts reported that aligning CTE programs with labor market demands was a Top 3 or an active priority, with 19 percent reporting it was a Top 3 priority and 44 percent of districts reporting it was a priority they were actively working on. More districts reported it was an emerging priority (26 percent) than a Top 3 priority (see Appendix Exhibit C.9).

MOST STATES PRIORITIZED BOTH DUAL CREDIT CTE OPPORTUNITIES AND WORK-BASED LEARNING, BUT IT WAS A TOP 3 PRIORITY ONLY IN SOME.

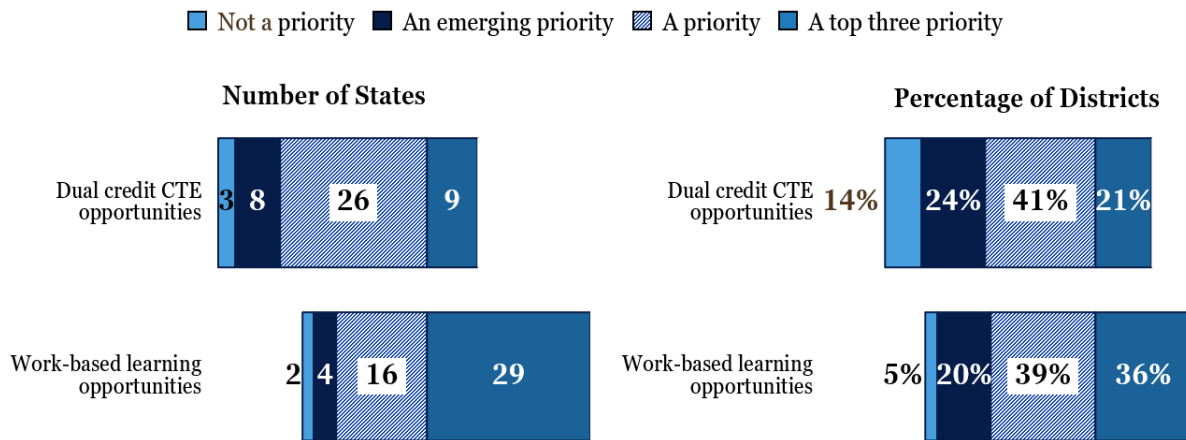
Thirty-five (of 46) states reported that developing or implementing dual enrollment, concurrent enrollment, or other opportunities to accumulate college credit in high school CTE programs was a Top 3 or an active priority—selected from a predefined list of activities. Nine of these states reported that providing dual enrollment or dual credit opportunities was one of their Top 3 priorities in 2022–23 and 26 states reported it was an active priority. Eight states reported it was an emerging priority (see Exhibit 11 and Appendix Exhibit C.7).

- Some districts (21 percent) reported that developing or implementing dual enrollment or dual credit opportunities in high school CTE programs was a Top 3 priority. An additional 42 percent reported it was an active priority and 24 percent reported it was an emerging priority (see Exhibit 11 and Appendix Exhibit C.9).

Forty-five (of 51) states reported that developing or implementing work-based learning opportunities in high school was a Top 3 or an active priority. More states identified work-based learning as a Top 3 priority than other activities, with 29 states reporting it was one of their Top 3 priorities in 2022–23 (see Exhibit 11 and Appendix Exhibit C.7).

- Similarly, more districts (36 percent) identified expanding opportunities for students to learn through work experience as a Top 3 priority than any other activity they were asked about. An additional 39 percent of districts reported that work-based learning was an active priority and 20 percent reported it was an emerging priority in 2022–23 (see Exhibit 11 and Appendix Exhibit C.9).

Exhibit 11. Number of states and percentage of districts reporting that dual credit CTE opportunities and work-based learning were priorities



NOTE: CTE is career and technical education. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$). For “Dual credit CTE opportunities,” 5 states did not respond ($n = 46$). Counts across priority levels sum to 46 and 51. District estimates are based on responses from CTE administrators in 835 districts and independent area CTE schools that received Perkins funding in program year 2022–23. District estimates are weighted to account for survey design and nonresponse. Percentages may not sum to 100 due to rounding. SOURCE: NECTEP state director survey, Item 2.5.3; NECTEP district survey, Item 50.

MOST STATES USED FUNDING FLEXIBILITIES, WHILE FEWER USED ACCOUNTABILITY FLEXIBILITIES

CTE is intended to prepare students for postsecondary education and work opportunities. However, because labor market needs vary across communities, approaches that succeed in one setting may not translate well to another. Recognizing this variation, Perkins V gives states and districts greater flexibility to adapt CTE to local conditions.²⁶

One way Perkins V does this is by allowing flexibility in how some funds are used. For states, the law permits providing a larger share of funds to local recipients in ways that reinforce state priorities (often referred to as the state reserve fund)²⁷ and allows set-asides for a range of state leadership activities—such as providing technical assistance to local recipients, supporting programs for special populations, developing or approving programs of study, and offering professional development for CTE educators.²⁸ For districts, the law permits them to use funds on activities aligned with local priorities, provided they fall within the statute’s six broad categories for local use of funds.²⁹

Perkins V also introduces a new approach to measuring accountability. While the law requires states to select at least one of three program quality indicators specified in statute³⁰, states may adopt more than one of these indicators or may also include their own additional quality indicators. States may also decide whether districts will meet state-determined performance levels or negotiate their own performance targets with the state. When making these choices, states may consider input from CTE stakeholder groups, along with other sources of information, to align selections with state-specific contextual factors. At the local level, districts may meet state-determined levels of performance or negotiate their own performance targets with the state.³¹ Together, these options create room for different choices in both funding and measurement.

Examining how states and districts use these flexibilities reveals whether the law’s intent—to let states and districts tailor CTE to local workforce needs—is being realized and where additional guidance or policy support may be needed.

PERKINS V PROGRAM QUALITY INDICATORS

- **Postsecondary credential attainment.** Percentage of CTE concentrators who graduate having earned a recognized postsecondary credential (e.g., industry certification, license, or similar)
- **Postsecondary credit attainment.** Percentage of concentrators who graduate having earned postsecondary credits in their CTE program of study through dual or concurrent enrollment or another credit transfer agreement
- **Work-based learning participation.** Percentage of concentrators who graduate having participated in work-based learning aligned with their program of study

MOST STATES ESTABLISHED A RESERVE FUND, AND LEADERSHIP FUNDS WERE USED BY ALMOST ALL STATES TO EXPAND ACCESS AND INCREASE PARTICIPATION IN CTE AND BY MOST TO IMPROVE PROGRAM QUALITY.

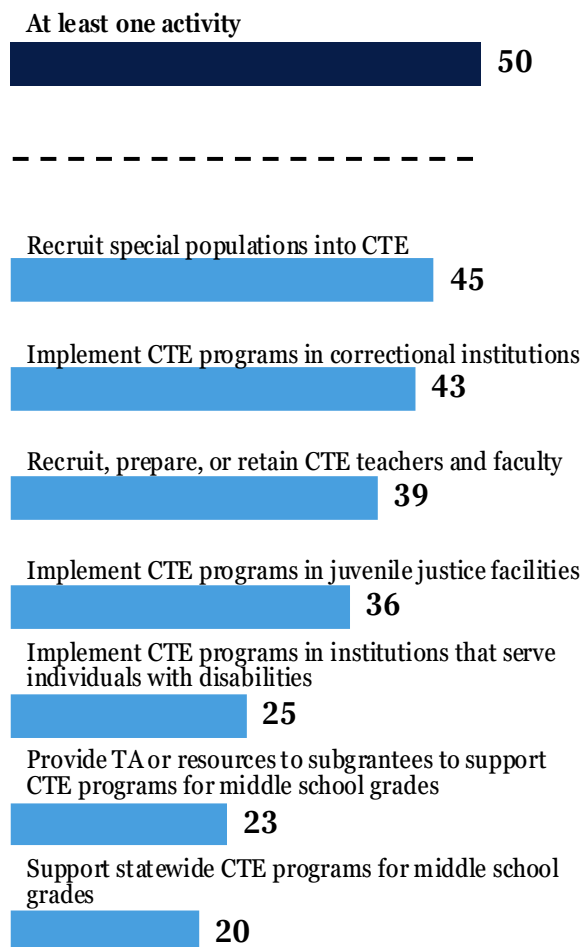
Forty (of 51) states reported creating a reserve fund from their state Perkins allotment intended for districts (see Appendix Exhibit C.28). The most common use of these reserve funds—reported by 29 (of 51) states—was supporting the implementation of programs of study aligned with labor market needs. Twenty-five (of 51) states reported using reserve funds to support the development or revision of such programs. Some states used reserve funds to support efforts to prepare individuals from nontraditional fields (22 of 51 states) and to support CTE in the middle grades (13 of 51 states) (see Appendix Exhibit C.29).

States used leadership funds for a variety of activities and purposes. Leadership funds supported activities to expand access to and increase participation in CTE in 50 states and activities to improve CTE program quality in 40 states. Across states, the most frequently reported uses of these funds were recruiting special populations into CTE (45 states) and implementing CTE programs in correctional institutions (43 states). Many states (39 states) used leadership funds to support recruitment, preparation, and retention of CTE teachers and faculty, signaling efforts to bolster the CTE teacher pipeline. In the category of program quality, the most common activity was establishing or expanding work-based learning opportunities (37 states) (see Exhibit 12 and Appendix Exhibit C.30).

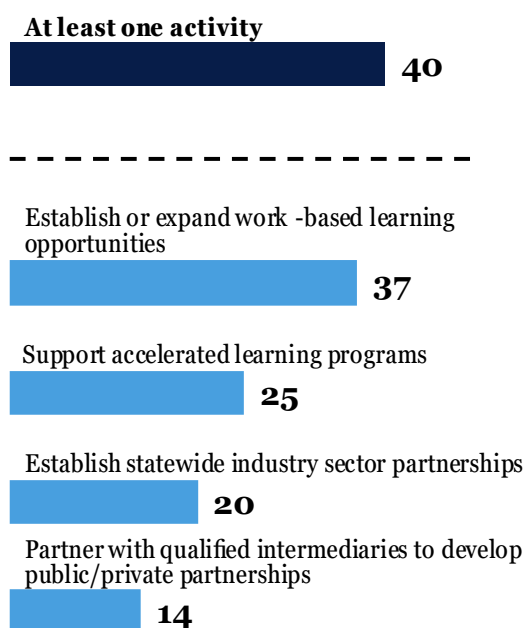
- Similarly, almost all districts used funding flexibilities to engage in a variety of efforts to strengthen CTE access (88 percent) and quality (91 percent). For access and participation, the most commonly reported investments were in improving career guidance and academic counseling (77 percent) and increasing student access to, engagement in, and success in STEM (75 percent). For program quality, the uses most commonly reported included integrating employability skills into CTE programs or programs of study (77 percent), supporting work-based learning (75 percent), funding industry-recognized certification exams (74 percent), and supporting career and technical student organizations (71 percent) (see Appendix Exhibit C.31).

Exhibit 12. Number of states that reported using leadership funds, by purpose

Expand access to and increase participation in CTE



Improve quality of CTE programming



NOTE: CTE is career and technical education; TA is technical assistance. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$).

SOURCE: NECTEP state director survey, Item 4.1.7b, d, e, f, g, i, n, o, q, r, s.

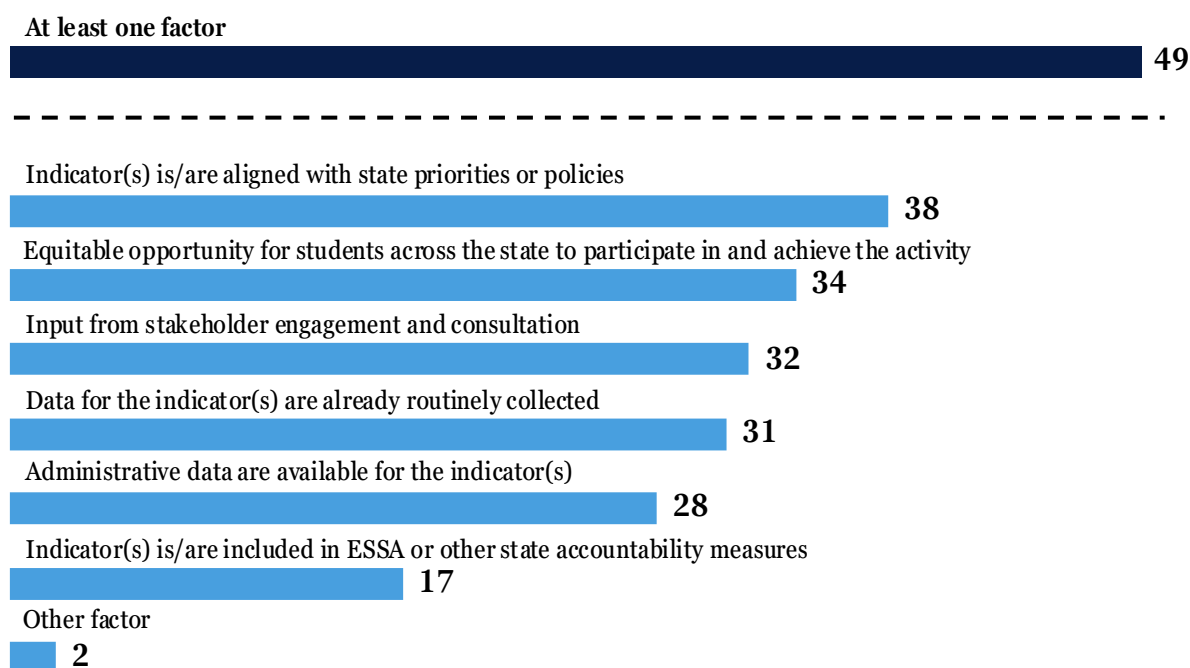
ONLY SOME STATES USED ACCOUNTABILITY FLEXIBILITIES OF PERKINS V.

Eighteen (of 51) states used accountability flexibilities to customize their program quality indicators beyond what is required under Perkins V. Evidence from the *Strengthening States' Implementation of Program Quality Indicators for Career and Technical Education Report* (2022)³² shows that these states selected more than one program quality indicator, including 13 that identified one or more of their own state-defined indicators (see Appendix Exhibit C.32). Two patterns stand out among states selecting multiple quality indicators. First, of the 13 states that adopted state-defined indicators, 11 paired a single Perkins V indicator with one or more state-defined indicators; the remaining two states paired two Perkins indicators with one state-defined indicator. Second, among the 18 states with multiple program quality indicators, eight adopted three indicators in total but did so in distinct ways: three selected all three Perkins indicators; two selected two Perkins indicators and added one of their own; and three combined one Perkins indicator with two state-defined indicators. This variation illustrates that, although relatively few states built multi-indicator systems, those that did used the flexibility differently—some by fully embracing the federal menu and others by tailoring more heavily to state priorities.

- District use of the accountability flexibilities afforded by Perkins V was similarly limited. Among districts that reported being expected to meet CTE performance targets, some (34 percent) reported being allowed to negotiate their own performance targets (including both those who negotiated and those who could have negotiated but did not; see Appendix Exhibit C.33), although fewer districts (16 percent) reported taking advantage of this option.³³ In the states that identified their own program quality indicator, some districts (30 percent) reported that collecting and reporting data for the new measure was at least moderately challenging, including a few (7 percent) that said it was very or extremely challenging (see Appendix Exhibit C.34).

Most states (38) reported weighing alignment with established state priorities to a large or very large extent when selecting required and, for states choosing to do so, additional program quality indicators. Other common factors taken into account included whether there was equitable opportunity for students across the state to participate in and benefit from the activity (34 states) and input from stakeholder engagement and consultation (32 states). Practical considerations also mattered: Some states selected indicators with data already collected (31 states) or readily available in administrative systems (28 states), underscoring the importance of data capacity (see Exhibit 13 and Appendix Exhibit C.35). Despite the reliance on administrative data many states reported challenges related to data capacity. Indeed, the most commonly cited challenge among states to improving secondary CTE was coordinating, matching, and sharing secondary-level data across state systems, which 27 states described as very or extremely challenging and an additional 11 states as moderately challenging (see Appendix Exhibit C.12).

Exhibit 13. Number of states that reported considering certain factors to a large or very large extent when selecting program quality indicators



NOTE: ESSA is Every Student Succeeds Act. The exhibit includes state directors of CTE in 49 states, the District of Columbia, and Puerto Rico ($n = 51$). For the factor “Administrative data are available for indicator(s),” two states did not respond ($n = 49$).

SOURCE: NECTEP state director survey, Item 2.4.5.

LESSONS LEARNED AND LOOKING AHEAD

This study shows that states and districts made substantial progress implementing key provisions of Perkins V. However, the extent of implementation varied across states and districts. Findings point to differences in local priorities, administrative capacity, and the perceived burden of specific requirements as potential factors shaping implementation. Most states and districts took steps to expand student access to CTE, strengthen program quality, and use new flexibility in funding. Yet several of the law’s more ambitious goals—especially targeted outreach, deeper labor-market alignment, and adoption of additional accountability measures—remain uneven in practice and may require continued support as states and districts refine their approaches.

States and districts more readily implemented strategies that built on existing systems—such as career guidance and work-based learning—than strategies requiring intensive coordination or new infrastructure, such as completing the CLNA or adopting new program quality indicators. These patterns highlight the need for continued technical assistance, streamlined processes, and practical tools to help states and districts meet the intentions of Perkins V while balancing other operational demands.

A few areas stand out for future support.

Prioritize targeted outreach to expand CTE participation. Most states and districts implemented outreach activities to promote CTE (see Exhibit 2 and Appendix Exhibit C.2), but these efforts were often not tailored to reach special populations of students, such as students with disabilities, English learners, and students from economically disadvantaged families (see Exhibit 3 and Appendix Exhibits C.4 and C.5). Policymakers might consider elevating targeted outreach—such as partnerships with community organizations or local employers and tailored messaging for specific groups—as a central strategy to close participation gaps and ensure more students are aware of and engaged in CTE opportunities.

Establishing consistent definitions for high-skill, high-wage, and in-demand jobs. To ensure CTE programs in all states are aligned with labor market needs, it may be valuable to establish a shared understanding of how to identify occupations and industries that are likely to lead to better outcomes for young adults. Some states had not established consistent definitions for these terms (see Exhibit 7 and Appendix Exhibit C.13). It may be helpful to offer further guidance to states on developing and adopting clear definitions for these terms. States and districts may also benefit from leveraging existing regional or workforce data systems when identifying in-demand occupations, where available.

Easing the burden of the CLNA process and strengthening stakeholder engagement. Some districts did not substantially involve any stakeholder groups in the CLNA process (see Exhibit 8). Further, almost half of states believe that the CLNA process deters some districts from applying for Perkins V funding (see Appendix Exhibit C.21). Simplifying the CLNA requirements—for example, through streamlining the needs-assessment process—and supporting districts in meaningfully engaging stakeholders, possibly through providing tools or best practices for collaboration, could ensure the CLNA process results in CTE programs aligned to labor market needs and that administrative demands do not discourage districts from potential benefits of Perkins V.

Strengthen use of accountability flexibilities. While most states leveraged funding flexibilities under Perkins V, fewer adopted its accountability options (see Appendix Exhibits C.30 and C.32). Policymakers could consider promoting broader use of multiple program quality indicators or customized district performance targets to better align accountability with local needs and help drive continuous improvement. Additional efforts to strengthen communication between states and districts about expectations related to performance targets may also improve districts' awareness of these requirements and their ability to take advantage of available flexibilities (see Appendix Exhibit C.36).

Looking ahead, CTE educators face a familiar challenge: delivering high-quality programs that prepare students to succeed in today's workforce *and* lay a strong foundation for the workforce of tomorrow. Although the labor market has shifted in a variety of ways since the passage of Perkins V, one phenomenon—rapid advancements in artificial intelligence (AI) is poised to be the most disruptive. Its expansion across industries raises new questions about how CTE can prepare students for a future of work increasingly shaped by automation, machine learning, and advanced digital tools. Although AI was not a focus of this study, future studies might examine the role of AI in CTE provision under Perkins V. For example, future studies could focus on understanding how states and districts incorporate AI-related skills and competencies into CTE programs or examine how teacher preparation programs, professional development systems, and state leadership funds support educators in delivering AI-relevant instruction.

ENDNOTES

¹ Fernandes-Alcantara, A. L. (2018) and Edgerton, A. K. (2022).

² U.S. Department of Education, National Center for Education Statistics (2024).

³ Fernandes-Alcantara, A. L. (2018). More recent data from the Bureau of Labor Statistics' Current Population Survey indicate that youth labor force participation is unchanged from 2017, with a participation rate of 56 percent for youth ages 16–24 in 2024 (U.S. Department of Labor, Bureau of Labor Statistics, 2025).

⁴ Fernandes-Alcantara, A. L. (2018).

⁵ Office of Disability Employment Policy (n.d.).

⁶ Section 3(48) of Perkins V defines *special populations* as nine groups for whom states and districts must ensure equitable access, participation and outcomes. These groups include: individuals with disabilities; individuals from economically disadvantaged families; individuals preparing for nontraditional fields; single parents, including single pregnant women; out-of-workforce individuals; English learners; homeless individuals; youth who are in, or have aged out of, foster care; and youths with a parent on active-duty military service

⁷ Miller, S. L. (2022).

⁸ States determine the requirements for local applications, but Section 134(b) describes nine elements that must be included in the local application.

⁹ This report focuses on CTE implementation in K–12 public school districts and does not examine CTE offered by postsecondary institutions or other adult-serving education providers.

¹⁰ In this report, *district* refers broadly to all Perkins V subgrantees, not only traditional public school districts.

¹¹ Under the Carl D. Perkins Career and Technical Education Act, states, the District of Columbia, and Puerto Rico receive formula funding through the Basic State Grant program (Section 111), while the outlying areas receive separate assistance under Section 115. These provisions establish different funding mechanisms and administrative structures for CTE. [U.S. Congress. Strengthening Career and Technical Education for the 21st Century Act (Perkins V), Sections 111 and 115. Retrieved from: <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>]

¹² Program year 2020–21 funding was used to establish eligibility because the study's research questions focus on Perkins V implementation in program years 2021–22 and 2022–23. Districts and independent area CTE schools would have needed to receive Perkins funding in 2020–21 to implement Perkins-supported activities during the subsequent years examined.

¹³ Perkins V, Section 113(b)(2)(iv), specifies three program quality indicators for secondary CTE: attainment of a recognized postsecondary credential, attainment of postsecondary credits in the relevant program area, and participation in work-based learning. States must select at least one of these indicators but may adopt more than one or include additional state-defined indicators.

¹⁴ Lindsay, J., Hughes, K. L., Dougherty, S. M., Reese, K., & Joshi, M. (2024). *What we know about the impact of career and technical education: A systematic review of the research*. Washington, DC: Career and Technical Education Research Network.

¹⁵ U.S. Department of Education, National Center for Education Statistics, 2019 High School Transcript Study. Table 225.25 and Table H257, https://nces.ed.gov/programs/digest/d22/tables/dt22_225.25.asp and <https://nces.ed.gov/surveys/ctes/tables/h257.asp>.

¹⁶ U.S. Department of Education (2019) and National Center for Education Statistics. (2022).

¹⁷ Under Perkins IV, funding for middle-grades CTE was available only for programs aimed at students in grades 7 and above. But Perkins V expanded eligibility to include students in grades 5 and 6.

¹⁸ Among the six broadly defined required uses of Perkins funds for local recipients listed in Section 135(a), the first required use is to “provide career exploration and career development activities through an organized, systematic framework designed to aid students, including in the middle grades, before enrolling and while participating in a career and technical education program, in making informed plans and decisions about future education and career opportunities and programs of study.”

¹⁹ Perkins V, Section 135(b).

²⁰ Perkins V, Section 135(b).

²¹ See Strengthening Career and Technical Education for the 21st Century Act. Report 115–164. H.R. 2353. (2021). <https://www.congress.gov/115/crpt/hrpt164/CRPT-115hrpt164.pdf>. A related state plan requirement is in Perkins V, Section 122(d)(4)(C)(iii). A related local application requirement is in Perkins V, Section 134(b)(3)(B).

²² Before Perkins V, several studies had identified dual enrollment and work-based learning as innovative and promising strategies for improving student success. These include Karp et al. (2008); Kemple & Willner (2008); Caspary & Warner (2020), Theodos et al. (2017), and What Works Clearinghouse (2017).

²³ *Dual enrollment* is identified as a required element of local applications for funds in Perkins V, Section 134(b)(6). *Work-based learning* is identified as a required element of local applications for funds in Perkins V, Section 134(b)(7). Dual enrollment is listed among potential CTE elements acceptable for local uses of funds in Perkins V, Section 135(b)(5)(C). Work-based learning is listed among potential CTE elements acceptable for local uses of funds in Perkins V, Section 135(b)(5)(E).

²⁴ States were required to choose at least one of three indicators to measure program quality—the third option was related to graduating from high school having received a recognized postsecondary credential. See Perkins V, Section 113(b)(2)(A)(iv).

²⁵ In the survey instruments, *work-based learning* was defined as follows: “*Work-based learning* refers to sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.”

²⁶ Strengthening Career and Technical Education for the 21st Century Act (Public Law 115–224), 132 Stat. 1563. H.R. 2353. (2018) <https://www.congress.gov/115/statute/STATUTE-132/STATUTE-132-Pg1563.pdf>.

²⁷ Perkins V, Section 112(a)(1), specifies that states can reserve a maximum of 15 percent of the total amount to be distributed to local (secondary and postsecondary) subgrantees; under Perkins IV the maximum was 10 percent. Perkins V, Section 112(c)(1), specifies that states must distribute reserve funds to districts (or institutions of higher education) that are in geographic areas that fall into at least one of four categories: rural areas, areas with high percentages of CTE concentrators or CTE participants, areas with high numbers of CTE concentrators or CTE participants, and areas with disparities or gaps in performance. Perkins V, Section 112(c)(2), describes the two allowable uses of the state reserve fund, which are to foster innovation through the identification and promotion of promising and proven CTE programs, practices, and strategies; and to promote the development, implementation, and adoption of CTE programs of study or career pathways aligned with state-identified high-skill, high-wage, or in-demand occupations or industries.

²⁸ Perkins V, Section 112(a)(1)(2), caps state leadership spending at 10 percent of the state’s total allocation. Within that cap, the law sets additional requirements and restrictions, including allocations for services to individuals in state institutions, support for nontraditional programs and services, recruitment of special populations, and required provision of technical assistance to districts. See Section 124 for the list of 25 permissible state leadership activities.

²⁹ Perkins V, Section 135(b), identifies six broad categories for local use of funds and lists activities under each category that may be supported with Perkins funding: (1) career exploration and development; (2) professional development; (3) preparation for high-skill, high-wage, or in-demand sectors/occupations; (4) integration of academic skills into CTE; (5) implementation supports that increase student achievement on performance indicators; and (6) evaluation of activities, including evaluations needed for the CLNA and local reporting.

³⁰ Perkins V, Section 113(b)(2)(A)(iv)(I), requires states to select at least one of the following program quality indicators: (1) attainment of a recognized postsecondary credential; (2) attainment of postsecondary credits earned through a dual or concurrent enrollment program or another credit transfer agreement; or (3) participation in work-based learning. States may also adopt additional statewide, valid, and reliable indicators of CTE program quality (Perkins V, Section 113(b)(2)(A)(iv)(II)). Section 113(b)(4) further requires that local levels of performance be either equivalent to state levels or negotiated between the state and districts.

³¹ Perkins V, Section 113(b)(4)(i), describes the requirement for districts (or institutions of higher education) to accept state-determined levels of performance or to negotiate with the state to set their own targets.

³² U.S. Department of Education, Office of Career, Technical, and Adult Education (2022).

³³ The analysis is based on the 59 percent of districts reporting they were expected to meet performance targets or benchmarks—either all CTE programs and students or only for Perkins-funded CTE programs and students who participated in them. Among responding districts, 29 percent reported that they did not know whether they were expected to meet such targets, and 13 percent reported that they were not expected to meet them. See Appendix Exhibit C.36.

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ACKNOWLEDGMENTS

We gratefully acknowledge the contributions of many individuals in conducting the study and producing the report. Several current and former American Institutes for Research staff supported the study throughout its phases, including Hannah Acheson-Field, Scott Davis, Anne Diffenderffer, Sarah Duffy, Mike Garet, Chad Henry, Katherine Hughes, David Kamm, Rebecca Medway, Sugey Paz, Irma Perez-Johnson, Dana Shaat, Jessica Stockham, and Jill Walston. We appreciate the design and formatting work from AIR Studio. We were also fortunate to have the early advice of our expert technical working group members including: Laura Arnold, Nelson County (KY) Schools; Marie Barry, Marie Barry, LLC; Charisse Childers, Arkansas Division of Workforce Services; Jennifer Dykema, University of Wisconsin; Richard Grimsley, Dallas (TX) Independent School District; Steve Klein, Education Northwest; Pradeep Kotamraju, formerly of the California Department of Education, Equity & Access Branch; Jeff Strohl, Georgetown Center on Education and the Workforce.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

The research team for this evaluation included staff from American Institutes for Research. None of the research team members has financial interests that could be affected by findings from this evaluation. None of the eight members of the technical working group, convened once by the research team during the study to provide advice and guidance, has financial interests that could be affected by findings from the evaluation.